

Final Observer Report
For the
Unalaska Marine Center Dock Replacement Project

City of Unalaska, Alaska

April 29, 2018



Submitted to:

National Marine Fisheries Service

Office of Protected Resources

1305 East-West Highway Silver Spring, Maryland 20910-3226

Prepared by:

High Tide Environmental, LLC

180 E Hygrade Lane

Wasilla, AK 99654

907-354-3132

TABLE OF CONTENTS

SECTION	PAGE
1 Introduction.....	1
2 Project Area.....	1
3 Project Description.....	2
3.1 Construction Activities.....	2
4 Observation Methods.....	4
4.1 Observer Stations.....	4
4.2 Observer Efforts.....	7
4.3 Visibility Conditions.....	8
4.4 Sighting Records	12
5 Sighting Summary.....	13
5.1 Potential Noise Exposures.....	17
5.2 Mitigation Measures	18
6 Conclusions	19

LIST OF TABLES

Table 1 – Summary of shutdown and monitoring zones.....	7
Table 2 – Summary of visibility conditions.....	8
Table 3 – Summary of sightings.....	13
Table 4 – Potential exposures to Level B Harassment.....	18
Table 5 – Summary of delays.....	19

LIST OF FIGURES

Figure 1 – Project location within Dutch Harbor, AK.....	2
Figure 2 – Sheet pile cell under construction.....	3

Final Observer Report
For Unalaska Marine Center Dock Replacement

Figure 3 – Graph of construction hours by type and month.....	3
Figure 4 – Observer monitoring locations.....	5
Figure 5 – Observer location on Mount Ballyhoo hillside.....	6
Figure 6 – Observer location on UMC Dock.....	6
Figure 7 – Graph of protected species sightings by specified visibility condition.....	9
Figure 8 – Graph of protected species sightings by specified Beaufort sea state (BSS).....	10
Figure 9 – Graph of protected species sightings by of specified glare %.....	11
Figure 10 – Partial view of survey area on an overcast day.....	11
Figure 11 – Partial view of survey area on a sunny day.....	12
Figure 12 – Graph of sightings by month.....	14
Figure 13 – Graph of Steller sea lion behaviors.....	15
Figure 14 – Graph of construction hours by type with vessel activity.....	16
Figure 15 – Graph of sightings by month with vessel activity.....	17
Figure 16 – Humpback whales in Unalaska Bay.....	17

LIST OF APPENDICES

Appendix A. Project Area Grid

Appendix B. Potential Noise Exposures

Appendix C. Summary of Sightings

Appendix D. Daily Observation Records (Digital)

Acronyms and Abbreviations

dB	decibels
DPS	distinct population segment
ESA	Endangered Species Act
IHA	Incidental Harassment Authorization
MMO	Marine Mammal Observer
MMMP	Marine Mammal Monitoring Plan

Final Observer Report
For Unalaska Marine Center Dock Replacement

MMPA Marine Mammal Protection Act

NMFS National Marine Fisheries Service

NOAA National Oceanic and Atmospheric Administration

1 Introduction

The City of Unalaska (COU) conducted observations in support of the Unalaska Marine Center (UMC) Dock Replacement Project in Unalaska, AK between June 2017 and February 2018. The observer program was designed and managed by PND Engineers, Inc. (PND) to comply with all pertinent project permits. The observer program was executed by observers from High Tide Environmental, LLC and TZ Engineering. In accordance with the project's Incidental Harassment Authorization (IHA) and accompanying Biological Opinion, this is the final report of all monitoring activities. Previously submitted monthly data has been compiled here and reviewed for accuracy and completeness. The primary goals of the monitoring program were:

- To monitor the Level A and Level B harassment zones, estimate the number of marine mammals potentially exposed in these, and document responses;
- To minimize impacts to the marine mammal species present in the project area by implementing mitigation measures including monitoring of the shutdown and monitoring zones, clearing the zones and shutdown procedures; and
- Collect data on the occurrence of marine mammal species in the project area and any impacts from the project.

2 Project Area

The UMC Dock is located within Dutch Harbor in Unalaska, Alaska (53.9030°N, -166.527°W) Township 72S, Range 117W, Section 35, of the Seward Meridian as found on USGS Quad Map Unalaska C-2.

The project is located between the existing USCG Dock and the existing UMC Dock. The project provides 610 feet of new dock face with a minimum water depth of approximately 45 feet. The project will align approximately 390 feet of the new dock face with the current U.S. Coast Guard dock creating a total face length of approximately 730 feet, for this section of the facility. The project will also provide approximately 220 feet of dock aligned with existing UMC Positions V through VII creating the added length needed for modern container ships that use the Port of Dutch Harbor. The dock has the added benefit of creating over 1.8 acres of new uplands area that can be utilized for container storage or other critical port activities. Figure 1 provides an overview of the project area.



Figure 1. Project location within Dutch Harbor, AK

3 Project Description

The City of Unalaska installed an OPEN CELL SHEET PILE™ (OCSP) dock at UMC Dock Positions III and IV, replacing the existing pile-supported structure and providing a smooth transition between the previously existing UMC facility and the U.S. Coast Guard dock. The project involved demolition of the existing dock, installation of sheet pile cells and supporting round piles, and placement of fill within the completed cells. Additional details for the project description were given in the IHA application for this project.

3.1 Construction Activities

The existing infrastructure was demolished and its support piles were removed using a vibratory hammer. The template framework and sheet piles for the new dock were also installed using a vibratory hammer. Following the installation of sheet piles for the first few cells, clean fill material was placed behind the sheet pile cells and compacted using vibrocompaction methods. Construction of the remaining cells continued in a similar manner. Fender piles were installed along the dock face using a combination of vibratory driving, drilling, and impact driving. Additional details for construction methodology were given in the IHA application for this project.

Final Observer Report
For Unalaska Marine Center Dock Replacement

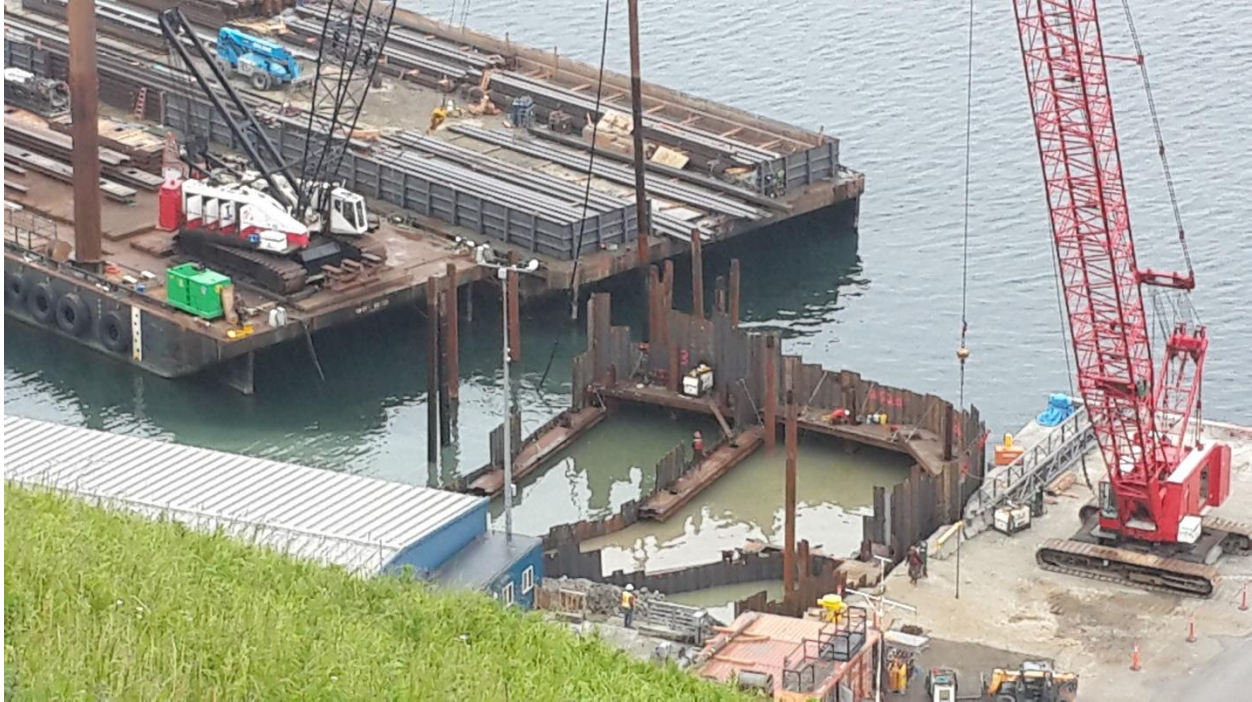


Figure 2 – Sheet pile cell under construction

Start and stop times for drilling, vibratory driving, vibrocompaction, and impact driving were recorded by observers. Figure 3 summarizes the hour of each type of activity. Other types of construction work, including stabbing or dead-pulling piles and other in- or over-water construction, were not tracked by time, but were monitored and were noted in relation to animal sightings.

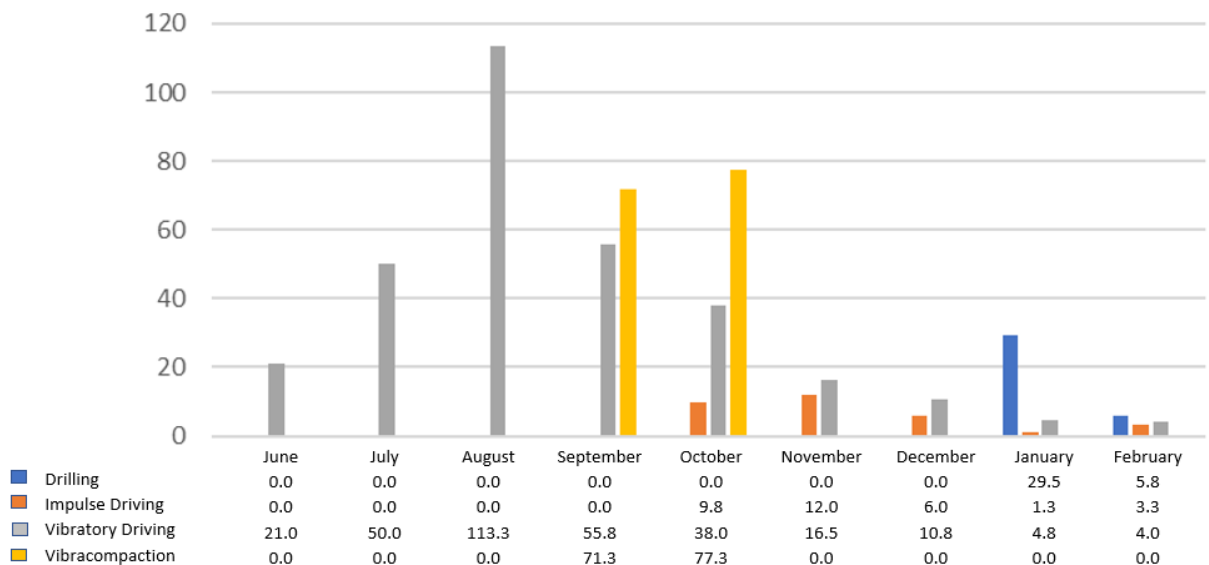


Figure 3 – Graph of construction hours by type and month

4 Observation Methods

The Marine Mammal Observers (MMOs) operated in accordance with the Marine Mammal Monitoring Plan (MMMP): Unalaska Marine Center Dock Positions III and IV Replacement Project (Draft, revised February 2, 2017). The MMMP was simplified to a set of observer instructions and utilized some minor updates based on final permits. A team of six observers were used to work the shifts over the nine-month duration of the project with two observers always in the field during pre-construction monitoring, construction monitoring, and post-construction monitoring. Field observations forms were preserved locally and backed up both locally and on multiple devices at High Tide Environmental. Marine mammal sightings and potential exposures were entered into a spreadsheet each week.

MMOs recorded mammal sightings, construction activities, environmental conditions, and vessel traffic. The MMOs utilized stations that provided sufficient viewpoint over the project activities, varying their location based on weather, visibility, and project needs (Figure 4). All sites shown in figure 4 were used for observations except the location on the end of the spit. Observers were equipped with two-way radios allowing for direct communication with the site manager and between the observers.

4.1 Observer Stations

The primary observation stations were on Rocky Point and the UMC Dock. The site on the Mount Ballyhoo hillside was used frequently and the site on the spit was not used at all. Pre and post-construction monitoring typically involved driving along the road system around Dutch Harbor to ensure animals were not present in any blind spots caused by vessels or infrastructure. Daily usage of the observation stations was based on construction activities, weather conditions, and optimization of view angles. Figures 5 and 6 show typical observer site conditions.

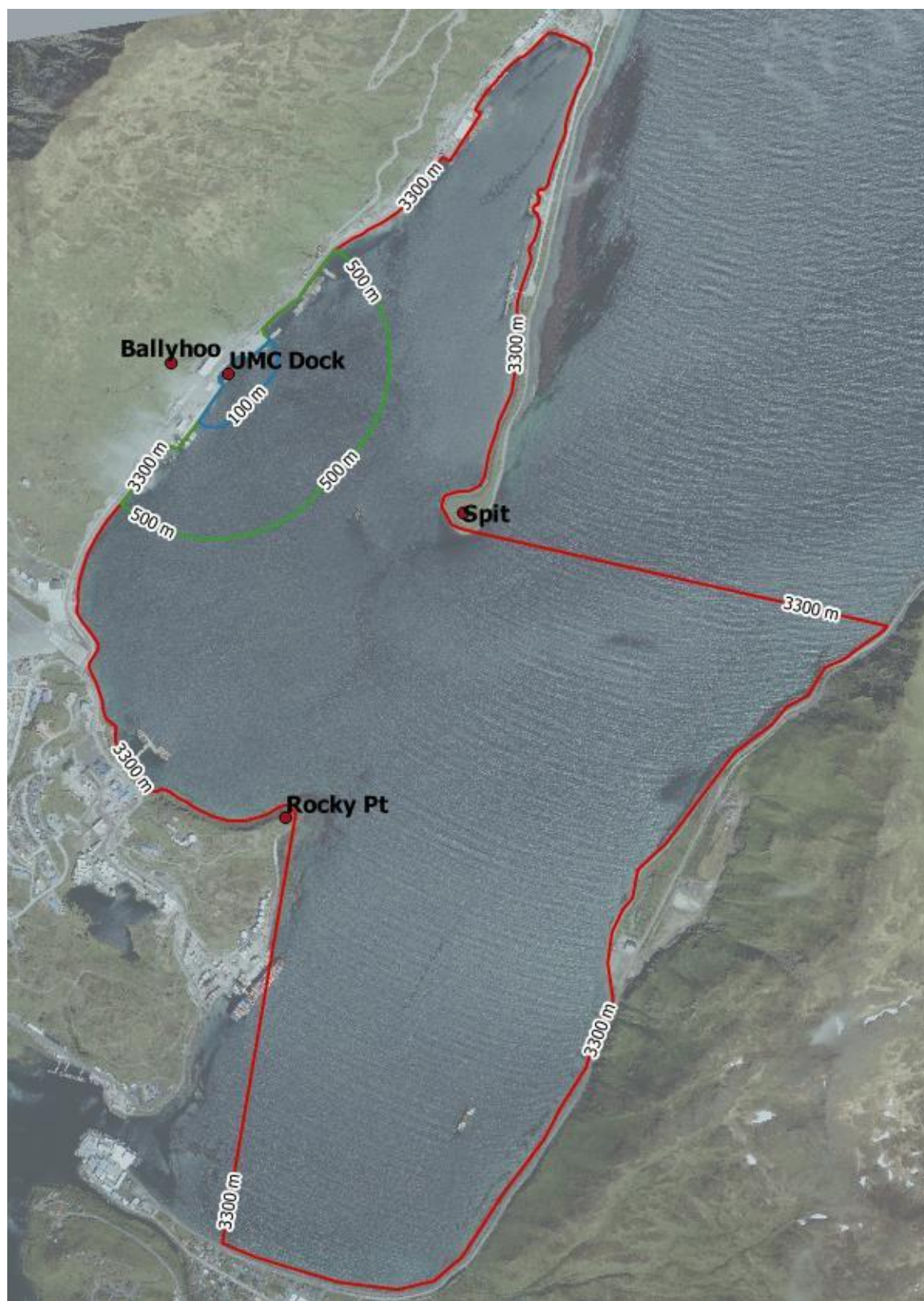


Figure 4. Observer monitoring locations.

Final Observer Report
For Unalaska Marine Center Dock Replacement



Figure 5. Observer location on the Mount Ballyhoo hillside; photo by Carol Bunes.



Figure 6. Observer location on the UMC Dock; photo by Tracy Bulard

4.2 Observer Efforts

Approximately 3,600 hours of observation took place during 150 days from 16 June 2017 to 9 February 2018. Occasional breaks in construction occurred due to construction schedule, poor weather, or holiday breaks. Two MMOs were in position to observe both the Level A and Level B Harassment zones during pile driving, drilling, vibracompaction, and any in- or over-water work. On rare occasions, a single observer was used to monitor in- or over-water dockside activities that did not require observation of the larger pile-driving exclusion zones. The shutdown and monitoring zones used for this project are summarized in Table 1.

Table 1 – Summary of shutdown and monitoring zones

Species		Effective Shutdown Zones (m)			Effective Monitoring Zones (m)				
		In/ Over Water Work	Vibratory /Removal /Drilling	Impact	Vibratory /Removal /Drilling	Impact	Upland Vibratory	Upland Impact	Quarry Blasting
Cetaceans	Humpback Whales	10	10 - 15	10 - 400	3300	1000	N/A	N/A	N/A
	Killer Whales	10	10	10 - 15	3300	1000	N/A	N/A	N/A
Pinnipeds	Steller sea lion	10	10	10 - 15	3300	1000	10	50	15
	Harbor seal	10	10 - 15	10 - 215	3300	1000	15 - 35	150	40
	Other NMFS mammals	10	1600 / 3300	1000	N/A*				

**Level B Harassment is not authorized for these species, so there are no monitoring zones.*

Observations began and ended at least 30 minutes prior to and following construction activities. In practice, the MMO coverage was nearly continuous on days when construction activities occurred that required monitoring. Monitoring during the busiest phases of in-water construction involved 12hour work days, seven days a week. The crew rotated shifts approximately every four hours.

4.3 Visibility Conditions

Dutch Harbor and the inner portion of Iliuliuk Bay are protected by on three sides by land masses. The most protected water is inside Dutch Harbor, especially to the north end. The area most likely to have rougher wave conditions is Iliuliuk Bay, depending on wind direction. Strong north winds result in the greatest wave heights in Iliuliuk Bay. Due to the protection afforded by the land masses, wave heights were typically less than 3 feet in Iliuliuk Bay and even less inside Dutch Harbor, and resultant visibility conditions were generally good. When the wind was very strong it was typically above the maximum velocity for safe crane operations, so work was cancelled for the day on several occasions in the fall and winter. This practical limitation essentially eliminated situations where work occurred with rough sea conditions that would have limited marine mammal detectability. Visibility limitations most often resulted when fog set in, in which instance work was postponed until conditions improved. Weather was most commonly partly cloudy or overcast, allowing for good visibility conditions.

The weather breakdown of the approximately 3,600 hours of MMO hours is shown in Table 2. This table uses the visibility characteristics from the MMO data sheets and shows that most of the observation hours were carried out during moderate to excellent visibility conditions. Visibility is a better metric for marine mammal sighting conditions than the weather conditions since sunny days can often be less than ideal due to the associated glare.

Table 2 – Summary of Visibility Conditions

	Excellent	Good	Moderate	Poor	Bad
Total Hours	612	2196	648	72	36
% Total Hours	17	61	18	3	1

Visibility condition is an estimate of visible distance made by the observers based on the following intervals: Excellent (>10 km), Good (3 – 10 km), Moderate (0.9 – 3 km), Poor (0.5 – 0.9 km), Bad (<0.5 km).

Final Observer Report
For Unalaska Marine Center Dock Replacement

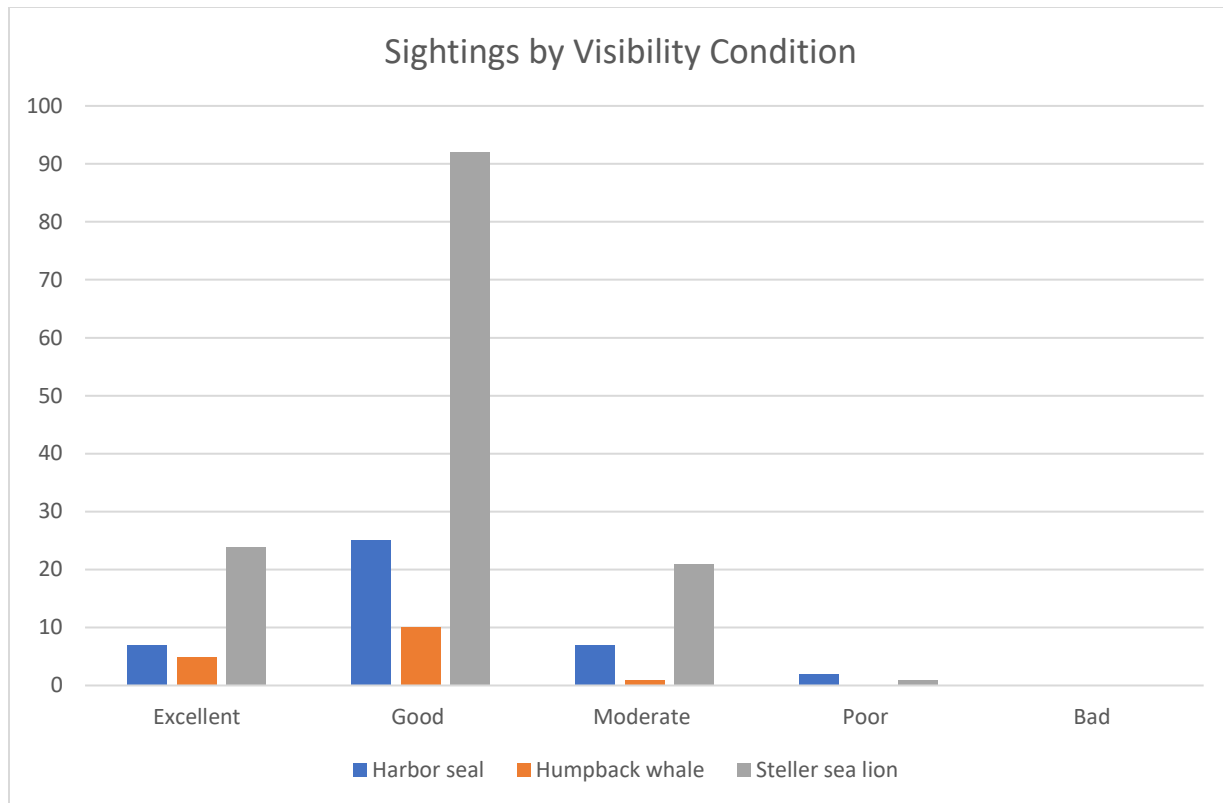


Figure 7 – Graph of protected species sightings by specified visibility condition

Beaufort sea state (BSS) is an established scale designed to describe wind and wave conditions at sea, described further in the MMMP.

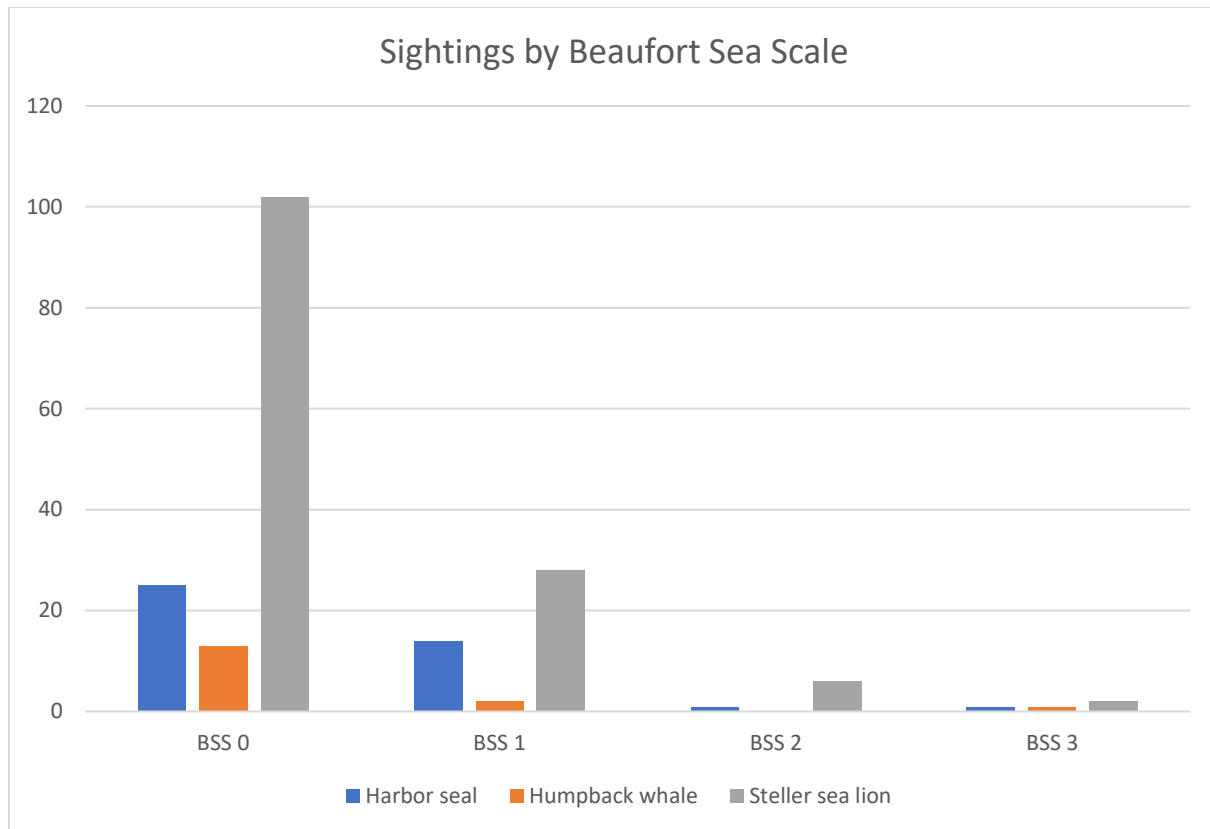


Figure 8 – Graph of protected species sightings by specified Beaufort sea state (BSS)

Final Observer Report
For Unalaska Marine Center Dock Replacement

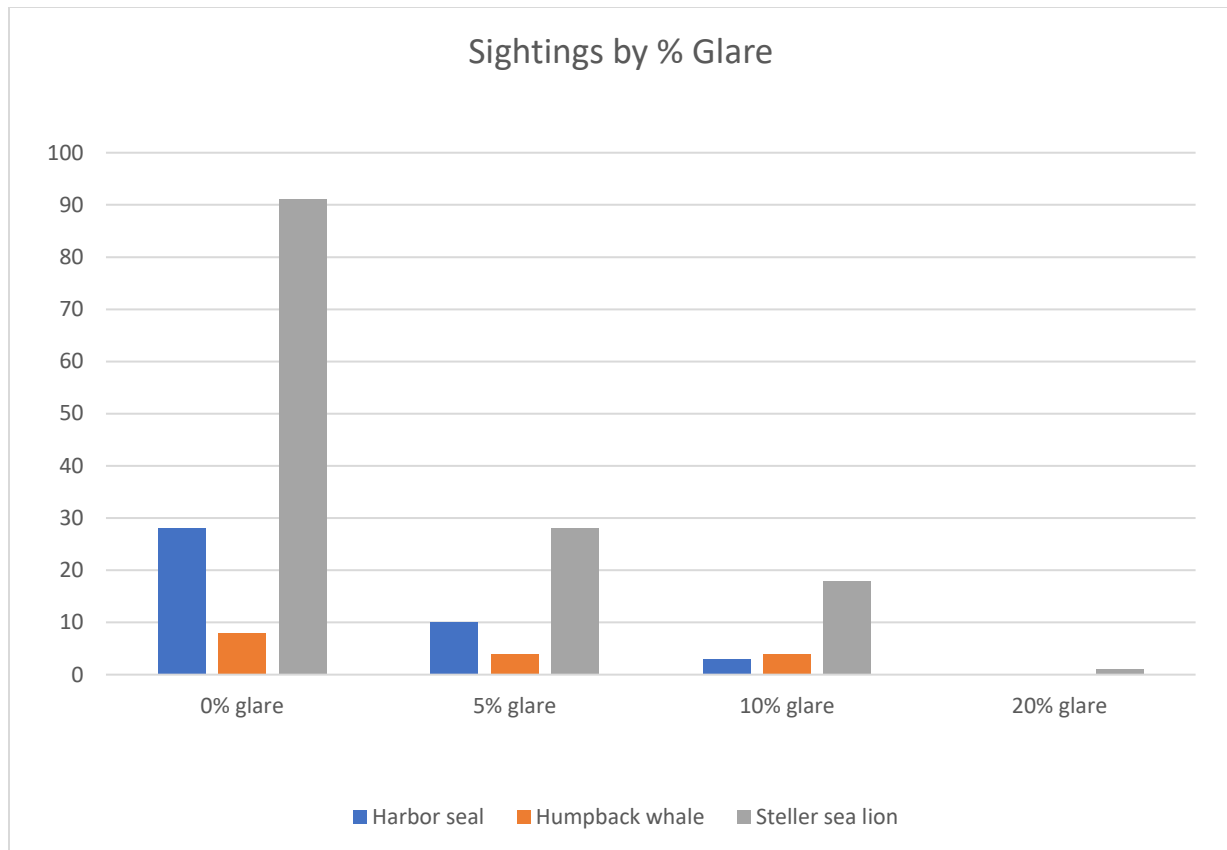


Figure 9 – Graph of protected species sightings by hour of specified % glare



Figure 10 – Partial view of survey area on an overcast day. Project area is in the lower right foreground.
Photo by Carol Bunes



Figure 11 – Partial view of survey area on a sunny day; photo by Carol Bunes

4.4 Sighting Records

Observers recorded all sightings of marine mammals while on site, regardless of whether construction operations were occurring. Sighting records included sighting record number, observer name and location, date and time of first and last observation, location of first observation, group size (if appropriate, this was estimated by minimum, maximum, and best guess counts), direction of travel, animal behavior, construction at the time of sighting, mitigation used for that animal, visibility and weather conditions at the time of first sighting, and notes regarding the animal's activities and other significant events. If multiple construction or mitigation types occurred during the animal's presence, the most significant was recorded. If an animal remained during both fill operations and vibratory pile driving, the construction type was recorded as 'V' (vibratory driving). Exposures to pile-driving or drilling noise were noted for animals that entered the Level B monitoring zones.

Separate entries were made for start and stop times of 'SS' (soft start procedures), vibratory driving (sometimes with the additional characterization of 'VC' for vibracompaction), 'I' (impact driving), 'M-DE' (delays), and 'M-SD' (shutdowns). Notes were made in the comment field when pile driving activities took place in uplands. There was no additional tracking of 'FI' (fill placement), 'OWC' (over-water construction), 'DP' (dead-pulling piles), or 'BC' (bubble curtain) beyond the notes made in sighting entries, so start and stop times are not available for these activities unless noted.

Individuals or groups were tracked for as long as they could be uniquely identified. If an animal or group was not continually tracked, a new sighting number was used when it was next observed. The use of "re-sighting" codes (e.g. 17.1, 17.2) were used when the MMO was certain that the same animal or group of

animals appeared in an adjacent location a short time after it was initially observed but when the initial observation was closed out on the form. Re-sighting codes were not used if there were long periods of time between initial and subsequent observations. When in doubt, a new observation was started even though it might inadvertently cause an animal or group of animals to be double counted.

Vessel traffic was noted throughout the day, with vessel names if visible. Few animal/vessel interactions were noted other than sea lions milling about fishing vessels for opportunistic feeding. In some cases, sea lions were observed climbing out on the stern ramp of trawlers, but intentional feeding by crew members was never observed.

Appendix D contains all the observer records in digital form. These have been reviewed for completeness and correctness of transcription. The original observer reports remain on file with High Tide Environmental.

5 Sighting Summary

A total of 224 marine mammal sightings were recorded between 16 June 2017 and 9 February 2018. This count includes 162 Steller sea lion sightings (206 individuals), 42 harbor seal sightings (52 individuals), and 20 humpback whale sightings (16 individuals). There was one harbor seal re-sighting of a single seal, four humpback whale re-sightings of a single whale, and 21 Steller sea lion re-sightings of single and multiple sea lions. Rates of sightings of harbor seals were relatively consistent from July through October, while Steller sea lions were present in greater numbers during August through October. Humpback whales were sighted in July through October. Figure 12 shows sighting rates for each species by month.

Table 3 – Summary of sightings

Species	Population / Stock	MMPA Status	ESA Status	Occurrence In/Near Project Area	Number of Sightings	Number of Individuals**
Steller sea lion (<i>Eumetopias jubatus</i>)	Western distinct population segment	Depleted	Endangered	Common	162	206
Harbor seal (<i>Phoca vitulina richardii</i>)	Aleutian Islands	Protected	N/A	Occasional	42	52
Humpback whale (<i>Megaptera novaeangliae</i>) *	Hawaii DPS	Protected	Not Listed	Seasonal	~17	~14
Humpback whale (<i>Megaptera novaeangliae</i>) *	Western North Pacific DPS	Depleted	Endangered	Seasonal	~2	~2
Humpback whale (<i>Megaptera novaeangliae</i>) *	Mexico	Protected	Threatened	Seasonal	~1	~1
Total					224	274***

*NMFS estimates the percentage of the three population of humpbacks whales in the Aleutian Islands are 86.5% Hawaii DPS, 4.4% Western North Pacific DPS, and 11.3% Mexico. These percentages were applied to this table to most accurately estimate the breakdown of sightings.

Final Observer Report For Unalaska Marine Center Dock Replacement

***Count of individuals is based on "Group Max" field (the observers' estimate of the maximum number of individuals in a group).

***This sum of this column would read 275 if added as shown, but there were only 274 individuals sighted. The rounding error in humpback whales is the reason for this apparent error in the sum of the column.

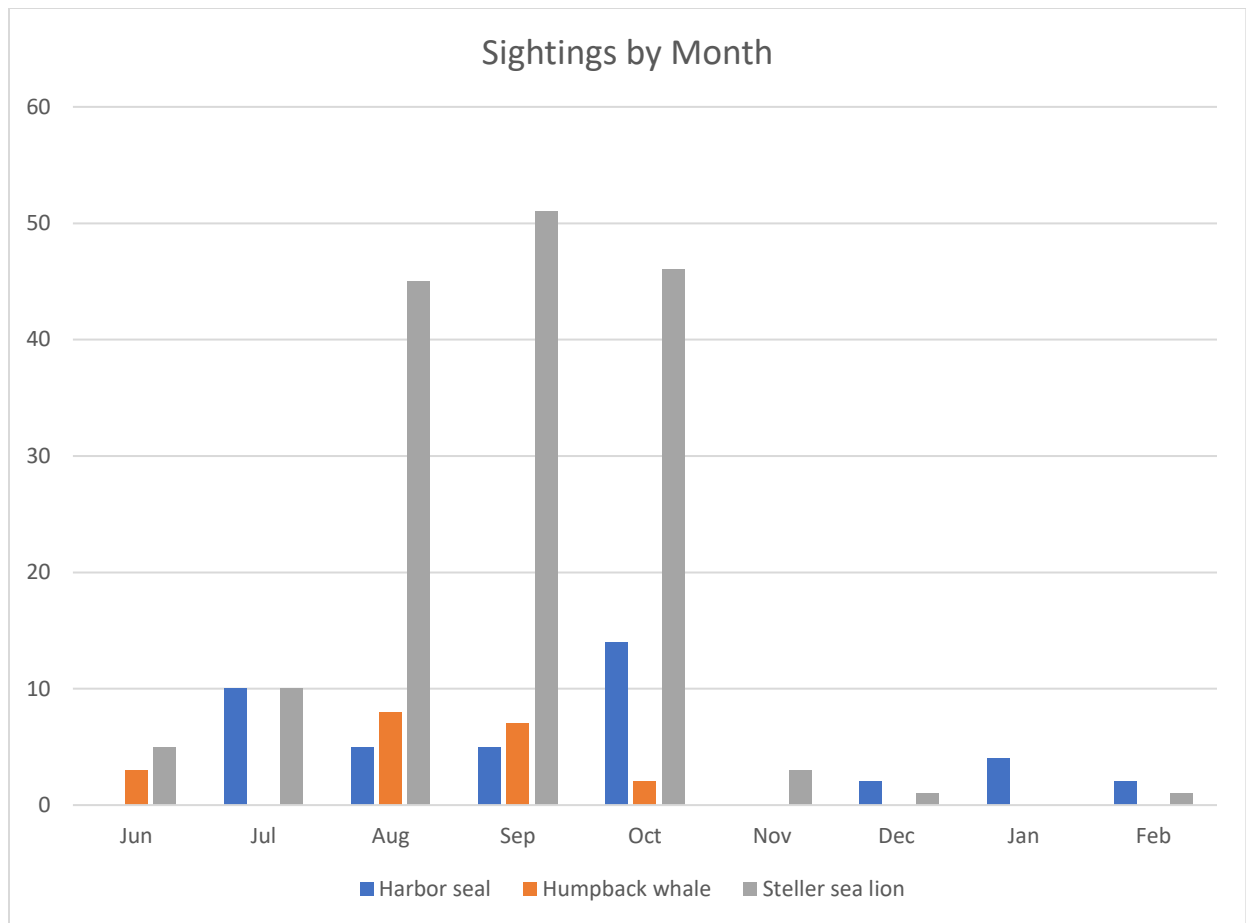
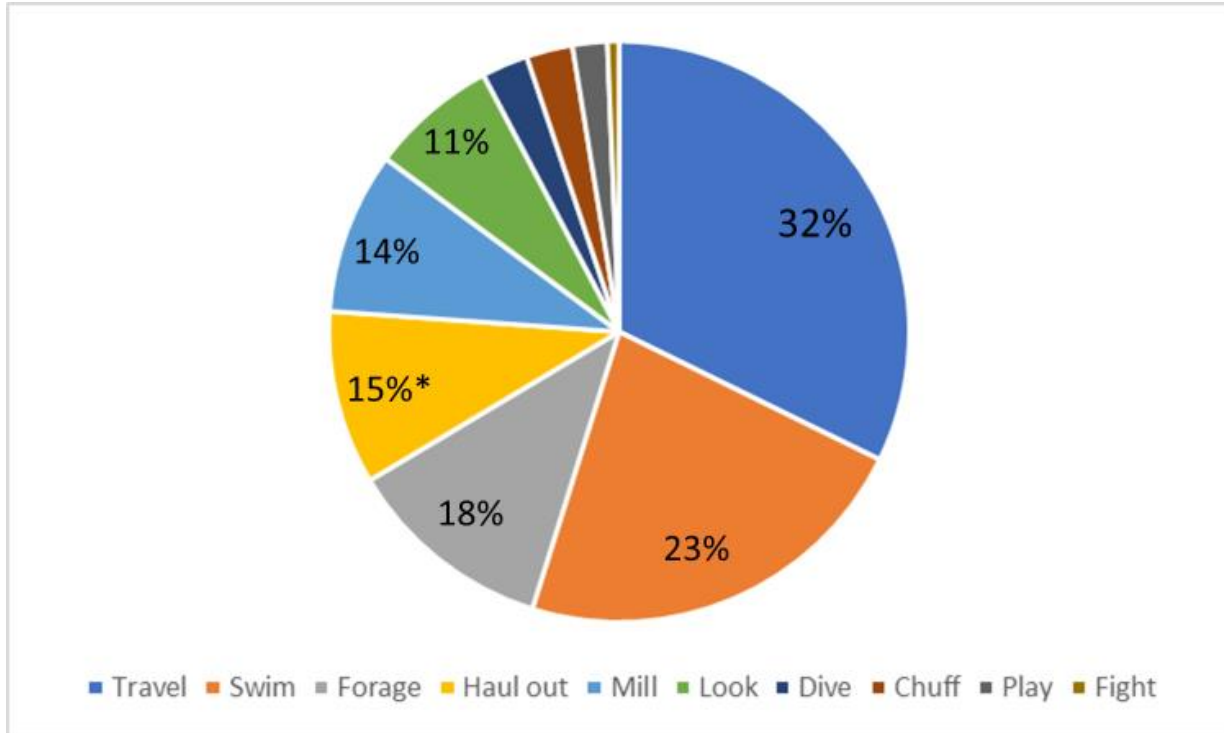


Figure 12 – Graph of sightings by month



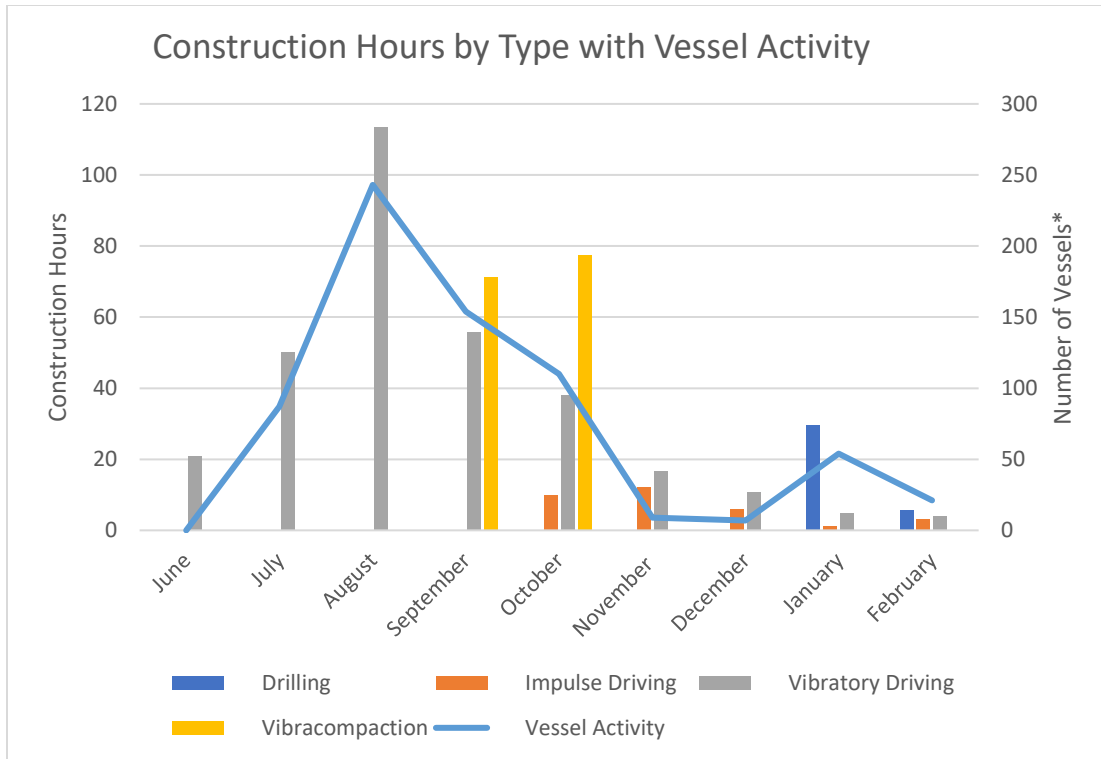
*Hauled out sea lions in this area were sea lions on two different mooring buoys in Dutch Harbor, not on docks or land.

Figure 13—Graph of Steller sea lion behaviors

Steller sea lion sighting rates are likely explained by a combination of their reproductive history and local conditions. Many Steller sea lions are likely at rookeries in June and July, accounting for the low numbers observed by MMOs. The sharp increase in observations in August through September is likely due to an abundance of salmon in Iliuliuk Bay, either for natal streams such as Iliuliuk Creek or simply an abundance of sea run salmon (king salmon were particularly abundant in Unalaska Bay during late summer and early fall 2017). Timing of Steller sea lion abundance during the MMO observations was not correlated with commercial fishing. The pollock “B” season and several other fisheries are starting up and active in June and July when very few sea lions were observed. Commercial boats come into Dutch Harbor to offload at Icicle Seafoods at the head of Dutch Harbor, which is the only processor in Dutch Harbor. Commercial fishing vessels routinely come into Kloosterboer, but this is only an offload site for catcher-processors, so all the product is already boxed and frozen, providing little in the way of attractant except for a few curious sea lions that swim up on stern ramps of the trawlers. It does not appear that marine construction on the UMC project attracted or deterred Steller sea lions or altered their behavior in any noticeable manner.

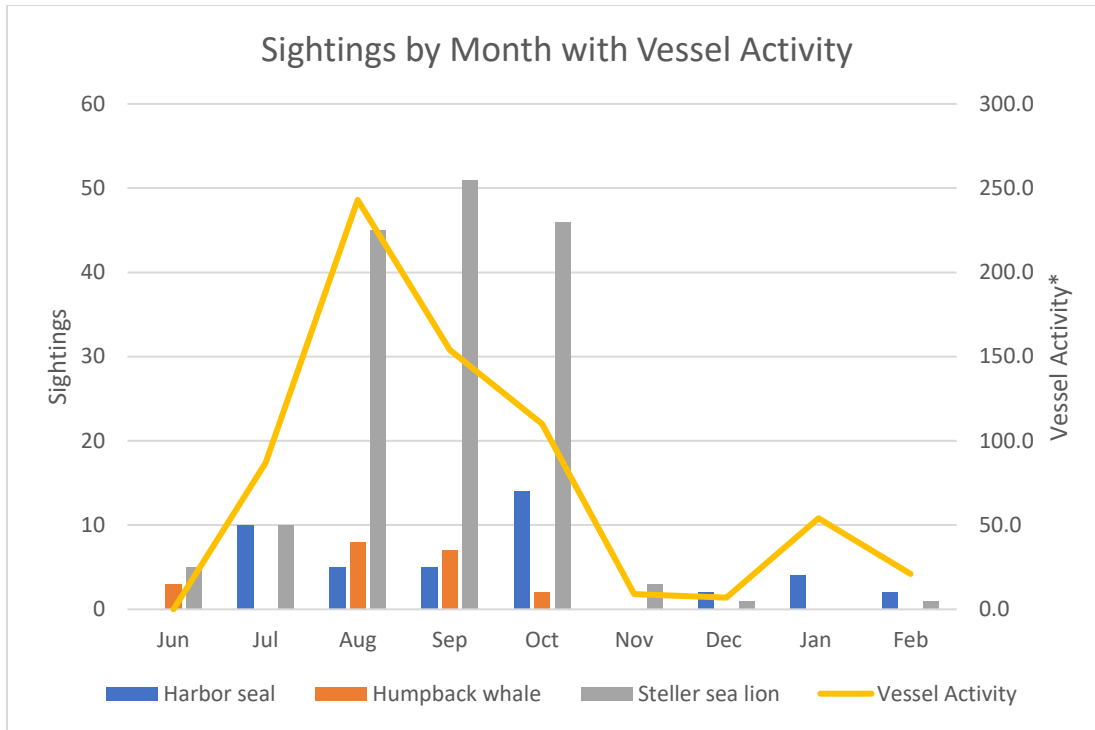
Harbor seals and humpback whales were present in low number during many of the months of construction, especially the busy construction months of July through October (see figure 3). MMOs did not note any visible reaction by harbor seals or humpback whales to various aspects of marine construction.

Final Observer Report
For Unalaska Marine Center Dock Replacement



*Vessel activity was not recorded in June, so the true number is not zero vessels. Low numbers in December and January are partially due to short work months due to weather and holiday break. February has low numbers since construction/MMO work ended on 9 February.

Figure 14 – Graph of construction hours by type with vessel activity



*See vessel activity explanation for figure 14.

Figure 15 – Graph of sightings by month with vessel activity

Vessel activity did not appear to result in any change in marine mammal abundance or behavior. The months with the most sightings also had abundant vessel traffic and very active marine construction.



Figure 16 – Humpback whale in Unalaska Bay; photograph by Carol Bunes

5.1 Potential Noise Exposures

Of the 224 recorded sightings, 69 potential exposures (98 individuals) of marine mammals to Level B Harassment (behavioral disturbance) from noise were identified from the recorded sightings. The total number of individuals potentially exposed is well below the numbers authorized in the IHA (Table 4). Of the 69 potential exposures, all but one was due to vibratory pile driving; the only exception was a single potential exposure due to impact pile driving. No potential exposures of marine mammals not

authorized under the IHA were observed. Coordination of a delayed effort for vibratory pile driving with the contractor (a mitigation measure), was done twice to prevent Level A exposures to Steller sea lions. In both these situations the sea lion was in the level B zone during over-water construction but was very close to the level A zone. The contractor was informed of this and delayed the initiation of upcoming vibratory pile driving until the sea lion was far removed from the level A zone. Killer whales were never sighted during this project; the fractional exposure noted in table 4 is due to estimated exposure during some brief periods of fog when a portion of level B zone was obscured (although visible and cleared prior to initiation of construction earlier in the day). Fractional exposures noted for other species in table 4 are also due to the same fog events.

Table 4 – Potential exposures to level B harassment

Species	Authorized Level B takes	Potential exposures (fog)	Potential exposures (individuals)*	Potential exposures (total)	Unused Level B Allowance
Steller sea lion	926	4.29	67	71.29	854.71
Harbor seal	470	2.2	23	25.2	444.8
Killer whale	88	0.34	0	0.34	87.66
Humpback whale	176	0.85	8	8.85	167.15

*Count of individuals is based on "Group Max" field (the observers' estimate of the maximum number of individuals in a group).

See Appendix A for an image of the grid map used. Distances to animals are calculated based on the distance from a grid point identifying the initial sighting position to the observer location. A table in Appendix B summarizes the potential noise exposures for this project. Additional details are available in the list of sightings (Appendix C) and in the digital observer records (Appendix D).

5.2 Mitigation Measures

Mitigation measures used to prevent unauthorized exposures included soft starts, delays, and shutdowns. Bubble curtains were not used during this project. Soft starts were performed 245 times throughout the project, including 19 times for impact driving and 226 times for vibratory driving and vibracompaction. Delays were experienced 2 times and shutdowns were not required during this project.

Delays were experienced twice for Steller sea lions approaching the level A zone while over water construction was occurring, but vibratory pile driving was slated to begin shortly. In both these cases work was delayed until the sea lion moved well away from the Level A boundary. No shutdowns were necessary during this project.

Table 5 – Summary of delays

Date	Event Code	Start Time	End Time	Const. Type	Behavior Change / Response to Activity / Comments
8/27	Delay	08:17	08:45	OWC	Delay for sighting #67 – delayed start of vibratory pile driving until sea lion moved far away from Level A zone.
8/31	Delay	09:10	10:05	OWC	Delay for sighting #73 – delayed start of vibratory pile driving until sea lion moved far away from Level A zone.

6 Conclusions

Protected-species monitoring during the UMC Dock Replacement Project successfully prevented unauthorized take of marine mammals. Observations continued regardless of concurrent construction activities and showed little to no evidence of behavioral changes because of the project.

The monitoring stations were effective in providing full observer coverage of the shutdown and monitoring zones, and communication with the contractors was typically successful in ensuring that all mitigation protocols were followed. Delays were successfully implemented as needed. Less than 7% of the authorized takes were used to complete the project.

Appendix A. Project Area Grid

Final Observer Report
For Unalaska Marine Center Dock Replacement



Appendix B. Potential Noise Exposures

Final Observer Report
For Unalaska Marine Center Dock Replacement

Date	Start Time	End Time	Sight #	Species	Number of Animals (Group)	Calculated Distance (m) Animal to Construction	Construction Type	Mitigation Type	Behavior change/ Response to Activity/ Comments
22-Jun-17	16:48	18:50	3	Humpback Whale	1	1277	V	None	Humpback Observed off Delta Western Dock, final obs off DW Dock, no changes to behavior
22-Jun-17	16:58	None	4	Steller Sea Lion	1	1291	V	None	Sea Lion observed N of Delta Western Dock TR-SE out of B zone, no changes noted
25-Jul-17	19:36	19:37	20	Steller Sea Lion	1	2650	V	None	Sea Lion TR-S from G19 towards front beach/channel, briefly saw head/neck, went under, no changes present
26-Jul-17	17:16	17:35	21	Harbor Seal	1	1819	V	None	Harbor seal hauled out on rock near Rocky Point, later slipped into water, looked to be TR- S but lost sight of quickly
29-Jul-17	8:45	9:30	24	Steller Sea Lion	1	1443	V	None	Sighted Sea lion surface by vessel stern at Delta Western dock, did not see surface again, no noticeable changes to behavior
30-Jul-17	13:49	17:25	28	Harbor Seal	1	1752	V	None	Harbor seal Hauled out on rock at Rocky Point, Observed there for over 3 hrs., at 1725 it was gone, did not see leave rock but Vibbing took place from 1710 - 1810 so exposure must have taken place

Final Observer Report
For Unalaska Marine Center Dock Replacement

1-Aug-17	12:00	12:01	29	Humpback Whale	1	1470	V	None	Humpback Porpoising, TR- S in direction of APL dock, no change detected
1-Aug-17	12:35	12:53	30	Humpback Whale	1	820	V	None	Humpback swam into Dutch Harbor, loitered in the middle and then left harbor, no changes to behavior detected
2-Aug-17	12:34	12:34	31	Humpback Whale	1	2140	V	None	Saw tail first, Humpback dove under, traveled S towards front beach, no changes detected
4-Aug-17	12:42	12:45	34	Steller Sea Lion	2	1735	V	None	Sea lions surfaced and appeared to be playing, did not see again after 3 minutes near the surface.
6-Aug-17	11:43	11:53	37.1	Steller Sea Lion	3	1989	V	None	Resight of Sea Lions, still milling but a little farther to the South, no changes detected
6-Aug-17	12:16	12:32	37.2	Steller Sea Lion	3	1989	V	None	No behavior changes noted, just appeared to be traveling N
6-Aug-17	12:47	12:56	37.3	Steller Sea Lion	3	2160	V	None	Resight - Same three STSL changed direction and were observed travelling S where they milled and foraged salmon
6-Aug-17	12:47	12:56	38	Steller Sea Lion	2	1166	V	None	Two different Sea Lions milling about at the mouth of the harbor, no behavior changes
6-Aug-17	17:50	18:30	39	Steller Sea Lion	1	448	V	None	Sea lion was foraging and went under and did not resight
7-Aug-17	10:00	10:20	40	Steller Sea Lion	1	1422	V	None	Observed Sea Lion foraging for food near Delta Western dock, no behavioral changes seen

Final Observer Report
For Unalaska Marine Center Dock Replacement

7-Aug-17	10:30	10:50	40.1	Steller Sea Lion	1	1711	V	None	Resight - Followed Sea Lion to tip of Rocky Point where it milled, swam and floated
7-Aug-17	12:00	12:00	41	Steller Sea Lion	1	1478	V	None	Sea Lion TR-W to Delta Western dock from Rocky Point, no changes noted
10-Aug-17	14:06	14:06	44	Steller Sea Lion	1	1734	V	None	Sea Lion spyhopping just N of the large rock off Rocky Point, not traveling in any known direction,
10-Aug-17	16:25	16:45	45	Steller Sea Lion	1	208	V	None	Sea Lion milling off end of Coast Guard dock, no changes to behavior
13-Aug-17	10:05	10:25	50	Steller Sea Lion	1	2172	V	None	Sea Lion spyhopping over near the landfill, watched for 20 minutes and lost sight after that, no behavior changes
19-Aug-17	11:16	11:27	52	Steller Sea Lion	2	1724	V	None	Two Sea Lions milling near reef off Rocky Point, normal behavior
19-Aug-17	11:28	11:32	52.1	Steller Sea Lion	1	1514	V	None	Resight - One of the two Sea Lions split off, TR-W around Rocky Point to Delta Western side, submerged and lost sight, seems like normal behavior
22-Aug-17	12:30	12:40	55	Steller Sea Lion	2	1765	V	None	Sea Lions TR- S past Rocky Point to APL dock area, lost sight at E18
22-Aug-17	18:21	18:21	56	Humpback Whale	1	917	V	None	Humpback sighted TR-NE around inner harbor, normal behavior
23-Aug-17	11:50	12:05	58	Steller Sea Lion	1	1497	V	None	Observed Sea Lion travel into inner harbor, over to Delta Western dock, then back out in the areas of D14, C13, B12, and D14

Final Observer Report
For Unalaska Marine Center Dock Replacement

24-Aug-17	9:40	9:42	61	Harbor Seal	1	1078	V	None	Harbor Seal spotted offshore by Magone/Resolve Marine in area between G3 and H3, sighted just once and it disappeared. Vibbing had just stopped but mammal exposed, no noticeable changes to behavior
24-Aug-17	11:23	11:36	62	Steller Sea Lion	1	1902	V	None	Sea Lion swiftly TR-N from area of H15, lost sight of
24-Aug-17	14:47	15:04	63	Steller Sea Lion	1	1356	V	None	Sighted Sea Lion just off Delta Western dock foraging for salmon, TR-E and sighted a few more times, lost sight at D-13, no apparent behavior changes to Vibbing
25-Aug-17	14:56	16:45	64	Harbor Seal	1	1851	V	None	Harbor Seal spyhopping in area between RP and APL, it moved slightly N of E16 continuing to spyhop, no changes to behavior due to construction
26-Aug-17	13:42	14:03	65	Steller Sea Lion	1	1097	V	None	Sea Lion spotted in area H10, TR-E, actively searched for 20 minutes, no resights, no noticeable behavior modifications to Vibbing
27-Aug-17	9:03	9:21	67.1	Steller Sea Lion	1	1318	V	None	Resight of Sea Lion behind vessels at Delta Western dock, diving and possibly feeding here for 20 minutes, then lost sight of, no noticeable changes to Vibbing except it moved in direction opposite of construction site from previous sighted location

Final Observer Report
For Unalaska Marine Center Dock Replacement

27-Aug-17	15:04	15:55	69	Steller Sea Lion	1	278	V	None	Sea Lion surfaced in front of UMC dock, it was TR-S to Delta Western dock area, did not resight, no changes to behavior that is noticeable
1-Sep-17	11:20	11:25	74	Steller Sea Lion	1	1477	V	None	Sea Lion popped up, looked around, then appeared to TR back around Rocky Point
1-Sep-17	15:45	16:30	75	Steller Sea Lion	1	211	V	None	Sea Lion feeding off UMC/UCCG Dock, TR-S to Delta Western dock
2-Sep-17	12:45	13:45	76.1	Steller Sea Lion	2	374	V	None	Resight - Two of the four Sea Lions came up in same area as originally sighted, looking around and TR-N again, hanging around Icicle and TR-S along spit dock near vessels, lost sight here, confirmed resight - one of the four is extremely light in color in both groups of STSL's.
5-Sep-17	15:08	15:20	78	Humpback Whale	1	686	V	None	Humpback surfaced and blew, traveled inner harbor, F10, E12, and B13, TR-E to outer harbor, then N and lost sight of
6-Sep-17	15:21	15:30	86.1	Steller Sea Lion	2	313	V	None	Re-sight of Sea Lions previously hauled out TR-W towards TMC barge, dove under and could not resight them, called TMC to let them know they were close and to possibly delay vibbing, delay did not happen

Final Observer Report
For Unalaska Marine Center Dock Replacement

6-Sep-17	19:00	19:28	88	Steller Sea Lion	9	269	V	None	Heard of Sea Lions passed by TMC barge swimming N to Icicle dock area, lost sight of at the spit dock area, no noticeable behavior changes due to vibbing
9-Sep-17	14:28	14:30	95	Steller Sea Lion	1	1481	V	None	Sea Lion popped up then traveled W towards Delta Western dock, lost sight of here, sighting too brief to notice any behavior changes
10-Sep-17	11:58	12:30	98	Steller Sea Lion	1	1503	V	None	Sea Lion surfaced at South end of Delta Western dock, milling back and forth at dock for quite some time, went down and was not resighted
10-Sep-17	14:15	14:47	99	Harbor Seal	1	1585	V	None	Harbor Seal Spyhopping at tip of Rock Point in shallow waters, sighted 3 times in 20 minutes, no apparent behavior changes due to vibbing
10-Sep-17	14:24	15:34	100	Steller Sea Lion	2	295	V	None	Two Sea Lions surfaced mid dock at UMC TR-N all the way to Icicle dock, then TR-S along spit dock area, sent down here and did not resurface
10-Sep-17	18:00	18:32	101	Steller Sea Lion	1	551	V	None	Sighted Sea Lion off Tanker at USCG dock TR-N, popped up S end of Magone Barge, dove under and lost him, could not determine any changes to behavior due to vibbing
11-Sep-17	9:18	10:25	102	Steller Sea Lion	1	699	V	None	Small Sea Lion hauled out on Barge buoy, at 10:25 dove into water but did not resurface

Final Observer Report
For Unalaska Marine Center Dock Replacement

12-Sep-17	11:17	11:23	105	Steller Sea Lion	2	1062	V	None	Sighted two Sea Lions TR-W in C12, then B12, lost sight of here, too brief to note any behaviors
12-Sep-17	18:58	19:20	106	Steller Sea Lion	1	2180	V	None	Observed Sea Lion between Rocky Point and APL TR-N, sighted again at mouth of harbor at H13, lost sight of here
13-Sep-17	11:05	11:16	107	Steller Sea Lion	1	1713	V	None	Sea Lion sighted off Rocky Point, TR-E around RP headed S to past APL ship at APL dock, dove under and did not see resurface
13-Sep-17	14:20	15:44	109.1	Humpback Whale	1	1500	V	None	Resight - Confirmed Resight of Humpback (continuously observed North of the B zone) crossed back into B zone feeding while Vibbing this time, TR-S slowly in outer harbor of B zone, lost sight of
19-Sep-17	11:08	11:11	114	Steller Sea Lion	1	1618	V	None	Small Sea Lion sticking snout up, traveled around Rocky Point and headed West, observer moved to get better location to view and lost sight of
20-Sep-17	10:46	11:10	116	Steller Sea Lion	1	1530	V	None	Sea Lion TR-West near Delta Western dock, slowly swimming North past runway area near B-9, looked around a lot, dove and did not resurface, no obvious distress or behavioral changes to vibbing

Final Observer Report
For Unalaska Marine Center Dock Replacement

23-Sep-17	13:33	13:38	122	Steller Sea Lion	1	1327	V	None	Sea Lion popped up near Delta Western dock, five min later at the tip of Rocky Point, TR-East around point, submerged and lost sight, maybe same mammal as sighting #121 but cannot confirm
24-Sep-17	18:46	18:54	126	Steller Sea Lion	2	3158	V	None	Sighted two Sea Lions Porpoising near Front Beach of Unalaska, swiftly TR- West towards channel, lost sight at E23 due to two tugs moving thru Channel at same time, no behavior changes noticed to vibbing
6-Oct-17	10:41	11:47	135	Humpback Whale	1	802	V	None	Sighted Humpback by blow, then body near Spit, TR-N to Icicle dock, sighted four more times traveling back and forth from spit dock boats to Icicle, last seen at G8, did not resurface in harbor, seems like normal behavior, they seem to always go down to and spend time near Icicle dock
6-Oct-17	10:58	11:20	136	Steller Sea Lion	1	1404	V	None	While observing Humpback in sighting #135 sighted this Sea Lion TR-N around NPF dock, Icicle and then Spit dock, handing around vessels possibly looking for food, normal behavior

Final Observer Report
For Unalaska Marine Center Dock Replacement

8-Oct-17	12:35	12:55	143	Harbor Seal	1	1638	V	None	Harbor Seal sticking head out and Looking, then sunk below surface, slowly swam around RP to NW, sank and lost sight of, no apparent reaction to Vibbing
8-Oct-17	14:35	16:10	146	Harbor Seal	3	1865	V	None	(Possible resight of #144 & #145 but cannot confirm this) Three Harbor Seals off RP, looking not traveling in any direction milling in small area, lost sight of after changing positions, no noticeable behavior changes to Vibbing
8-Oct-17	15:13	15:14	147	Steller Sea Lion	1	143	V	None	Sea Lion popped up near UMC dock, TR-N past Coast Guard dock, did not resurface, sighting too brief to note any behavior to Vibbing
19-Oct-17	16:58	17:02	174	Harbor Seal	1	1562	V	None	Harbor Seal off RP spyhopping, looking at me, sighted several times, sunk down and lost him, no noticeable changes in behavior due to Vibbing
19-Oct-17	17:01	19:20	175	Harbor Seal	1	1552	V	None	Light Headed Harbor Seal in same area as #174, spyhopping and looking at me, swam around RP to DW dock side underwater, turned around and came back to RP, seems very interested by MMO presence, checked back at 19:20 and did not see it, behavior is normal

Final Observer Report
For Unalaska Marine Center Dock Replacement

5-Dec-17	16:15	16:19	189	Steller Sea Lion	1	110	V	None	Sea Lion surfaced near worksite, looked around, went down and did not resurface in area, not traveling in any set direction, normal, curious behavior exhibited
13-Dec-17	17:03	18:20	191	Harbor Seal	2	1831	V	None	Two Harbor Seals sighted near Rocky Point, spyhopping and sinking below surface, floating in their favorite area, TMC began vibbing half way into the sighting, no behavior changes after this occurred, mammals onsite until shift ended
23-Jan-18	13:55	14:44	192	Harbor Seal	2	1717	V	None	Two Harbor Seals sighted off Rocky Point, looking and milling in same general area, no direction of travel, normal behavior, still in area at time MMO needed to leave
23-Jan-18	13:55	14:44	193	Harbor Seal	3	1781	V	None	Same time as sighted group of 2 HSEA another group of 3 HSEA's popped their heads up further south, milling about in their spot, normal behavior, no noted changes to Vibbing, in area until MMO had to vacate
29-Jan-18	9:43	10:05	194	Harbor Seal	1	1707	V	None	Harbor Seal observed in cove between RP and APL, spyhopping, not traveling in any direction, no behavior changes to vibbing, still there when MMO had to leave area

Final Observer Report
For Unalaska Marine Center Dock Replacement

29-Jan-18	9:46	10:10	195	Harbor Seal	1	1562	V	None	Sighted another Harbor Seal off RP spyhopping with waves crashing around on reef, very brief sighting could not tell if behavior changes due to vibbing
3-Feb-18	12:03	12:10	196	Harbor Seal	2	1804	V	None	Sighted 2 Harbor Seals in cove South of Rocky Point, spyhopping and looking around, no behavior changes to Vibbing as I observed before and after
4-Feb-18	12:03	13:15	197	Harbor Seal	1	1832	Impact	None	Sighted Harbor Seal resting/floating on surface of water, not moving in any direction, checked on it continuously, no changes in behavior to impacting
5-Feb-18	18:46	19:36	198	Steller Sea Lion	1	680	V	None	Steller Sea Lion hauled out on Bay Buoy looking around, it stayed there until barge came over and tied up on it, it dove off in direction of North, two minutes later TMC started Vibbing, not enough of time for mammal to swim out of B zone so it was exposed, did not resight it after it left buoy

Appendix C. Summary of Sightings

Final Observer Report
For Unalaska Marine Center Dock Replacement

Sighting #	Exp?	Species	Group Max	Sighting Cue	Behavior Code	Date	Start time	End Time	Grid Loc.	Dist Obs. to An. (m)	Dir Obs. to An.	Dir. Of Travel	Const. Type	Mit. Type	Behavior change/ Response to Activity/ Comments
1	N	Humpback Whale	1	Body	Dive	22-Jun-17	13:10	13:56	D7	77	SE	N	NOWC	Delay	Humpback sighted near A zone, tracked it out past APL out of B zone
2	N	Steller Sea Lion	3	Surface Activity	Play	22-Jun-17	16:20	16:40	D7	144	SE	N/A	DP	None	Observed 3 Sea Lions playing together off TMC Barge
3	Y	Humpback Whale	1	Blow	Dive	22-Jun-17	16:48	18:50	B13	1427	SW	N/A	V	None	Observed off Delta Western Dock - Final obs off DW Dock
4	Y	Steller Sea Lion	1	Surface Activity	Traveling	22-Jun-17	16:58		C13	432	N	SE	V	None	Observed Sea Lion N of Delta Western Dock TR- SE out of B zone
5	N	Steller Sea Lion	2	Surface Activity	Swimming	23-Jun-17	10:32	10:42	H5	349	SW	N	OWC	None	Observed 2 Sea Lions off Light Cargo Dock, also witness by second MMO TB
6	N	Steller Sea Lion	1	Surface Activity	Traveling	28-Jun-17	9:17	9:30	D15	58	NE	S	OWC	None	Sighted Sea Lion TR-S off Rocky Point headed S, last seen in are F19
7	N	Humpback Whale	1	Blow	Traveling	28-Jun-17	9:45	10:38	E14	234	NE	N	OWC	None	Sighted Humpback entering harbor but did not resurface in harbor and did not resight again
8	N	Steller Sea Lion	1	Surface Activity	Traveling	29-Jun-17	14:02	14:19	G10	910	NE	SE	OWC	None	Sighted Sea Lion TR-SE out of harbor, F/V Traveler right behind it. Mammal swam out of way of vessel traffic and lost sight of mammal
9	N	Steller Sea Lion	2	Surface Activity	Swimming	5-Jul-17	14:04	14:32	C8	178	S	N	DP	None	Observed 2 Sea Lions off UMC dock TR-N past TMC barge, sighted half hour later in similar area, called TMC to warn them mammals close to A zone
10	N	Steller Sea Lion	1	Surface Activity	Swimming	5-Jul-17	15:37	15:41	C8	191	SE	N	DP	None	Sighted Sea Lion off UMC dock SW-N, sighted again farther out from dock still TR-N, contacted TMC dur to proximity to A zone
11	N	Steller Sea Lion	1	Blow	Traveling	5-Jul-17	15:45	16:00	D14	123	NE	S	DP	None	Sea Lion surfaced with a big huff or blow next to shore between Delta Western dock and Rocky Point, surfacing twice and SW-SE out of B zone
12	N	Harbor Seal	1	Other	Hauled Out	8-Jul-17	6:54	7:04	D15	116	SE	S	NONE	None	Harbor Seal hauled out on rock by Rocky Point, it entered the water slowly and SW-S to ara E-19 where I lost sight of it
13	N	Harbor Seal	1	Surface Activity	Spyhopping	9-Jul-17	7:24	7:40	D6	45	W	N/A	NONE	None	Observed Harbor Seal inside arm of Coast Guard Dock by Resolve Marine for 10 min, did not resurface
14	N	Steller Sea Lion	3	Surface Activity	Milling	10-Jul-17	13:17	13:30	E15	165	E	N/A	NONE	None	Sighted 3 Sea Lions just S of Rocky Point milling, playing together during post construction observing, continued observing until time to leave

Final Observer Report
For Unalaska Marine Center Dock Replacement

15	N	Steller Sea Lion	2	Surface Activity	Swimming	20-Jul-17	13:29	13:33	D8	147	E	N	NONE	None	Spotted 2 Sea Lions off N end of Maersk container ship at UMC dock SW-N past TMC barge, dove under and lost sight
16	N	Harbor Seal	1	Surface Activity	Milling	22-Jul-17	17:00	17:02	G8	685	SE	N/A	OWC	None	Observed Harbor Seal at spyhopping at surface for 1.5 minutes, went down and did not resurface
17	N	Harbor Seal	1	Surface Activity	Spyhopping	23-Jul-17	11:36	11:46	F8	1174	NE	N/A	OWC	None	Harbor Seal Spyhopping in middle of bay, surfaced twice, contacted MMO TB who was on spit to also sight him, not able to, lost sight after 10 minutes
18	N	Steller Sea Lion	1	Surface Activity	Swimming	24-Jul-17	6:56	7:52	G5	186	SE	S	NONE	None	Sea Lion SW-S toward worksite, contacted TMC, no work has started for the day, no resight after an hour observing
19	N	Steller Sea Lion	2	Body	Traveling	25-Jul-17	9:50	10:03	F23	1631	S	W	OWC	None	Sighted Sea Lions near front beach in Unalaska, swiftly TR-W from F23 to E22, and then C22 to out of B zone, no behavioral changes to OWC
20	Y	Steller Sea Lion	1	Surface Activity	Swimming	25-Jul-17	19:36	19:37	G19	1006	SE	S	V	None	Sea Lion TR-S from G19 towards front beach/channel, briefly saw head/neck, went under
21	Y	Harbor Seal	1	Other	Hauled Out	26-Jul-17	17:16	17:35	E16	109	E	S	V	None	Harbor seal hauled out on rock near Rocky Point, later slipped into water, looked to be TR- S but lost sight of quickly
22	N	Harbor Seal	1	Surface Activity	Spyhopping	28-Jul-17	17:31	17:50	E17	177	SE	N/A	OWC	None	Harbor seal spyhopping off APL container ship tied up at APL, sighted twice in 20 minutes, no behavioral changes to OWC
23	N	Harbor Seal	1	Other	Hauled Out	28-Jul-17	19:30	21:10	E15	1855	S	N/A	OWC	None	Harbor seal hauled out on rock near Rocky Point, watched for 40 minutes, continued haul out into Post Construction Observations
24	Y	Steller Sea Lion	1	Surface Activity	Dive	29-Jul-17	8:45	9:30	B14	354	NW	W	V	None	Sighted Sea lion surface by vessel stern at Delta Western dock, did not see surface again
25	N	Harbor Seal	1	Body	Hauled Out	29-Jul-17	11:20	15:00	E14	126	E	N/A	ST	None	Harbor seal hauled out on rock reef at tip of Rocky Point for hours
26	N	Steller Sea Lion	3	Surface Activity	Fighting	29-Jul-17	18:05	18:17	G17	657	SE	S	OWC	None	Sea lions fighting over food, salmon jumping everywhere, TR-S toward Unalaska area, watched for 10 min but did not see again, no behavioral changes
27	N	Harbor Seal	1	Surface Activity	Spyhopping	30-Jul-17	8:25	8:40	F11	910	NE	S	OWC	None	Harbor seal spyhopping, looked around, went down and could not locate again, observed for 15 minutes
28	Y	Harbor Seal	1	Other	Hauled Out	30-Jul-17	13:49	17:25	E15	131	E	N/A	V	None	Harbor seal Hauled out on rock at Rocky Point, observed there for over 3 hrs., at 1725 it was gone, did not see leave rock but Vibbing took place from 1710 - 1810 so exposure must have taken place

Final Observer Report
For Unalaska Marine Center Dock Replacement

29	Y	Humpback Whale	1	Body	Porpoising	1-Aug-17	12:00	12:01	H13	780	NE	S	V	None	Humpback Porpoising, TR- S in direction of APL dock, no change detected
30	Y	Humpback Whale	1	Body	Porpoising	1-Aug-17	12:35	12:53	F10	1055	NE	SW then NE	V	None	Humpback swam into Dutch Harbor, loitered in the middle and then left harbor, no changes to behavior detected
31	Y	Humpback Whale	1	Body	Dive	2-Aug-17	12:34	12:34	L13	1445	E	SW	V	None	Saw tail first, Humpback dove under, traveled S towards front beach, no changes detected
32	N	Harbor Seal	1	Body	Spyhopping	3-Aug-17	10:56	11:06	E15	970	NE	N/A	ST	None	Harbor seal spyhopping, watched for 10 minutes and then disappeared, no behavior changes
33	N	Steller Sea Lion	4	Body	Foraging	3-Aug-17	13:30	14:00	F14	270	NE	N/A	None	None	Four Sea Lions foraging, seen eating salmon
34	Y	Steller Sea Lion	2	Body	Play	4-Aug-17	12:42	12:45	E15	125	E	N	V	None	Sea lions surfaced and appeared to be playing, did not see again after 3 minutes near the surface.
35	N	Steller Sea Lion	1	Surface Activity	Traveling	5-Aug-17	13:48	13:50	G13	590	NE	E	NONE	None	Observed swimming E out of harbor area
36	N	Steller Sea Lion	3	Surface Activity	Milling	6-Aug-17	9:45	9:45	E15	190	NE	E	NOWC	None	Sea Lions milling about in slowly moving in direction of E
37	N	Steller Sea Lion	3	Surface Activity	Milling	6-Aug-17	11:20	11:33	F13	430	NE	N/A	ST	None	Three Sea Lions milling about off Rocky Point, moving in no particular direction, no changes detected
37.1	Y	Steller Sea Lion	3	Surface Activity	Milling	6-Aug-17	11:43	11:53	F16	520	SE	S	V	None	Resight of Sea Lions, still milling but a little farther to the South, no changes detected
37.2	Y	Steller Sea Lion	3	Surface Activity	Milling	6-Aug-17	12:16	12:32	F16-G13	595	E	N	V	None	Resight - No behavior changes noted, just appeared to be traveling N
37.3	Y	Steller Sea Lion	3	Surface Activity	Milling	6-Aug-17	12:47	12:56	F17	540	SE	S	V	None	Resight - Same three STSL changed direction and were observed travelling S where they milled and foraged salmon, no behavior changes
38	Y	Steller Sea Lion	2	Surface Activity	Milling	6-Aug-17	12:47	12:56	F12	645	NE	N/A	V	None	Two different Sea Lions milling about at the mouth of the harbor, no behavior changes
38.1	N	Steller Sea Lion	2	Surface Activity	Milling	6-Aug-17	13:12	13:32	F16	358	SE	N/A	NONE	None	Resight - Two Sea Lions appeared to be foraging on salmon
38.2	N	Steller Sea Lion	2	Surface Activity	Milling	6-Aug-17	13:39	13:43	F16	370	SE	N/A	NONE	None	Resight - Two Sea Lions appeared to be foraging on salmon
38.3	N	Steller Sea Lion	2	Surface Activity	Foraging	6-Aug-17	14:14	14:43	F16	370	SE	N/A	ST	None	Resight - Same Sea Lions eating salmon - thrashing it at surface
39	Y	Steller Sea Lion	1	Surface Activity	Foraging	6-Aug-17	17:50	18:30	D9	560	S	N/A	V	None	Sea lion was foraging and went under and did not resight
40	Y	Steller Sea Lion	1	Surface Activity	Foraging	7-Aug-17	10:00	10:20	B14	332	NW	N	V	None	Observed Sea Lion foraging for food near Delta Western dock, no behavioral changes seen

Final Observer Report
For Unalaska Marine Center Dock Replacement

40.1	Y	Steller Sea Lion	1	Surface Activity	Milling	7-Aug-17	10:30	10:50	E15	137	SE	N	V	None	Resight - Followed Sea Lion to tip of Rocky Point where it milled, swam and floated, no changes to behavior
40.2	N	Steller Sea Lion	1	Body	Spyhopping	7-Aug-17	11:18	11:18	E15	137	SE	S	ST	None	Resight - Same Sea Lion spyhopping prior to Observer Rotation
41	Y	Steller Sea Lion	1	Body	Traveling	7-Aug-17	12:00	12:00	C14	221	NW	W	V	None	Sea Lion TR-W to Delta Western dock from Rocky Point, no changes noted
42	N	Steller Sea Lion	1	Surface Activity	Traveling	8-Aug-17	8:58	8:58	F15	337	E	S	OWC	None	Observed Sea Lion off Rocky Point TR-S toward Unalaska
43	N	Steller Sea Lion	1	Surface Activity	Traveling	9-Aug-17	11:20	11:40	D7	276	SE	E	ST	None	Sea Lion TR-E past UMC dock, headed towards Delta Western dock, lost sight of
44	Y	Steller Sea Lion	1	Body	Spyhopping	10-Aug-17	14:06	14:06	F15	246	SE	N/A	V	None	Sea Lion spyhopping just N of the large rock off Rocky Point, not traveling in any known direction,
45	Y	Steller Sea Lion	1	Body	Milling	10-Aug-17	16:25	16:45	D7	237	SE	N/A	V	None	Sea Lion milling off end of Coast Guard dock, no changes to behavior
46	N	Humpback Whale	1	Surface Activity	Milling	11-Aug-17	9:55	10:50	I15	882	W	N/A	NOWC	None	Humpback seen floating, sleeping, (logging) in place off Rocky Point area for just short of an hour
47	N	Steller Sea Lion	3	Surface Activity	Traveling	11-Aug-17	10:00	10:55	F14	334	NE	N	NOWC	None	Sea Lions sighted off Rocky Point area, slowly traveling to outside (ocean side) of spit area, out of B zone
48	N	Steller Sea Lion	1	Body	Foraging	12-Aug-17	14:17	15:00	D14	136	N	N/A	ST	None	Sea Lion witnessed foraging near Rocky Point look out sight
49	N	Steller Sea Lion	1	Body	Spyhopping	12-Aug-17	18:57	18:57	E15	141	SE	N/A	NONE	None	Sea Lion spyhopping near reef, normal activity, no known direction
50	Y	Steller Sea Lion	1	Body	Spyhopping	13-Aug-17	10:05	10:25	K15	1206	E	N/A	V	None	Sea Lion spyhopping over near the landfill, watched for 20 minutes and lost sight after that, no behavior changes
51	N	Harbor Seal	1	Surface Activity	Spyhopping	17-Aug-17	8:05	8:17	E14	102	E	S	NOWC	None	Harbor seal spyhopping off Rocky Point, sighted only twice, no changes in behavior
52	Y	Steller Sea Lion	2	Surface Activity	Milling	19-Aug-07	11:16	11:27	E15	145	SE	N/A	V	None	Two Sea Lions milling near reef off Rocky Point, normal behavior
52.1	Y	Steller Sea Lion	1	Surface Activity	Traveling	19-Aug-07	11:28	11:32	E14	131	NE	W	V	None	Resight - One of the two Sea Lions split off, TR-W around Rocky Point to Delta Western side, submerged and lost sight, seems like normal behavior
53	N	Steller Sea Lion	3	Surface Activity	Spyhopping	20-Aug-17	8:45	8:47	C8	296	S	N/A	OWC	None	Sighted three Sea Lions spyhopping off UMC dock area, popped up for few seconds, down again and did not resurface, no known direction of travel
54	N	Humpback Whale	1	Blow	Traveling	21-Aug-17	17:35	17:45	F12	712	NE	W	NOWC	None	Humpback sighted TR - E toward airport runway, blowing and possibly feeding

Final Observer Report
For Unalaska Marine Center Dock Replacement

54.1	N	Humpback Whale	1	Blow	Traveling	21-Aug-17	17:56	17:56	D8	389	SE	N	NOWC	None	Resight - Humpback sighted near UMC dock TR- N, called TMC to let them know of whale in area, normal behavior
54.2	N	Humpback Whale	1	Blow	Traveling	21-Aug-17	18:03	18:03	E7	218	SE	N	NOWC	None	Resight - Humpback seen TR-N of USCG dock
55	Y	Steller Sea Lion	2	Surface Activity	Traveling	22-Aug-17	12:30	12:40	E15	140	SE	S	V	None	Sea Lions TR- S past Rocky Point to APL dock area, lost sight at E18
56	Y	Humpback Whale	1	Body	Traveling	22-Aug-17	18:21	18:21	E11	836	NE	NE	V	None	Humpback sighted TR-NE around inner harbor, normal behavior
57	N	Steller Sea Lion	3	Surface Activity	Traveling	23-Aug-17	8:05	8:15	E16	214	SE	S	ST	None	Sighted 3 Sea Lions off Rocky Point TR-S, saw them surface twice and did not see again.
58	Y	Steller Sea Lion	1	Surface Activity	Traveling	23-Aug-17	11:50	12:05	D14	140	N	W	V	None	Observed Sea Lion travel into inner harbor, over to Delta Western dock, then back out in the areas of D14, C13, B12, and D14, seems to be normal behavior for traveling the harbor
59	N	Steller Sea Lion	1	Surface Activity	Traveling	23-Aug-17	13:45	14:03	D14	175	NE	W	NONE	None	Observed 1 Sea Lion Traveling back and forth in areas D14, E14, C14, and D13
60	N	Steller Sea Lion	1	Body	Traveling	23-Aug-17	16:42	17:00	D-13	348	N	E/S	OWC	None	Sea Lion TR-E out of Harbor, then TR-S to G17, feeding on fish. Tug in close proximity and lost sight of mammal
61	Y	Harbor Seal	1	Surface Activity	Spyhopping	24-Aug-17	9:40	9:42	G3	132	E	N/A	V	None	Harbor Seal spotted offshore by Magone/Resolve Marine in area between G3 and H3, sighted just once and it disappeared. Vibbing had just stopped but mammal exposed, no noticeable changes to behavior
62	Y	Steller Sea Lion	1	Surface Activity	Traveling	24-Aug-17	11:23	11:36	H15	683	E	N	V	None	Sea Lion swiftly TR-N from area of H15, lost sight of
63	Y	Steller Sea Lion	1	Surface Activity	Foraging	24-Aug-17	14:47	15:04	C13	382	NW	E	V	None	Sighted Sea Lion just off Delta Western dock foraging for salmon, TR-E and sighted a few more times, lost sight at D-13, no apparent behavior changes to Vibbing
64	Y	Harbor Seal	1	Surface Activity	Spyhopping	25-Aug-17	14:56	16:45	E16	214	S	N	V	None	Harbor Seal spyhopping in area between RP and APL, it moved slightly N of E16 continuing to spyhop, no changes to behavior due to construction
65	Y	Steller Sea Lion	1	Surface Activity	Traveling	26-Aug-17	13:42	14:03	H10	1164	NE	W	V	None	Sea Lion spotted in area H10, TR-E, actively searched for 20 minutes, no resights, no noticeable behavior modifications to Vibbing
66	N	Steller Sea Lion	1	Surface Activity	Traveling	26-Aug-17	18:21	18:49	E7	269	E	E	NOWC	None	Sighted Sea Lion came up looked around, TR-E to area of harbor buoy, went down and did not resurface

Final Observer Report
For Unalaska Marine Center Dock Replacement

67	N	Steller Sea Lion	1	Surface Activity	Traveling	27-Aug-17	8:17	8:45	G4	124	SE	S	OWC	DELAY	Sea Lion TR-S past Magone, TMC barge, and UMC dock, so close to Level A zone, contacted TMC to Delay any Vibbing, lost sight of at area C9 - See Resight 67.1
67.1	Y	Steller Sea Lion	1	Surface Activity	Dive	27-Aug-17	9:03	9:21	B13	839	S	N/A	V	None	Resight of Sea Lion behind vessels at Delta Western dock, diving and possibly feeding here for 20 minutes, then lost sight of, no noticeable changes to Vibbing except it moved in direction opposite of construction site from previous sighting location
68	N	Steller Sea Lion	1	Surface Activity	Traveling	27-Aug-17	14:15	14:30	E7	247	E	N	ST	None	Sea Lion sighted TR-N off TMC Barge, both MMO's searched for 15 min. but no resights
69	Y	Steller Sea Lion	1	Surface Activity	Traveling	27-Aug-17	15:04	15:55	C8	192	S	S	V	None	Sea Lion surfaced in front of UMC dock, it was TR-S to Delta Western dock area, did not resight, no changes to behavior that is noticeable
70	N	Steller Sea Lion	1	Surface Activity	Traveling	28-Aug-17	10:58	11:40	D7	76	SE	N	OWC	None	Sea Lion surfaced near the construction site, mammal TR-N to Icicle dock, followed the spit dock TR-S to out around spit and out of B zone
71	N	Harbor Seal	1	Surface Activity	Spyhopping	30-Aug-17	7:42	7:54	E14	128	NE	N/A	ST	None	Harbor seal seen spyhopping off Rocky Point, last seen at 07:54, did not resurface, no noticeable behavior changes to Stabbing
72	N	Steller Sea Lion	1	Surface Activity	Traveling	31-Aug-17	8:34	9:00	E14	115	NE	S	OWC	None	Small Sea Lion surfaced at tip of Rocky Point, TR-S to APL area, surfacing twice and then lost sight
73	N	Steller Sea Lion	1	Surface Activity	Traveling	31-Aug-17	9:10	10:05	D7	115	SE	N	OWC	Delay	Sea Lion TR-N past construction site, not in A zone but close enough to contact TMC to Delay any Vibbing, continued TR - N to Icicle and then TR-S along vessels at Spit, MMO at RP watched him TR-N around spit and out of B zone
74	Y	Steller Sea Lion	1	Surface Activity	Traveling	1-Sep-17	11:20	11:25	D14	153	N	E	V	None	Sea Lion popped up, looked around, then appeared to TR back around Rocky Point
75	Y	Steller Sea Lion	1	Surface Activity	Foraging	1-Sep-17	15:45	16:30	D6	134	SE	S	V	None	Sea Lion feeding off UMC/UCCG Dock, TR-S to Delta Western dock
76	N	Steller Sea Lion	4	Surface Activity	Traveling	2-Sep-17	12:20	12:40	E8	321	SE	N	ST	None	Four Sea Lions surfaced off TMC barge, TR-N past USCG dock to KDH dock area, looked around, turned direction in middle of harbor and TR-S along spit area, lost them when a barge came into harbor
76.1	Y	Steller Sea Lion	2	Surface Activity	Traveling	2-Sep-17	12:45	13:45	E8	408	SE	N	V	None	Resight - Two of the four Sea Lions came up in same area as originally sighted, looking around and TR-N again, hanging around Icicle and TR-S along spit dock near vessels, lost sight here, confirmed resight - one of

Final Observer Report
For Unalaska Marine Center Dock Replacement

the four is extremely light in color in both groups of STSL's.

77	N	Steller Sea Lion	1	Surface Activity	Traveling	5-Sep-17	10:02	10:05	D14	182	NW	E	ST	None	Sea Lion popped up, looked around, then TR-E around Rocky Point and lost sight of there
78	Y	Humpback Whale	1	Surface Activity	Traveling	5-Sep-17	15:08	15:20	G8	691	SE	S	V	None	Humpback surfaced and blew, traveled inner harbor, F10, E12, and B13, TR-E to outer harbor, then N and lost sight of
79	N	Steller Sea Lion	1	Body	Swimming	5-Sep-17	15:35	15:50	E14	161	NE	E	ST	None	Sea Lion TR-E, swimming towards Delta Western dock from E14 to D14, dove under and could not resight
80	N	Steller Sea Lion	1	Body	Foraging	6-Sep-17	9:29	10:19	B12	666	NW	E/S	OWC	None	Sea Lion slowly milling about and foraging TR-E past Delta Western dock to past Rocky Point, doing a circling pattern, foraging fish, lost sight of at shift change, no behavior changes to construction
81	N	Steller Sea Lion	1	Surface Activity	Traveling	6-Sep-17	10:44	10:47	D13	392	N	W	OWC	None	Sea Lion popped its head up, traveling fast E to W, and then lost sight of
82	N	Steller Sea Lion	1	Surface Activity	Look	6-Sep-17	10:58	11:24	E6	257	E	N	OWC	None	Sea Lion surfaced off USCG vessel looking around, TR-N off Magone area, last sighted at KDH dock area of G4, could be a resight of earlier sightings (80,81) but cannot confirm this
83	N	Steller Sea Lion	1	Surface Activity	Traveling	6-Sep-17	11:37	11:57	D14	140	NE	W	OWC	None	Sea Lion TR-W to Delta Western dock to B10 (between runway and S end of UMC dock), lost sight here
84	N	Steller Sea Lion	1	Surface Activity	Swimming	6-Sep-17	12:13	12:30	E7	286	SE	N	OWC	None	Sea Lion observed off TMC Barge TR- N, sighted again at KDH dock (G4) and lost sight here
85	N	Steller Sea Lion	1	Body	Hauled Out	6-Sep-17	13:30	15:18	G7	634	E	N/A	OWC	None	Sea Lion Hauled out on the buoy in middle of bay, did not see it leave buoy but at 15:18 it was gone
86	N	Steller Sea Lion	1	Body	Hauled Out	6-Sep-17	15:12	15:18	G7	634	E	N/A	OWC	None	Observed a 2nd Sea Lion join the 1st Sea Lion hauled out on the buoy, watched them carefully but when looked up at 15:18 both were gone
86.1	Y	Steller Sea Lion	2	Surface Activity	Swimming	6-Sep-17	15:21	15:30	E6	235	E	W	V	None	Re-sight of Sea Lions previously hauled out TR-W towards TMC barge, dove under and could not resight them, called TMC to let them know they were close and to possibly delay vibbing, delay did not happen
87	N	Steller Sea Lion	7	Surface Activity	Look	6-Sep-17	17:15	18:01	G13	605	NE	E	DP	None	A heard of Sea Lions swimming E, milling and looking about around the green can are, lost sight here

Final Observer Report
For Unalaska Marine Center Dock Replacement

87.1	N	Steller Sea Lion	1	Surface Activity	Swimming	6-Sep-17	18:05	18:45	E14	168	NE	W/N	OWC	None	Resight - One of the seven sighted off Rocky Point swimming W towards Delta Western dock, TR-N to KDH dock area, lost sight of here
88	Y	Steller Sea Lion	9	Surface Activity	Swimming	6-Sep-17	19:00	19:28	E6	220	E	N	V	None	Heard of Sea Lions passed by TMC barge swimming N to Icicle dock area, lost sight of at the spit dock area, no noticeable behavior changes due to vibbing
89	N	Steller Sea Lion	1	Other	Hauled Out	7-Sep-17	8:35	10:43	G7	633	E	N/A	OWC	None	Sea Lion hauled out on the buoy in middle of bay, at 10:30 it was there, at 10:45 it was gone
90	N	Steller Sea Lion	4	Surface Activity	Swimming	7-Sep-17	13:26	13:51	E7	250	E	N	NOWC	None	Sea Lions sighted off USCG dock, swimming N, turned and swam S along vessels at spit dock, lost sight at H8
91	N	Steller Sea Lion	1	Surface Activity	Swimming	7-Sep-17	15:55	16:00	D7	206	S	N	OWC	None	Observed Sea Lion surface two times, look around, went down again, did not resurface, no noticeable behavioral changes
92	N	Steller Sea Lion	1	Surface Activity	Traveling	8-Sep-17	10:05	10:20	E13	396	NE	N	NOWC	None	Observed Sea Lion enter harbor and travel to end of runway, looked around, TR-N towards UMC, changed directions and headed to tip of spit, headed out of B zone, no changes to behavior
93	N	Steller Sea Lion	1	Body	Hauled Out	9-Sep-17	8:39	9:16	G8	681	SE	N/A	NOWC	None	Sea Lion hauled out on barge buoy, Rocky Point MMO saw it dive off buoy at 0916 but did not sight again, no known direction of travel
94	N	Steller Sea Lion	1	Surface Activity	Foraging	9-Sep-17	13:29	13:34	C12	625	N	W	NONE	None	Sea Lion Traveled W past Delta Western dock, caught a fish at B12, turned North along beach but lost sight at B10
95	Y	Steller Sea Lion	1	Surface Activity	Traveling	9-Sep-17	14:28	14:30	D14	149	N	W	V	None	Sea Lion popped up then traveled W towards Delta Western dock, lost sight of here, sighting too brief to notice any behavior changes
96	N	Steller Sea Lion	1	Surface Activity	Traveling	9-Sep-17	16:25	16:50	D6	153	E	N	NOWC	None	Sea Lion surfaced near construction site, traveling N to Resolve Marine, went down here and did not resurface, unable to relocate
97	N	Steller Sea Lion	3	Surface Activity	Foraging	10-Sep-17	8:25	9:00	D14	228	N	N	NOWC	None	Sea Lions enter harbor, TR-W to Delta Western dock then TR-N to South end of UMC dock, feeding on salmon at C9, lost sight here
98	Y	Steller Sea Lion	1	Surface Activity	Traveling	10-Sep-17	11:58	12:30	C14	200	NW	W	V	None	Sea Lion surfaced at South end of Delta Western dock, milling back and forth at dock for quite some time, went down and was not resighted

Final Observer Report
For Unalaska Marine Center Dock Replacement

99	Y	Harbor Seal	1	Surface Activity	Spyhopping	10-Sep-17	14:15	14:47	E14	99	E	N/A	V	None	Harbor Seal Spyhopping at tip of Rock Point in shallow waters, sighted 3 times in 20 minutes, no apparent behavior changes due to vibbing
100	Y	Steller Sea Lion	2	Surface Activity	Traveling	10-Sep-17	14:24	15:34	D8	298	SE	N	V	None	Two Sea Lions surfaced mid dock at UMC TR-N all the way to Icicle dock, then TR-S along spit dock area, went down here and did not resurface
101	Y	Steller Sea Lion	1	Surface Activity	Traveling	10-Sep-17	18:00	18:32	F6	469	E	N	V	None	Sighted Sea Lion off Tanker at USCG dock TR-N, popped up S end of Magone Barge, dove under and lost him, could not determine any changes to behavior due to vibbing
102	Y	Steller Sea Lion	1	Other	Hauled Out	11-Sep-17	9:18	10:25	G7	1623	NE	N/A	V	None	Small Sea Lion hauled out on Barge buoy, at 10:25 dove into water but did not resurface
103	N	Humpback Whale	1	Blow	Traveling	11-Sep-17	10:45	11:50	H10	1168	NE	N	NOWC	None	Humpback Observed entering harbor TR-N to Icicle dock, then TR-S along spit, changed direction again towards Icicle, spotted twice, went down and did not resurface in harbor
104	N	Steller Sea Lion	1	Body	Hauled Out	11-Sep-17	14:54	15:06	G9	787	SE	N/A	NOWC	None	Sea Lion hauled out of Barge buoy- See Resight #104.1
104.1	N	Steller Sea Lion	1	Surface Activity	Hauled Out	11-Sep-17	15:06	15:06	G9	787	SE	N/A	NOWC	None	Resight - Sea Lion seen diving off Barge buoy but don't know direction of dive , lost sight of here
105	Y	Steller Sea Lion	2	Surface Activity	Traveling	12-Sep-17	11:17	11:23	C12	637	N	W	V	None	Sighted two Sea Lions TR-W in C12, then B12, lost sight of here, too brief to note any behaviors
106	Y	Steller Sea Lion	1	Body	Swimming	12-Sep-17	18:58	19:20	F17	578	SE	N	V	None	Observed Sea Lion between Rocky Point and APL TR-N, sighted again at mouth of harbor at H13, lost sight of here
107	Y	Steller Sea Lion	1	Surface Activity	Swimming	13-Sep-17	11:05	11:16	E15	132	E	E/S	V	None	Sea Lion sighted off Rocky Point, TR-E around RP headed S to past APL ship at APL dock, dove under and did not see resurface
108	N	Harbor Seal	1	Surface Activity	Spyhopping	13-Sep-17	13:02	13:14	I6	95	S	N/A	NOWC	None	Harbor Seal sighted inside area of spit dock spyhopping, seen only once, continued looking but did not resurface
109	N	Humpback Whale	1	Surface Activity	Foraging	13-Sep-17	13:03	14:05	M11	1740	NE	S	NOWC	None	Humpback crossed over into B zone from the North, very actively feeding, surfaced slowly, TR-S to F18, then TR-N again crossing back out of the B zone
109.1	Y	Humpback Whale	1	Surface Activity	Foraging	13-Sep-17	14:20	15:44	J10	1285	NE	S	V	None	Resight - Confirmed Resight (continuously observed North of the B zone) crossed back into B zone feeding, TR-S slowly in outer harbor of B zone, lost sight of

Final Observer Report
For Unalaska Marine Center Dock Replacement

110	N	Humpback Whale	1	Blow	Milling	13-Sep-17	17:20	17:52	G13	1480	SE	W	NOWC	None	Humpback milling about and feeding in one area, Vessel Raven Bay went by next to it, resurfaced in same area, traveled all around harbor, including leaving B zone and re-entering coming close to A zone at D9, called TMC, lost sight at E11
111	N	Humpback Whale	1	Blow	Traveling	14-Sep-17	13:07	13:17	G11	1174	SE	S	ST	None	Humpback enters harbor, TR-S towards Delta Western dock, surfacing 4-5 times, went down and did not resurface- See Resight
111.1	N	Humpback Whale	1	Blow	Foraging	14-Sep-17	14:00	14:45	H5	707	NE	S	ST	None	Resight - Humpback at mid spit dock feeding on krill, spotted again at end of spit at 1440 and witnessed leaving B zone by Rocky Point MMO at 1445
112	N	Harbor Seal	1	Surface Activity	Swimming	18-Sep-17	9:40	9:52	H4	1067	NE	S	OWC	None	Harbor Seal sighted swimming S near Trident dock but lost sight of at 0952
113	N	Steller Sea Lion	1	Surface Activity	Traveling	18-Sep-17	17:33	18:20	D6	110	E	N	ST	None	Observed Sea Lion surface next to USCG Vessel at dock, TR-N, went down under vessel and did not resurface, mammal behavior is normal
114	Y	Steller Sea Lion	1	Surface Activity	Traveling	19-Sep-17	11:08	11:11	E14	73	E	W	V	None	Small Sea Lion sticking snout up, traveled around Rocky Point and headed West, observer moved to get better location to view and lost sight of
115	N	Steller Sea Lion	1	Body	Swimming	19-Sep-17	14:55	14:58	D7	156	E	E	ST	None but called	Sea Lion just North of TMC Supply Barge surfaced, headed East, sighted again TR-N now towards Resolve , lost sight of here, contacted TMC to shift any Vibbing due to proximity to A zone
116	Y	Steller Sea Lion	1	Surface Activity	Look	20-Sep-17	10:46	11:10	D14	179	NE	W/N	V	None	Sea Lion TR-West near Delta Western dock, slowly swimming North past runway area near B-9, looked around a lot, dove and did not resurface, no obvious distress or behavioral changes to vibbing
117	N	Steller Sea Lion	1	Surface Activity	Swimming	20-Sep-17	15:19	15:26	C14	200	NW	E/S	OWC	None	Sea Lion swimming from C14 to G-16 around Rocky Point, TR-S very rapidly lost sight with the wind and glare conditions, mammal very light in color with a singular, prominent black spot on its back
118	N	Steller Sea Lion	1	Surface Activity	Chuff	21-Sep-17	11:15	11:17	G7	708	E	S	NOWC	None	Sea Lion surface activity splashing and chuffing, sighted 2-3 times in small area, dove under and lost him, possibly foraging but could not confirm, no noticeable behavioral, changes, TMC just finished vibbing prior the sighting

Final Observer Report
For Unalaska Marine Center Dock Replacement

119	N	Steller Sea Lion	2	Surface Activity	Swimming	21-Sep-17	12:09	12:15	D8	237	SE	N	ST	None	Two Sea Lions surfaced off UMC dock, TR-N past Resolve, sighted again near KDH dock at shift change, transferred sighting to next observer
119.1	N	Steller Sea Lion	1	Surface Activity	Swimming	21-Sep-17	12:19	15:50	G4	163	E	N	ST	None	Confirmed Resight of at least one of the original two Sea lions, TR-N to Trident dock where Sea Lion jumped up on back of vessel (haul out) looking for fish, re-entered water and did not resurface
120	N	Steller Sea Lion	1	Body	Look	21-Sep-17	13:10	13:20	D14	141	NE	NE	ST	None	Sea Lion sighted near Rocky Point, went down and sighted again TR-NE but soon lost him, moderate visibility and light fog at the time, behavior seemed normal
121	N	Steller Sea Lion	1	Surface Activity	Traveling	23-Sep-17	12:47	13:20	F5	118	E	N	OWC	None	Sea Lion sighted North of Resolve, TR-N to KDH dock and further N to Trident dock where it spent 20 minutes milling about at the back of a vessel there, went down and lost sight, normal behavior, took photos and confirmed its markings on back are the same mammal as sighting #115 from four days ago, looks to be an adolescent
122	Y	Steller Sea Lion	1	Surface Activity	Traveling	23-Sep-17	13:33	13:38	C13	408	NE	E	V	None	Sea Lion popped up near Delta Western dock, five min later at the tip of Rocky Point, TR-East around point, submerged and lost sight, maybe same mammal as sighting #121 but cannot confirm, no changes in behavior noted
123	N	Steller Sea Lion	1	Body	Swimming	24-Sep-17	12:35	13:13	B14	346	NE	W/N	OWC	None	Sea Lion spotted near Delta Western dock, swimming W then N past UMC dock to Icicle, last sighted crossing bay to LCD/Spit dock where we lost sight, normal travel path for Sea Lions
124	N	Steller Sea Lion	1	Surface Activity	Traveling	24-Sep-17	12:55	13:15	D7	173	SE	N	None	None	Sea lion surfaces near worksite but not in A zone, TMC crew at lunch, no construction activity, TR-N to Trident dock to inspect vessels at dock, normal behavior observed, went down and didn't resurface
125	N	Steller Sea Lion	1	Surface Activity	Traveling	24-Sep-17	14:30	14:38	E8	369	SE	S	ST	None	Sea Lion sighted off worksite TR-South, lost sight due to vessels in area but picked back up with him at D9 and C12, no noticeable behavior modifications due to stabbing
126	Y	Steller Sea Lion	2	Surface Activity	Porpoising	24-Sep-17	18:46	18:54	F23	1481	S	W	V	None	Sighted two Sea Lions Porpoising near Front Beach of Unalaska, swiftly TR- West towards channel, lost sight at E23 due to two tugs moving thru Channel at same time, no behavior changes noticed to vibbing

Final Observer Report
For Unalaska Marine Center Dock Replacement

127	N	Harbor Seal	1	Other	Looking	29-Sep-17	9:45	10:01	D7	155	E	S	OWC	None	Sighted Harbor Seal near worksite but not in A zone, looking or spyhopping, went down and did not see him resurface
128	N	Steller Sea Lion	1	Body	Diving	30-Sep-17	11:18	11:33	D14	161	N	NE	OWC	None	Sea Lion sighted at D14, dove down and lost sight, no behavior changes were noticed
129	N	Harbor Seal	1	Surface Activity	Look	30-Sep-17	14:55	15:22	E15	133	SE	N/A	ST	None	Harbor Seal off Rocky Point, sometimes submerged and sometimes looking/spyhopping in reef area, lost sight off in the swell, no known direction of travel, normal behavior
130	N	Steller Sea Lion	2	Surface Activity	Swimming	1-Oct-17	10:27	10:38	D8	294	SE	S	ST	None	Two Sea Lions surfaced near UMC, swam South near runway, possibly feeding in area A10, no behavior changes to stabbing sheet piles
131	N	Steller Sea Lion	1	Surface Activity	Foraging	2-Oct-17	12:44	14:10	D10	612	SE	N	OWC	None	Sea Lion feeding on salmon in middle of bay, TR-N to Trident dock, staying here along time looking around and trying to get on the back of vessel tied up, lost sight by Icicle dock, normal behavior
132	N	Steller Sea Lion	1	Surface Activity	Swimming	2-Oct-17	15:56	15:57	F5	131	E	S	OWC	None	Observed Sea Lion come up and then did not resurface
133	N	Harbor Seal	1	Body	Swimming	2-Oct-17	18:17	18:47	E16	165	SE	N/S	OWC	None	Sighted Harbor Seal near RP swimming N, lost him and sighted again to the South, milling back and forth under water, no changes to behavior, normal
134	N	Steller Sea Lion	3	Surface Activity	Traveling	6-Oct-17	9:40	10:05	D14	166	N	NW	ST	None	Sighted 3 Sea Lions near RP TR-NW to DW dock feeding on octopus by runway, TR-N near UMC dock, lost sight at D7, normal behavior observed
135	Y	Humpback Whale	1	Blow	Traveling	6-Oct-17	10:41	11:47	F10	809	SE	N/S	V	None	Sighted Humpback by blow, then body near Spit, TR-N to Icicle dock, sighted four more times traveling back and forth from spit dock boats to Icicle, last seen at G8, did not resurface in harbor, seems like normal behavior, they seem to always go down to and spend time near Icicle dock
136	Y	Steller Sea Lion	1	Surface Activity	Traveling	6-Oct-17	10:58	11:20	H2	80	E	N	V	None	While observing Humpback #135, sighted this Sea Lion TR-N around NPF dock, Icicle and then Spit dock, hanging around vessels possibly looking for food, normal behavior
137	N	Steller Sea Lion	3	Surface Activity	Traveling	6-Oct-17	11:20	11:23	H4	277	E	S	ST	None	Three Sea Lions joined up with single (#136) to make group of four hanging out around vessels tied up at Spit dock, lost sight of the group and/or they split up again while still observing Humpback

Final Observer Report
For Unalaska Marine Center Dock Replacement

138	N	Harbor Seal	2	Body	Swimming	6-Oct-17	13:45	14:00	F14	265	NE	S	NONE	None	Two Harbor Seals off RP Swimming South out of B zone, TMC on lunch, no construction activity, normal behavior
139	N	Steller Sea Lion	2	Body	Traveling	6-Oct-17	13:55	14:30	F14	221	NE	NW	NONE	None	Two Harbor Seals off RP TR-NW toward Resolve Marine/KDH dock, TMC at lunch, no construction activity, normal behavior
140	N	Steller Sea Lion	1	Body	Swimming	6-Oct-17	16:12	17:41	C15	142	NW	E/W	OWC	None	Sighted Sea Lion near DW dock TR-E outside of inner harbor near green can, lost sight TR-W
141	N	Harbor Seal	2	Body	Slap	6-Oct-17	16:43	17:07	D15	94	N	NE/W	OWC	None	Two Harbor Seals sighted near RP area TR-NE towards tip, last sighted near DW dock but lost them there, no behavior changes noted
142	N	Steller Sea Lion	1	Surface Activity	Look	6-Oct-17	17:32	17:53	G5	691	NE	N/A	OWC	None	Observed Sea Lion surface and Look around, it was a large adult, no direction of travel, went down and did not resurface, no behavior changes to slinging over water
143	Y	Harbor Seal	1	Surface Activity	Look	8-Oct-17	12:35	12:55	E15	71	E	NW	V	None	Harbor Seal sticking head out and Looking, then sunk below surface, slowly swam around RP to NW, sank and lost sight of, no apparent reaction to Vibbing
143.1	N	Harbor Seal	1	Surface Activity	Traveling	8-Oct-17	13:06	13:08	D14	151	N	E	NONE	None	Resight- Moved to better observing location and located #143 swimming around RP, look around and turn back East but lost him, normal behavior exhibited, construction type is now NONE
144	N	Harbor Seal	2	Surface Activity	Look	8-Oct-17	13:15	13:25	E16	219	SE	N/A	NONE	None	Two Harbor Seals in E16, just looking, not traveling, lost sight when had to change positions out on RP, normal behavior for this mammal in this area
145	N	Harbor Seal	1	Surface Activity	Milling	8-Oct-17	13:16	13:25	E15	84	SE	N/A	NONE	None	Harbor Seal milling about in reef area off RP, no direction of travel, sunk below surface and lost him, went around point to find
146	Y	Harbor Seal	3	Surface Activity	Milling	8-Oct-17	14:35	16:10	E16	179	SE	N/A	V	None	(Possible resight of #144 & #145 but cannot confirm this) Three Harbor Seals off RP, looking not traveling in any direction milling in small area, lost sight of after changing positions, no noticeable behavior changes to Vibbing
147	Y	Steller Sea Lion	1	Surface Activity	Swimming	8-Oct-17	15:13	15:14	D7	148	SE	N	V	None	Sea Lion popped up near UMC dock, went down and TR-N past Coast Guard dock, did not resurface, sighting too brief to note any behavior to Vibbing
148	N	Steller Sea Lion	1	Surface Activity	Swimming	8-Oct-17	16:03	16:20	D7	136	SE	S	ST	None	Sea Lion popped up near UMC dock, went down and TR-S to near DW dock, spotted by RP MMO watched it TR-E out around RP, lost sight, no behavior changes

Final Observer Report
For Unalaska Marine Center Dock Replacement

149	N	Steller Sea Lion	1	Surface Activity	Hauled Out	9-Oct-17	15:10	18:34	G7	1687	NE	N/A	V	None	Sea Lion spotted on Harbor Buoy hauled out, resting where it stayed for approx. 3 hrs., did not see it leave buoy but noticed it gone at 18:34, no direction of travel, TMC vibbing on and off during this period but no exposure due to Haul Out
150	N	Steller Sea Lion	1	Surface Activity	Swimming	10-Oct-17	9:28	9:36	C14	242	NW	E	OWC	None	Sea Lion seen near DW dock, head out of water, swimming slowly East, it dove, lost sight and did not resurface
151	N	Steller Sea Lion	4	Surface Activity	Swimming	10-Oct-17	11:10	11:14	G13	627	NE	W	OWC	None	Heard of four Sea Lions Swimming West entering harbor, group dove, lost them for approx. 4 minutes then see Resight #151.1
151.1	N	Steller Sea Lion	4	Surface Activity	Swimming	10-Oct-17	11:18	11:23	D14	176	N	S/E	OWC	None	Resight - Sighted slightly to the South toward RP, circled and changed direction, heading East, dove again and lost them for approx. 6 minutes, see Resight #151.2
151.2	N	Steller Sea Lion	4	Surface Activity	Swimming	10-Oct-17	11:29	11:42	H15	678	E	S	OWC	None	Resight - Sighted heard to the East Swimming South towards Unalaska beach, dove under at G17 and lost sight, no behavior changes in all three sightings of group
152	N	Harbor Seal	1	Body	Look	10-Oct-17	12:45	17:01	E14	78	E	N/A	OWC	None	Harbor Seal off RP area looking at observer, then would sink back down and do this over and over the observers entire shift and into next observer shift, last sighted at 1701, normal activity for this animal
153	N	Steller Sea Lion	1	Surface Activity	Traveling	10-Oct-17	17:17	17:19	H2	66	E	N	OWC	None	Observed Sea Lion swimming North near Trident dock, went under and did not resurface, brief sighting, no behavior changes were identified
154	N	Steller Sea Lion	2	Surface Activity	Chuff	10-Oct-17	17:36	17:54	G4	47	E	N/A	OWC	None	Two Sea Lions observed 15 ft off KDH dock, milling back and forth watching observer, observer left area to better monitor the A zone
155	N	Steller Sea Lion	1	Surface Activity	Chuff	10-Oct-17	19:15	19:16	G4	47	E	S	NONE	None	Sighted Sea Lion in the same area, doing the same thing as Sighting #154, swimming close to KDH dock, brief sighting, no behavior changes detected, sighted during Post -Con Observations
156	N	Steller Sea Lion	1	Surface Activity	Chuff	12-Oct-17	8:53	8:59	C8	190	S	S	NONE	None	Sighted Sea Lion and heard Chuff near UMC dock, swimming South past UMC, then to DW dock, dove down and lost him, sighted in Pre-Con Observations, no construction activity
157	N	Steller Sea Lion	1	Other	Hauled Out	12-Oct-17	9:10	9:44	G8	685	SE	N/A	NONE	None	Sea Lion Haul Out on Bay Buoy, did not see it leave buoy to provide direction of travel,

Final Observer Report
For Unalaska Marine Center Dock Replacement

															normal behavior, construction had not begun for day
158	N	Steller Sea Lion	1	Body	Foraging	12-Oct-17	14:36	14:50	C8	157	SE	S	OWC	None	Sea Lion Swimming past UMC, went down swam to area of runway, headed near DW dock, seen foraging here, thrashing around an octopus, last time it went down it did not resurface in the area, normal behavior
159	N	Steller Sea Lion	1	Other	Hauled Out	12-Oct-17	18:34	19:00	G8	687	SE	N/A	NONE	None	Witnessed Sea Lion jump unto Bay Buoy and Haul Out, smaller in size, seen this happen yesterday too, No construction activity as this is in Post- Con Observations, behavior is normal, mammal present until end of shift
160	N	Steller Sea Lion	2	Other	Hauled Out	13-Oct-17	9:08	12:00	G8	687	SE	N/A	OWC	None	Two Sea Lions Hauled Out on Bay Buoy with lots of vessel traffic close by, both mammals stayed there approx. 3 hours and were present at the end of shift, normal behavior, popular place last few days
161	N	Steller Sea Lion	1	Surface Activity	Traveling	13-Oct-17	9:35	9:58	D8	208	SE	S	OWC	None	Sea Lion sighted TR-N past UMC dock, tracked it to Trident, no food or vessels there, it moved on to the Spit dock, lost sight at H5, it was taking its time, moving slowly and looking around, normal behavior
162	N	Steller Sea Lion	1	Surface Activity	Look	13-Oct-17	10:03	10:04	B13	543	SE	SE	OWC	None	Observed Sea Lion surface and Look around, looking at the back of vessels to jump up on, went down and did not resurface, general direction SE, normal behavior exhibited
163	N	Steller Sea Lion	1	Surface Activity	Swimming	13-Oct-17	10:23	10:25	D8	162	SE	S	OWC	None	Sea Lion Swimming South past UMC dock, nose up, moving slowly like Sighting # 161, same size and coloring but cannot confirm that it is a resight, very brief sighting, normal behavior exhibited
164	N	Steller Sea Lion	2	Surface Activity	Swimming	14-Oct-17	10:32	10:34	D8	178	SE	N	OWC	None	Sighted two Sea Lions swimming N off UMC dock, milling about, checking things out, in no hurry, normal behavior, see Resight #164.1
164.1	N	Steller Sea Lion	1	Surface Activity	Milling	14-Oct-17	10:36	10:42	D8	174	SE	N/A	OWC	None	Resight- One of two Sea Lions sighted after two minutes of losing sight, exhibiting same behavior, milling about showing side flipper in air, normal, relaxed behavior for this animal
165	N	Steller Sea Lion	1	Other	Hauled Out	14-Oct-17	11:25	14:50	G8	677	SE	N/A	OWC	None	Sea Lion Hauled Out on Bay Buoy in sun, oblivious to close vessel traffic, kept close eye on it for hours, noticed it gone at 1450, no known direction of travel noted, normal behavior

Final Observer Report
For Unalaska Marine Center Dock Replacement

166	N	Steller Sea Lion	1	Body	Diving	14-Oct-17	15:15	15:30	B13	519	NW	E	OWC	None	Observed Sea Lion near DW dock for about a minute and then it dove under, seen it porpoise a few times and lost it, see Resight #166.1
166.1	N	Steller Sea Lion	1	Body	Foraging	14-Oct-17	15:31	15:54	B11	929	NW	W	OWC	None	Resight - One minute late resighted Sea Lion Foraging in B11, went down, resurfaced near DW dock again, then TR-E to RP, lost sight at D14, seems to be normal behavior, see Resight #166.2
166.2	N	Steller Sea Lion	1	Surface Activity	Unknown	14-Oct-17	16:07	16:10	D14	128	N	N/A	OWC	None	Resight - Possibly foraging but cannot confirm, lots of splashing around, lost sight after this with no known direction of travel to note
167	N	Steller Sea Lion	1	Surface Activity	Foraging	14-Oct-17	17:12	17:26	B12	763	NW	S	OWC	None	Sea Lion TR-S towards DW dock, going under and resurfacing in the same place #166 was foraging food earlier, lost him as I could not keep up my positioning as he TR-E out and around RP, normal behavior exhibited
168	N	Humpback Whale	1	Blow	Traveling	14-Oct-17	17:50	18:08	I3	1563	NE	S/N	OWC	None	Humpback sighted in inner harbor by Icicle dock, TR-S down Spit dock, then around tip of Spit, Observed a breach by MMO @ RP just outside of B zone in area K9, normal behavior not by both MMO's
169	N	Steller Sea Lion	1	Surface Activity	Milling	16-Oct-17	9:40	9:42	D8	177	SE	N/A	OWC	None	Briefly observed Sea Lion off UMC dock crane, milling, no behavior changes noted
170	N	Harbor Seal	1	Surface Activity	Sink	17-Oct-17	16:50	17:05	E16	147	SE	S	OWC	None	Harbor Seal milling about in reef area off RP, sunk below surface, resurfacing slightly to the South, did this a few times, did not see him after 1705, normal behavior noted
171	N	Steller Sea Lion	1	Surface Activity	Swimming	18-Oct-17	10:40	10:46	B11	343	S	N	OWC	None	Sea Lion swimming playfully on back and side flipper showing, TR-N along shore South of UMC dock, lost him at B9, behavior seems relaxed and normal
172	N	Harbor Seal	2	Body	Resting	18-Oct-17	18:00	19:15	E16	213	S	N/A	OWC	None	Two Harbor Seals resting, floating, looking up at me from inside cove below RP, milling in no obvious direction, one is very light in color and has dark coloring on head, seem unaffected by construction activity
173	N	Steller Sea Lion	1	Surface Activity	Foraging	19-Oct-17	10:54	11:00	F14	290	NE	E	OWC	None	Observed Sea Lion Foraging on octopus, thrashing around, ripping it into smaller pieces and eating it, no behavior changes, behavior normal, lost sight after it went down and did not resurface
174	Y	Harbor Seal	1	Surface Activity	Look	19-Oct-17	16:58	17:02	E14	67	E	N/A	V	None	Dark Headed Harbor Seal off RP spyhopping, looking at me, sighted several times, sunk down and lost him, no noticeable changes in behavior due to Vibbing

Final Observer Report
For Unalaska Marine Center Dock Replacement

175	Y	Harbor Seal	1	Surface Activity	Look	19-Oct-17	17:01	19:20	E14	65	E	W/E	V	None	Light Headed Harbor Seal in same area as #174, spyhopping and looking at me, swam around RP to DW dock side underwater, turned around and came back to RP, seems very interested by MMO presence, checked back at 19:20 and did not see it, behavior is normal
176	N	Steller Sea Lion	1	Body	Look	20-Oct-17	15:15	15:25	D15	50	N	N	OWC	None	Sea Lion sighted by head above water, swimming North along shore line and then lost sight, no behavior changes were noted
177	N	Steller Sea Lion	1	Body	Hauled Out	21-Oct-17	9:22	15:13	G8	669	SE	E	OWC	None	Sea Lion Hauled Out of Bay Buoy sleeping in sun all day, no noticeable changes when they started Vibbing in the uplands, sighted animal as it left buoy and dove into water heading East, may have been disturbed by seagulls landing on buoy, quickly lost sight once in water, normal behavior on a sunny day
178	N	Harbor Seal	1	Body	Hauled Out	23-Oct-17	14:42	16:00	F15	252	SE	N/A	OWC	None	Harbor Seal Hauled Out of rock off RP, did not see it leave rock but it was gone when checking it at 1600, normal behavior, popular spot for Harbor Seals
179	N	Steller Sea Lion	2	Surface Activity	Foraging	25-Oct-17	11:06	11:30	B13	527	NW	W/E	OWC	None	Two Sea Lions near DW dock jumping up on back of vessels tied up there, looking for food, TR-W stopping at each vessel, went down, surfaced with an octopus, both mammals ripping it apart, lost sight of one while the other swam E out and around RP, normal behavior, lots of vessels in harbor
180	N	Steller Sea Lion	1	Body	Play	25-Oct-17	14:40	15:00	B14	352	NW	N/A	ST	None	Sea Lion exhibiting same behavior as #179, hanging out at DW dock looking up the backsides of vessels, jumping up on the back of the vessels tied up, normal behavior noted by MMO
181	N	Steller Sea Lion	1	Other	Hauled Out	26-Oct-17	11:30	13:10	G8	674	SE	N/A	ST	None	Small Sea Lion Hauled out on Bay Buoy, did not move with heavy vessel traffic nearby, did not see it leave buoy but know it left within 3 minutes of last look in that direction, normal behavior exhibited especially for a sunny day
182	N	Steller Sea Lion	2	Surface Activity	Foraging	26-Oct-17	15:57	16:03	E8	366	SE	N/A	OWC	None	Two Sea Lions foraging and thrashing an octopus around, watched for approx. four minutes and they went down and did not resurface, normal behavior, See Resight #182.1

Final Observer Report
For Unalaska Marine Center Dock Replacement

182.1	N	Steller Sea Lion	1	Surface Activity	Foraging	26-Oct-17	16:10	16:13	C9	508	SW	N/A	OWC	None	Resight- One of two Sea Lions resighted foraging nearby original sighting area, thrashing around, went down and did not resurface, could not locate other mammal, behavior normal, lots of octopus
183	N	Steller Sea Lion	2	Other	Hauled Out	28-Oct-17	16:55	19:30	G9	722	SE	N/A	OWC	None	Two Sea Lions Hauled Out on 2nd Bay Buoy, exhibiting normal behavior, still present at end of shift
184	N	Harbor Seal	1	Surface Activity	Spyhopping	29-Oct-17	14:20	14:23	E15	115	NW	E	OWC	None	Sighted Harbor Seal off RP spyhopping, TR-East and lost sight, no behavioral changes
185	N	Steller Sea Lion	1	Surface Activity	Foraging	29-Oct-17	17:15	17:31	D14	102	N	E	OWC	None	One large Sea Lion surfaced eating an octopus, throwing it around, shaking it and consuming it, slowly it swam East toward RP, lost sight of here
186	N	Steller Sea Lion	1	Body	Swimming	13-Nov-17	10:47	10:49	H6	741	E	S	OWC	None	Sea Lion spotted swimming South, head surfacing frequently, lost sight in wake of small vessel traffic and not seen again
187	N	Steller Sea Lion	1	Surface Activity	Swimming	14-Nov-17	15:18	15:20	D7	151	S	S	OWC	None	Sea Lion surfaced, looking and swimming South outside worksite, not in A zone, submerged and lost sight of, sighting too brief to evaluate behavior
188	N	Steller Sea Lion	1	Body	Swimming	14-Nov-17	17:51	17:55	D14	138	NW	E	OWC	None	Sea Lion swimming slowly East around RP, submerged and lost sight of, ran to better vantage point but was not able to sight again, behavior seemed normal although sighting was very brief
189	Y	Steller Sea Lion	1	Surface Activity	Look	5-Dec-17	16:15	16:19	D7	131	SE	N/A	V	None	Sea Lion surfaced near worksite, looked around, went down and did not resurface in area, not traveling in any set direction, normal, curious behavior exhibited
190	N	Harbor Seal	1	Body	Hauled Out	13-Dec-17	17:00	17:43	E15	133	SE	N/A	ST	None	Witnessed Harbor Seal Haul Out on rock near reef at Rocky Point, it watched me on the hill above, it was a younger, smaller animal. Checked back on it at 1743 and it was gone. Normal behavior exhibited.
191	Y	Harbor Seal	2	Surface Activity	Spyhopping	13-Dec-17	17:03	18:20	E16	191	SE	N/A	V	None	Two Harbor Seals sighted near Rocky Point, spyhopping and sinking below surface, floating in there favorite area, TMC began vibbing half way into the sighting, no behavior changes after this occurred, mammals onsite until shift ended
192	Y	Harbor Seal	2	Surface Activity	Look	23-Jan-18	13:55	14:44	E15	118	SE	N/A	V	None	Two Harbor Seals sighted off Rocky Point, looking and milling in same general area, no direction of travel, normal behavior, still in area at time MMO needed to leave

Final Observer Report
For Unalaska Marine Center Dock Replacement

193	Y	Harbor Seal	3	Surface Activity	Milling	23-Jan-18	13:55	14:44	E16	172	SE	N/A	V	None	Same time as sighted group of 2 HSEA another group of 3 HSEA's popped their heads up father south, milling about in their spot, normal behavior, no noted changes to Vibbing, in area until MMO had to vacate
194	Y	Harbor Seal	1	Surface Activity	Look	29-Jan-18	9:43	10:05	E15	140	S	N/A	V	None	Harbor Seal observed in cove between RP and APL, spyhopping, not traveling in any direction, no behavior changes to vibbing, still there when MMO had to leave area
195	Y	Harbor Seal	1	Surface Activity	Spyhopping	29-Jan-18	9:46	10:10	E14	77.9	NE	N/A	V	None	Sighted another Harbor Seal off RP spyhopping with waves crashing around on reef, very brief sighting could not tell if behavior changes due to vibbing
196	Y	Harbor Seal	2	Surface Activity	Look	3-Feb-18	12:03	12:10	E16	188	S	N/A	V	None	Sighted 2 Harbor Seals in cove South of Rocky Point, spyhopping and looking around, no behavior changes to Vibbing as I observed before and after
197	Y	Harbor Seal	1	Body	Resting	4-Feb-18	12:03	13:15	E16	234	S	N/A	Impact	None	Sighted Harbor Seal resting/floating on surface of water, not moving in any direction, checked on it continuously, no changes in behavior to impacting
198	Y	Steller Sea Lion	1	Body	Hauled Out	5-Feb-18	18:46	19:36	G7	626	E	N	V	None	Steller Sea Lion hauled out on Bay Buoy looking around, it stayed there until barge came over and tied up on it, it dove off in direction of North, two minutes later TMC started Vibbing, not enough of time for mammal to swim out of B zone so it was exposed, did not resight it after it left buoy

Appendix D. Daily Observation Records (Digital)

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 06/16/17

Time Effort Initiated: 06:30

Time Effort Completed: 19:30

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
7:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
9:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	1	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	2	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Above water construction activity
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft Start
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post-Con watch completed-nothing to report
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

First Day of Job

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 6-16-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre Construction
E ON PRE/POST CON S M OR E OFF		07:00	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		10:30	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:00	Grid		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00	Grid		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction
E ON PRE/POST CON S M OR E OFF		19:30	Grid					Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear.
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 6-17-17

Time Effort Initiated: 1600

Time Effort Completed: 2000

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
17:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
19:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:45 16:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre-Const. 30 min. Called onto job short notice
E ON PRE/POST CON S M OR E OFF		16:30 16:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crew initiated soft start before vibbing 14" piling S-Steel Timber
E ON PRE/POST CON S M OR E OFF		19:30 20:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post Con - no sightings no casualties
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 6/17/17

Time Effort Initiated: 16:30

Time Effort Completed: 2000

Page 1 of 1

MMO ARE

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		(N)S(E)W	(N)S(E)W
19:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		(N)S(E)W	(N)S(E)W
20:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		(N)S(E)W	(N)S(E)W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:30 17:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction
E ON PRE/POST CON S M OR E OFF		19:30 20:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 6-18-17

Time Effort Initiated: 630

Time Effort Completed: 830

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
7:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
8:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		6:30 7:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Pre Construction All Clear
E ON PRE/POST CON S M OR E OFF		7:03 7:06	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft Start of Crane- Ready to Vibe out old 14" pilings
E ON PRE/POST CON S M OR E OFF		7:56 8:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post Construction crew done w/in- water work
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: R.P.

Date: 6/18/17

Time Effort Initiated: 0630

Time Effort Completed: 0700, 0830

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
08:30	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: _____

Date: _____

Time Effort Initiated: _____

Time Effort Completed: _____

Page _____ of _____

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		mms
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OFF
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		6-19-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		6-20-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		6-21-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OWC
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 06/22/17

Time Effort Initiated: 06:30

Time Effort Completed: 1930

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
11:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
19:00	(G)	5%	(OC)	(L)	0	---	---

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI DP DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre construction. All clear 07:05
E ON PRE/POST CON S M OR E OFF		07:13	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI DP DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start vibing removal 16" fender pilings
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI DP DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation (OR)
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	1	13:10 13:56	D-7 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HPBK	Min: Max: Best:	Beh code(s): DI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	mammal in level B zone. Effort off - mammal near A zone mitigated Delay Effort on to time
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		RP mmo tracked it out past APL - out of B zone Observer Rotation
E ON PRE/POST CON S M OR E OFF	2	16:20 16:40	D-7 Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): PL	SSV SSI DP DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed 3 STSL Approx 200 yards off const. Barge, zone B.
E ON PRE/POST CON S M OR E OFF	1.1	16:48 18:50	B-13 Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER	HPBK	Min: Max: Best:	Beh code(s): DI	SSV SSI DP DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Observed HPBK 200 m off Delta west dock. Final observation 1/2 mile from DW dock.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction. All clear.

1600
meter

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 6-22-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-(G)-E	0%	S-PC-L-R-F-(OC)-SN-HR	(L)Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-(G)-E	0%	S-PC-L-R-F-(OC)-SN-HR	(L)Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-(G)-E	0%	S-(PC)-L-R-F-(F)-OC-SN-HR	(L)Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-(G)-E	0%	S-PC-L-R-F-(OC)-SN-HR	(L)Mod/Hvy	0	(N)SEW	NSEW
15:00	B-P-M-(G)-E	5%	S-PC-L-R-F-(OC)-SN-HR	(L)Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-(G)-E	5%	S-PC-L-R-F-(OC)-SN-HR	(L)Mod/Hvy	0	NSEW	NSEW
19:00	(G)	0%	(OC)	(L)	0		

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		6:30 7:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre-construction 30 min. All clear to CR @ 0701 am
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation All clear - No mammal activity in Level B zone
E ON PRE/POST CON S M OR E OFF		13:00 13:20	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer all rotation clear
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation All clear.
E ON PRE/POST CON S M OR E OFF	1	16:58	C-13 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): TR-SE	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Observed STSL N of Delta western dock TR-SE out of B zone - not seen again
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction no observations to report
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 06/23/17

Time Effort Initiated: 06:30

Time Effort Completed: 1930

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	G	0	PC	Lt	0	N	N

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	*	0630 -700	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Pre construction Area cleared.
E ON PRE/POST CON S M OR E OFF		07:32 07:36	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Soft start Crane.
E ON PRE/POST CON S M OR E OFF	1	10:32 10:42	Grid N or S W or E	B	CR TB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): SW-N	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None	N	Observed 2 STSL. TB also observed. Contacted TACrew
E ON PRE/POST CON S M OR E OFF		10:55	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Shift change TB takes over on STSL sighting.
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Rotation CAROL takes over UMC From Tracy - to Rocky Pt.
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Obs. Rotation no mammal activity
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Post construction no mammal observed, All clear
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		

* Change made by CB per CR

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 6-23-17

Time Effort Initiated: 630

Time Effort Completed: 1930

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
7:00	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
9:00	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	G	0	PC	Lt	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		6:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		Pre-Construction - monitoring 3300m - Both clear * 1600 meter
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OR-Observer-Vibbing 10" Rotation-All clear No sightings @ RP
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer shift change - no sightings
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation All clear, - no observations @ Rocky Pt.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post Construction Observations completed Nothing to Report
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 06/24/2017

Time Effort Initiated: 06:30 AM

Time Effort Completed: 19:30 PM

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	N(SE)W	N-SE-W
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	N(SE)W	N-SE-W
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	N(SE)W	N(SE)W
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	N(SE)W	N-SE-W
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	N(SE)W	N(SE)W
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	N(SE)W	N(SE)W

1900 (M) 0 (R) (OC) (LT) 2-3 (SE) (SE)

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #P	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30 7:09	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		area cleared @ 07:09.
E ON PRE/POST CON S M OR E OFF		07:30	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start - dead pull remaining pivings,
E ON PRE/POST CON S M OR E OFF		07:57	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibing remaining pivings.
E ON PRE/POST CON S M OR E OFF		10:30 10:35	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Went back to dead pull.
E ON PRE/POST CON S M OR E OFF		12:50	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation All clear, CAROL B. TAKES OVER @ UMC. TRACY GOES TO RP.
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Rotation TMC cutting Dolphin cap #3 off Position 3 of dock
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post construction observations, All clear, NO mammals observed.
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 6-24-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
7:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
9:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW

Hazy

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PreConstruction - All clear monitoring 1600m radii 4 V-DP 16" Timbers later
E ON PRE/POST CON S M OR E OFF		11:07	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Rotation - E-off DP
E ON PRE/POST CON S M OR E OFF		13:10	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation. done w/ timbers. cutting steel pilings.
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation. Tracy Replaces Carol Bures @ UMC Dock. Carol goes to Rocky Pt. All clear.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		30min post construction walk area @ RP no observations
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 6-25-17

Time Effort Initiated: 0630

Time Effort Completed: 0800

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
7:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre-con - all clear in 10m A zone
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc moved Barge while concrete workers worked to cut concrete
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc called off mms OWC to remove Bridge - since no work
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		really started post-con monitoring not required
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 6/25/17

Time Effort Initiated: 06:30

Time Effort Completed: 0800

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre, const, observation NO mammal observed in zones.
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC called mms off for OWC & moving BARGE NO post construction Required.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 06/26/17

Time Effort Initiated: 06:30

Time Effort Completed: 19:30

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
11:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD (None)		pre construct. Area clear
E ON PRE/POST CON S M OR E OFF		07:15 07:18	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD (None)		soft start
E ON PRE/POST CON S M OR E OFF		09:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD (None)		vibing out 4 DP of dolphin pilings - 18" steel
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation - vibing continues.
E ON PRE/POST CON S M OR E OFF		14:30 15:30	Grid N or S W or E		LP TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD (None)		Observer Rotation OWC.
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		LP CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD (None)		Moving pilings on ground into vehicle to take away
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD (None)		post construction no mammal activity.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 6/26/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	1	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	1	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Pre construction observation - 10 m zone and 1600 meter zone, all clear!
E ON PRE/POST CON S M OR E OFF		10:30 12:10	Grid N or S W or E		TB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotate vibing extraction of 18" steel pil.
E ON PRE/POST CON S M OR E OFF		12:10 14:00	Grid N or S W or E		CR LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotate (lunch break)
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		LP CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		end of lunch break - obs. rotate.
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Post construction observations, All clear, no observations
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 06/27/17

Time Effort Initiated: 06:30

Time Effort Completed: 08:00

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre construction all clear contacted TA Josh
E ON PRE/POST CON S M OR E OFF		07:18 07:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start w/crane.
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		crane damage. No work for mms - repair crane
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		all day.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 6-27-17

Time Effort Initiated: 0630

Time Effort Completed: 0800

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
7:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
9:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
11:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		6:30 7:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Pre-Con No Sightings
E ON PRE/POST CON S M OR E OFF		* 8:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		* TMC called off mmo due to crane issues - will be doing repairs
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		all day - no post can. needed since no effort on work performed today.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 06/28/17

Time Effort Initiated: 06:30

Time Effort Completed: 1400

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		pre construction
E ON PRE/POST CON S M OR E OFF		07:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		started vibing soft start.
E ON PRE/POST CON S M OR E OFF		09:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		transferring pilings to land by crane.
E ON PRE/POST CON S M OR E OFF		10:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Observer Rotation CB, takes over UMC. Tray goes up to R.P.
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC called off for day for OWC - removing concrete structure
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		E-off for sometime All indications point to no post-con needed
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 6-28-2017

Time Effort Initiated: 0630

Time Effort Completed: 1400

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
7:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
9:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre-Construction
E ON PRE/POST CON S M OR E OFF	1	09:17 09:30	D-15 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): TR-S	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted STSL TR-S off R.P. headed South last seen in area F19. E-OFF/OWC
E ON PRE/POST CON S M OR E OFF	2	09:45 10:38	E-14 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HPBK	Min: 1 Max: Best:	Beh code(s): TR-N	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted HPBK entering harbor E-14, not sighted again prior OR
E ON PRE/POST CON S M OR E OFF		10:38 10:40	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation E-off
E ON PRE/POST CON S M OR E OFF		13:04 13:08	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called off by Tmc, Doing owc on concrete slabs, no post construction required.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Umc Dock

Date: 6/29/17

Time Effort Initiated: 11:00 AM

Time Effort Completed: 1830

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
17:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:00 11:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction observation Zones All Clear, NO observations, called in by JOSH tmc.
E ON PRE/POST CON S M OR E OFF		15:38	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation, Carol Bunes takes over @ umc dock, Tracy B. takes over @ Rocky Pt.
E ON PRE/POST CON S M OR E OFF		18:00 18:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post con. No mammals observed.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 6-29-17

Time Effort Initiated: 1254

Time Effort Completed: 1800

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
18:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (V/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:54 13:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre-Cons Clear 3300m radii for 18" steel pilling removal
E ON PRE/POST CON S M OR E OFF	1	14:02 14:19	G-10 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): TR-SE	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted STSL TR-SE out of harbor, vessel F/V Traveler right behind it - mammal swam out of its way, lost sight
E ON PRE/POST CON S M OR E OFF		15:38 :	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OR-E-OFF
E ON PRE/POST CON S M OR E OFF		18:00 18:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction observation, All clear no mammals observed in zones
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: _____

Date: _____

Time Effort Initiated: _____

Time Effort Completed: _____

Page _____ of _____

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		mmo's
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OFF
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		6-30-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		7-1-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		7-2-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		7-3-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Removing Concrete
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Slabs = OWC

22 pages Data Sheet (24 pages total)

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/05/2017

Time Effort Initiated: 06:20

Time Effort Completed: _____

Page | of _____

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	2	N(S)E W	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	2	N(S)E W	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	2	N(S)E W	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	1-2	N(S)E W	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	2	N(S)E W	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	1-2	N(S)E W	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:18 07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		- preconstruction - cleared area.
E ON PRE/POST CON S M OR E OFF		09:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		- soft start of crane.
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		- observer rotation
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	9	14:04 14:32	Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: 2 Max: Best:	Beh code(s): SW-N	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted 2 STSL 100ft off city dock TR-N to 120ft off TMC Barge. last spotted 1/2 hr later in similar location. warned TMC
E ON PRE/POST CON S M OR E OFF	10	15:37 15:41	Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): SW-N	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	mammals in area. Sighted STSL SW-N 40 ft off city dock again 65ft of TMC Barge let crew know. E-off DPs only
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:00 17:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction observation, All, Clear.
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-5-17

Time Effort Initiated: 0630

Time Effort Completed: 1730

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
7:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
9:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		6:30 7:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre-Con @ RP 3300 radii No mammals in area
E ON PRE/POST CON S M OR E OFF		10:35	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OR-observed rotation
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation. No mammal sightings
E ON PRE/POST CON S M OR E OFF	✓	15:45 16:00	D-14 Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): T.R-S	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	1. STSL, surfaced next to shore between D.W. & E.R.P. surfaced twice & swam out of B-Zone.
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		17:00 17:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction TMC done pulling pilling S- No sightings
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/08/2017

Time Effort Initiated: 06:30

Time Effort Completed: 16:30

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre construction - all clear contacted Tachris
E ON PRE/POST CON S M OR E OFF		07:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		- soft start - prep work for vibe extraction.
E ON PRE/POST CON S M OR E OFF		07:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Begin vibe ext. of 32 18" pilings.
E ON PRE/POST CON S M OR E OFF		09:00 09:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		mechanical issues with vibe. Fixed at ~ 09:20.
E ON PRE/POST CON S M OR E OFF		10:25	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		mechanical again. obs. rotation
E ON PRE/POST CON S M OR E OFF		12:45	Grid N or S W or E		T.B. C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation, vibbing 18" steel piles.
E ON PRE/POST CON S M OR E OFF		16:00 16:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction no mammals obs.- crew to continue w/OWC
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-8-17

Time Effort Initiated: 0630

Time Effort Completed: 1630

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
15:00	B-P-M-G-E	8 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:00	B-P-M-G-E	8 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW

Event Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre-Construction Obs. -mammal sighted see below -3300m
E ON PRE/POST CON S M OR E OFF	12	06:54 07:04	D-15 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: 1 Max: Best:	Beh code(s): HO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	HSEA hauled out on rock by RP - on line between D-15 & E-15 left 10 min later
E ON PRE/POST CON S M OR E OFF		10:37	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Lost sight at E-19 Observer Rotation E-off -Trouble w/Vibber
E ON PRE/POST CON S M OR E OFF		10:50 12:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Level B radius goes to 1,600m. Dead pull pilings
E ON PRE/POST CON S M OR E OFF		12:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Level B radius goes back 3,300m. -vibe on again
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rot. & HSEA mammal activity on shift.
E ON PRE/POST CON S M OR E OFF		16:00 16:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called off Job by Tmc. Post vibbing observations All clear. Done
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7-9-17

Time Effort Initiated: 0730

Time Effort Completed: 1100

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
11:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:21 07:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre-Con. Obs. A zone - 10 m - 18" Steel Piling B zone - 3300 m
E ON PRE/POST CON S M OR E OFF	13	07:24 07:40	D-6 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: 1 Max: Best:	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Obs. HSEA inside arm N. side Coast Guard dock Obs. 10 min & gone
E ON PRE/POST CON S M OR E OFF		07:50 07:53	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SoftStart initiated on Vibber-TMC pulling 18" Steel Piling - 16 eq
E ON PRE/POST CON S M OR E OFF		10:30 11:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post-Con. Obs. Called off job after pilings removed - TMC continues
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OWC - on call thru day.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 7/9/2017

Time Effort Initiated: 07:30

Time Effort Completed: 11:00

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:30 08:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction observation All cleared BY 0800
E ON PRE/POST CON S M OR E OFF		10:30 11:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called off by TMC, Post construction observation All clear.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-10-17

Time Effort Initiated: 1050

Time Effort Completed: 1330

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:17	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:50	Grid N or S W or E	B	CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called in at 11:00. owc in process - removing concrete slabs. Obs. effort on
E ON PRE/POST CON S M OR E OFF		10:50 11:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con - 30 minutes Level B zone 3300 m-Tmc to Vibe out bea 18" Steel pillings
E ON PRE/POST CON S M OR E OFF		11:30 11:33	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc initiates use of mitigation - soft start
E ON PRE/POST CON S M OR E OFF		11:35 12:06	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibber on - vibbing out bea 18" Steel pillings Vibber off approx 12:06
E ON PRE/POST CON S M OR E OFF		12:10 12:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc DP'ing bea 18" Steel pillings till approx. 12:55 - Tmc Break
E ON PRE/POST CON S M OR E OFF		13:00 13:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observers start Post-Con Tmc does not need us rest of day - 30 min Post-Con
E ON PRE/POST CON S M OR E OFF	14	13:17 13:30	E15 Grid N or S W or E	B 3300 Ø	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 3	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted 3 STSL Sof RP milling, playing 120ft offshore. No construction activities taking place - Tmc on break
E ON PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		mmds done for day. Post-Con. completed DONE at 1300
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

*observer CB tried out new data sheet documentation per PND

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC Dock

Date: 7/10/17

Time Effort Initiated: 10:50 AM

Time Effort Completed: 13:30

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
13:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:50 11:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre. vibbing observations zones All clear - called in after construction started.
E ON PRE/POST CON S M OR E OFF		13:00 13:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post vibbing observations complete, zones clear, no mammals observed.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

* Observer TB stuck with previous method of filling out data

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: R.P.

Date: 7/20/17

Time Effort Initiated: 1200

Time Effort Completed: 2000

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	Q-1	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	Q-1	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	Q-1	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	1	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on @ Rocky Pt. 3300 m. TMC crew working already
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		B-Zone 3300 m. All clear, Pre, construction complete, NO Mammals,
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E										
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC crew Takes Lunch, 1/2 HR. Observations continue,
E ON PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E										
Vessel Activity		13:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FLV Sovereignty out Bound of Inner Harbor From NPF Dock
E ON PRE/POST CON S M OR E OFF		13:33	Grid N or S W or E										
E ON PRE/POST CON S M OR E OFF		13:49	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC is moving supplies to shore from Barge,
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E										
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation, CB. & T.B.
E ON PRE/POST CON S M OR E OFF		20:00	Grid N or S W or E										
E ON PRE/POST CON S M OR E OFF		20:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC continues w/ owc slinging construction materials
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E										
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day No post-con needed since no piledriving or in-water work done today.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 7-20-17

Time Effort Initiated: 1200

Time Effort Completed: 2000

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
14:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort ON Arrive @ umc to clear Azone - owc in 10 meters progress
E ON PRE/POST CON S M OR E OFF		12:00 12:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		owc in progress - TMC unloading barge w/ pillings + Equip. All clear in zone
Vessels in immediate Area		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Coast Guard vessel # 726 in position at Coast Guard dock - maersk container ship at position 5 of umc dock
E ON PRE/POST CON S M OR E OFF		13:00 13:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC crew broke for Lunch - 1/2 HR Approx continued observations
E ON PRE/POST CON S M OR E OFF	15	13:29 13:33	0-8 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: 2 Max: Best:	Beh code(s): SW-N	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Spotted 2 STSL approx. 100 m off N tip of maersk container Ship - SW-N past TMC Barge
↓		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		approx 75 m from worksite They dove under and could not sight them again TMC is on lunch break
E ON PRE/POST CON S M OR E OFF		13:49 14:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Crane movement cont. unloading barge + Equip - Barge to Barge
Human/ Vessel Activity		13:51 13:52	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Small skiff races across Bay from fuel barge anchored in Bay to DW Fuel dock
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB to RP / TB to umc No mammals observed

Weather during sighting:
Good vis. OC, lt winds - ESE
BSS 0-1 EASY to see / spot

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 7/20/17

Time Effort Initiated: 1200

Time Effort Completed: 2000

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	Q %	S-PC-L-R-F- <u>OC</u> -SN-HR	Lt/Mod/Hvy	Q-1	NSEW	NSEW
19:00	B-P-M-G-E	Q %	S-PC-L-R-F- <u>OC</u> -SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST <u>CON</u> S M OR E OFF		18:30 20:00	Grid N or S W or E	T.B.		BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Time continues to move Equip-ect. To shore.
E ON PRE/POST CON S M OR <u>E OFF</u>		20:00 :	Grid N or S W or E	T.B.		BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Observer Effort off. NO Post construction observation All Over water work.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/21/17

Time Effort Initiated: 10:00

Time Effort Completed: _____

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	9	NSEW	NSEW
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

* Dual coverage at umc first 1/2 of day for additional training

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:00 10:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Observer's CR & TB both, Training
E ON PRE/POST CON S M OR E OFF		10:00 10:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Level A all clear. Contacted TA.
E ON PRE/POST CON S M OR E OFF		10:50 10:53	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start crane
E ON PRE/POST CON S M OR E OFF		10:55 12:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		prepping for later piling extraction.
E ON PRE/POST CON S M OR E OFF		12:22 12:26	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		// //
E ON PRE/POST CON S M OR E OFF		12:53 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		possible mechanical took vibe off
E ON PRE/POST CON S M OR E OFF		13:00 :	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		CR shift is done for day.
E ON PRE/POST CON S M OR E OFF		13:00 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		work shift continued with other mmos- no Post Construction needed by CR
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7/21/17

Time Effort Initiated: 10:00

Time Effort Completed: 2030

Page: 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

*DUAL coverage at umc first 1/2 of day for additional training

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:00	Grid N or S W or E		T.B. E C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observers: T.B. & C.R. (Training)
E ON PRE/POST CON S M OR E OFF		10:00 10:35	Grid N or S W or E		T.B. E C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Level A & B. Cleared (10 m) (3300 m)
E ON PRE/POST CON S M OR E OFF		10:50 10:53	Grid N or S W or E		T.B. E C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start - CRANE
E ON PRE/POST CON S M OR E OFF		10:55 12:22	Grid N or S W or E		T.B. E C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Clam Shelling Beach
E ON PRE/POST CON S M OR E OFF		12:22 12:26	Grid N or S W or E		T.B. E C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Prepping for 18" pile Removal *this did (vibbe out) not happen
E ON PRE/POST CON S M OR E OFF		12:53 12:57	Grid N or S W or E		T.B. E C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Possible mechanical, Removed vibbe.
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		T.B. E C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		CAROLY R Reed off TRACY B. continues @ umc Dock.
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		T.B. E CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		CAROL Bures takes umc, TRACY B. moved to R.P. Dredging shoreline next to position 5
E ON PRE/POST CON S M OR E OFF		14:03 14:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Stabbed 4 18" Pilling Next to Barge

Page 3 of 3

* Major fog rolled into B zone but A zone remained All clear - see RP for more weather

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (V/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:20 14:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			TMC vibbed in 4ea 18" pillings - first for new dock
E ON PRE/POST CON S M OR E OFF		15:04 15:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			TMC took vibber off and began stabbing 5ea pillings next to barge
E ON PRE/POST CON S M OR E OFF		15:45 16:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			TMC put vibber back on to vibrate the next 5 pillings into place - Pos. III
E ON PRE/POST CON S M OR E OFF		16:28 17:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			TMC using skiff to adjust 9ea pillings in place (w/ surveyor help)
E ON PRE/POST CON S M OR E OFF		17:35 18:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Clamshell Pulley broke down/crew working on it dockside
E ON PRE/POST CON S M OR E OFF		17:39 19:17	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Welders welding onto each of 9 pillings at water's edge
Vessel movement		18:32 X	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Coast Guard Vessel # Leaves Port opening up more visibility
E ON PRE/POST CON S M OR E OFF		19:06 19:17	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Clamshell broke down out of water again
E ON PRE/POST CON S M OR E OFF		20:00 20:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			TMC done for day. Perform 30 min post construction obs @ umc
E OFF		20:30			CB					NONE			Obser. Effort off for day

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-21-17

Time Effort Initiated: 1000

Time Effort Completed: 2030

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
14:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs effort ON @ Rocky Point 3300 m radii - B Zone
E ON PRE/POST CON S M OR E OFF		10:00 10:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre-Construction Obs. All Clear to immo CR @ UMC @ 10:30 AM
E ON PRE/POST CON S M OR E OFF		10:50 10:53	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC initiated mitigation by performing Soft Start of crane
E ON PRE/POST CON S M OR E OFF		10:55 12:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC prepping for eventual removal of 16-18" pilings
E ON PRE/POST CON S M OR E OFF		12:22 12:26	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC initiate SS of Vibber for preparation of pulling pilings/vibbing pilings
E ON PRE/POST CON S M OR E OFF		12:53 12:57	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibbing did not commence - Took vibe off
E ON PRE/POST CON S M OR E OFF		12:57 14:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC moving pilings around from barge
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. rotation. TB taking over for CB
E ON PRE/POST CON S M OR E OFF		14:03 14:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC stabbing in pilings 4x to prepare to vibrate in

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-21-17

Time Effort Initiated: 1000

Time Effort Completed: 2030

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
20:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST <u>CON</u> S M OR E OFF		14:20 14:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC is vibbing in 18" Sheet Piles
E ON PRE/POST CON S M OR E OFF		15:04 15:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP <u>ST</u> OWC NOWC / NONE	SS/BC DE SD None		TMC Removed vibbe & started Stabbing Sheet Piles in place.
E ON PRE/POST <u>CON</u> S M OR E OFF		15:45 16:28	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Put V. bbe on crane & starts vibbing Sheet Piles in place.
E ON PRE/POST <u>CON</u> S M OR E OFF		16:28 17:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		TMC is Doing OWC, on Template.
E ON PRE/POST <u>CON</u> S M OR E OFF		17:35 18:48	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		TMC is working on The clam shell.
E ON PRE/POST <u>CON</u> S M OR E OFF		17:39 19:17	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		TMC is welding on Sheet Piles in place.
E ON PRE/POST <u>CON</u> S M OR E OFF		19:06 19:17	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		TMC is working on The clam shell AGAIN.
E ON PRE/POST <u>CON</u> S M OR E OFF		20:00 20:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		TMC is Done for the day, start post construction observations.
E ON PRE/POST CON S M OR <u>E OFF</u>		20:30 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Observer Effort off no mammals observed in zone's Done!

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-22-17

Time Effort Initiated: 0630

Time Effort Completed: 2130

Page 1 of 3

misty
foggy

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Arrive Onsite 6:20 AM RP-DW
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Pre-Con for 1/2 hr to clean Area B-3300 radii - no sightings 6:57 All clear to move
Vessel Activity		06:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Large F/V AK Ocean idling in middle of bay waiting for dock space
E ON PRE/POST CON S M OR E OFF		07:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Crane/Skiff movement TMC to weld templates this AM - we were told
Vessel Float plane		08:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		F/V Arcturus enters harbor to Ice dock
		08:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Floatplane transit B zone S to N 40 ft above water
E ON PRE/POST CON S M OR E OFF		08:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Vibber on - SS noted by UMC mmo - see their datasheet for this info
"↓"		:	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		TMC scheduled to remove 7-8 16" pillings close to position 5 of old umc dock
Vessel		09:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		F/V Viking Explorer inbound NPF
E ON PRE/POST CON S M OR E OFF		10:41	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Rotation CB break CR @ RP

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 07/22/17

Time Effort Initiated: 0630

Time Effort Completed: 2130

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-(M)-G-E	5%	S-PC-(L)-R-(F)-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-(M)-G-E	8%	S-PC-(L)-R-(F)-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
14:00	B-P-(M)-G-E	8%	S-PC-(L)-R-(F)-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
16:00	B-P-(M)-G-E	8%	S-PC-(L)-R-(F)-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-(M)-G-E	8%	S-PC-(L)-R-(F)-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:30	B-P-(M)-G-E	8%	S-PC-(L)-R-(F)-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW

* Reduced Visibility (25%) due to fog

16

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel activity		11:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Vansee enters mouth of harbor.
E ON PRE/POST CON S M OR E OFF		11:58 12:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibbertaken off. Resume OWC.
E ON PRE/POST CON S M OR E OFF		12:30 13:25	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crane operator -dead pull 16" removal.
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		-observer rotation -no sea mammal activity.
E ON PRE/POST CON S M OR E OFF		14:00 19:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		construction on Barge & welding template OWC.
Vessel Activity		14:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Vansee leaves Harbor
Vessel Activity		15:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		#1 POHAT Enters Inner Harbor going to Delta western fuel dock.
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation, Carol Bures goes to R.P. Tracy Bulard @ Ume. Dock
Vessel Activity		18:01	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Caitlin Ann inbound harbor TR-W to D.W. Fuel dock

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-22-17

Time Effort Initiated: 0630

Time Effort Completed: 2130

Page 3 of 3

* BAD
Fog

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:20	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	L/Mod/Hvy	1	N S E W	N S E W
19:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	L/Mod/Hvy	0-1	N S E W	N S E W
20:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	L/Mod/Hvy	0	N S E W	N S E W
20:15	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	L/Mod/Hvy	1	N S E W	N S E W
20:45	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	L/Mod/Hvy	1	N S E W	N S E W
21:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	L/Mod/Hvy	1	N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC initiates mitigation with a 3 min SS on Vibber - no mammals present
E ON PRE/POST CON S M OR E OFF		19:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC begins Vibbing i-beams?
E ON PRE/POST CON S M OR E OFF		19:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		19:40 Takes Vibber off
E ON PRE/POST CON S M OR E OFF		19:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crew continues w/ OWC - Crane movement - Barge to Barge & welding template?
Vessel Activity		19:38	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tramper vessel No 1 Pohak outbound harbor from DW fuel dock
Vessel Activity		19:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tramper Chilean Reefer outbound harbor assisted by two tugs
E ON PRE/POST CON S M OR E OFF		19:38	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		21:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post-Con. Observations commence. No mammals observed in B zone
E ON PRE/POST CON S M OR E OFF		21:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort off for day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

* Weather Notes from Above - 1/2 HR of 50%-reduced visability in B zone - A zone still okay or "moderate"
90%

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC
Date: 07/22/17
Time Effort Initiated: 06:30
Time Effort Completed: 2130
Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		on site.
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre-construction all clear. contacted TA.
E ON PRE/POST CON S M OR E OFF		07:35 07:39	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start of primary crane
E ON PRE/POST CON S M OR E OFF		07:45 08:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Transferring gear over H2O. No vibe / impact.
E ON PRE/POST CON S M OR E OFF		08:50 11:58	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Initiated use of vibber. 16" piling extraction.
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation - still vibbing.
E ON PRE/POST CON S M OR E OFF		12:30 13:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Trac. Begins Dead pull of 18" steel piles.
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		CARDI Bunes takes over UMC Dock Pos. TRACY B. Takes over RP from CAROLYN Reed.
E ON PRE/POST CON S M OR E OFF		14:00 19:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		After 1/2 hr break crane excavator movement OWC begins welding of cross bars on template

*

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7-22-17

Time Effort Initiated: 0630

Time Effort Completed: 2130

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
20:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB goes to RP TB to umc - still OWC
E ON PRE/POST CON S M OR E OFF	16	17:00 17:02	G 8 Grid N or S W or E	B.	T.B.	BL BO BR DF SA OTHER	HSEA	Min: Max: 1 Best:	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed Harbor Seal surface for 1.5 min. went down did NOT resurface peeking, very low in water. NOT Traveling
Vessel Activity		19:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Gold Rust leaves Ice Dock & Heads out To Sea. NO mammals observed
E ON PRE/POST CON S M OR E OFF		19:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC soft start vibbo.
E ON PRE/POST CON S M OR E OFF		19:18 19:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Begins vibbing I. Beams in Place. for template. 1940 complete
E ON PRE/POST CON S M OR E OFF		21:00 21:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction Observations NO mammals observed In A-or B Zones, effort off for DAY!
E ON PRE/POST CON S M OR E OFF		21:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Done!
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7-23-17

Time Effort Initiated: 0630

Time Effort Completed:

Page 1 of 3

*
See
weather
event
Below

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
09:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
09:11	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
10:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
12:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive onsite UMC to monitor A zone
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre Construction Obs. commences @ 6:30 No mammals obs.
E ON PRE/POST CON S M OR E OFF		07:25 07:43	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts 3 template piles next to barge for later install
E ON PRE/POST CON S M OR E OFF		07:46 07:49	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC initiates SS of Vibber - mitigation
E ON PRE/POST CON S M OR E OFF		07:49 09:37	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibber on - vibbing in first of 3 template piles - 18" steel
* Weather Event (M)		09:11 09:26	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	But made call	Fog making visibility poor A zone is visible but notified TMC Josh of
↓		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Situation that A zone must be visible to continue vibbing. Duly noted
E ON PRE/POST CON S M OR E OFF		09:45 13:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OWC continues - Crane use swinging over more template const. materials
** E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation OWC continues

** TMC takes break

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7/23/17

Time Effort Initiated: 0630

Time Effort Completed: _____

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
20:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST (CON) S M OR E OFF		14:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST (OWC) NOWC / NONE	SS/BC DE SD None		Tmc. Begins OWC. (Crane work on Base).
E ON PRE/POST (CON) S M OR E OFF		14:32	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST (OWC) NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. - To R.P. C.B. @ UMC.
E ON PRE/POST (CON) S M OR E OFF		14:32 14:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST (OWC) NOWC / NONE	SS/BC DE SD None		Stab i-beam into Template
E ON PRE/POST (CON) S M OR E OFF		14:35 14:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST (OWC) NOWC / NONE	SS/BC DE SD None		Vibber on - Vibe down i-beam they just stabbed into place
E ON PRE/POST (CON) S M OR E OFF		14:55 17:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST (OWC) NOWC / NONE	SS/BC DE SD None		Tmc using crane to move I-beams from outside barge to swiftwater
E ON PRE/POST (CON) S M OR E OFF		17:25 17:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST (OWC) NOWC / NONE	SS/BC DE SD None		Crew Stabbing 4 i-beams into template
E ON PRE/POST (CON) S M OR E OFF		17:50 19:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST (OWC) NOWC / NONE	SS/BC DE SD None		Vibbing i-beams that were stabbed in (4 ea)
E ON PRE/POST (CON) S M OR E OFF		18:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST (OWC) NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST (CON) S M OR E OFF		19:20 20:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST (OWC) NOWC / NONE	SS/BC DE SD None		Tmc Begins OWC, with crane.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-23-17

Time Effort Initiated: 0630

Time Effort Completed:

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0-1	NSEW	NSEW
12:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
15:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Other Notes
E ON PRE/POST CON S M OR E OFF	17	11:36 11:56	F-8 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted Harbor Seal spyhopping in area of F-8. Bobbed to surface twice and not seen again. Contact other mmc TB who was on spit area. TMC webbing at the time of sighting Vigorously looked for 1/2 hr without seeing again
" "		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
Vessel activity		13:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Nordic Fury inbound, harbor - spun around & went back out
E ON PRE/POST CON S M OR E OFF		14:15 14:32	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC back from lunch OWC begins - crane work on barge
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation OWC Construction continues - no mammal activity
E ON PRE/POST CON S M OR E OFF		14:32 14:34	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Stabbed 1. I Beam Threw temp let.
E ON PRE/POST CON S M OR E OFF		14:35 14:51	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		connected vibbe & vibbed 1. I Beam in place.
E ON PRE/POST CON S M OR E OFF		14:55 17:25	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC. Doing construction on BARGE, moving Beams, BARGE to BARGE.
E ON PRE/POST CON S M OR E OFF		17:25 17:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC. Stabbing I Beams In to temp let.

Good Vis.
BSS & OC some fog & wind & swell

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7/23/17

Time Effort Initiated: 0630

Time Effort Completed: 2120

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N S E W	N S E W
20:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N S E W	N S E W
21:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:50	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Begin vibbing I Beams In to template, Vibber taken off - CB
E ON PRE/POST CON S M OR E OFF		19:15	Grid N or S W or E		T.B CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation, T.B. & C.B.
E ON PRE/POST CON S M OR E OFF		19:20 20:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crane moves Extend-A- Boom Equip to Barge From Shore side & other OWC
Vessel Activity		19:22	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V morning STAR inbound harbor TR-W to DW Dock
Vessel Activity		19:24	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V N. Eagle outbound Dutch Harbor TR-S and around Spit dock
Vessel Activity		19:30 20:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Skiff transiting from Naroud spit to South and over to DW Dock & Back out
Vessel Activity		20:54	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Samson Barge & Tug Gyr Falcon inbound to UMC dock - Position 5
E ON PRE/POST CON S M OR E OFF		20:50 21:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc wrapping up For day. Observers Begin Post construction
E ON PRE/POST CON S M OR E OFF		21:20	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mammals Obs. No issues. Obs. EFFORT OFF

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7/23/17

Time Effort Initiated: 0630

Time Effort Completed: _____

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		20:50 21:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Start Post const. observation
E ON PRE/POST CON S M OR <u>E OFF</u>		21:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Observer Effort off for the DAY, Done!
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7/23/17

Time Effort Initiated: 6:30

Time Effort Completed: _____

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	N S E W	N S E W
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	N S E W	N S E W
See	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W
pg: 2	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		ARRIVE on Site, - Rocky Point
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction, Observation, All Clear!
E ON PRE/POST CON S M OR E OFF		07:25 07:43	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc, Stabbed ③ Piles next to BARGE.
E ON PRE/POST CON S M OR E OFF		07:46 07:49	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SS on Vibe
E ON PRE/POST CON S M OR E OFF		07:49 09:37	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crew of tmc Begin vibbing 18" pile in template vibbing stopped @ 9:37
Vessel Activity		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Alderbaron Enters Inner Harbor & goes to Trident Dock. No mammals observed!
Vessel Activity		09:46	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Northern Hawk, Enters Harbor & Ties up @ USC9 Dock, No mammals Observed.
E ON PRE/POST CON S M OR E OFF		09:45 13:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Doing OWC, Template. OWC ends - Tmc breaks for Lunch
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation, Tracy B. @ UMC, Carol B. @ RP.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: R.P.

Date: 7/24/17

Time Effort Initiated: 0630

Time Effort Completed: 2120

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
(E) ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		Observer Effort on B-Zone 3300
(E) ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		Pre construction observation: RP. All clear.
(E) ON PRE/POST CON S M OR E OFF		07:05 09:11	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Ocean Hope, Enters Inner BAY & Ties up at DW Dock. Time starts OWC.
Vessel Activity		08:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Fuel BARGE tug: Pacific RAVEN BARGE CASCADES Ties up @ DW Dock. NO mammal interaction.
Vessel Activity		08:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Progress Enters Inner BAY & ties up @ DW Dock. NO mammal interaction.
(E) ON PRE/POST CON S M OR E OFF		9:11 10:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time, Begins stabbing sheet piles IN to template, tail sheets.
(E) ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		T.B. CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation, CR, & Tracy B.
(E) ON PRE/POST CON S M OR E OFF		11:00 11:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA crew does soft start/vibe.
(E) ON PRE/POST CON S M OR E OFF		11:05 12:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibing sheet piling.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 07/24/17

Time Effort Initiated: 0630

Time Effort Completed: 2120

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
vessel activity		11:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		T/V "Gretchen Dublin" enters mouth of harbor.
vessel activity		12:26	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tramper "ON AGARUM" entering harbor.
E ON PRE/POST (CON) S M OR E OFF		12:20 13:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Use of crane to transport gear to land / barge work.
E ON PRE/POST CON S M OR E OFF		13:40 14:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA lunch break.
E ON PRE/POST (CON) S M OR E OFF		14:10 15:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		start stabbing sheet pilings in place.
E ON PRE/POST (CON) S M OR E OFF		15:15 16:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		crane lowered vibe down on sheet pilings
E ON PRE/POST CON S M (OR) E OFF		15:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST (CON) S M OR E OFF		16:00 16:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time is doing Barge work.
E ON PRE/POST (CON) S M OR E OFF		16:45 18:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Begins stabbing more Sheet Piles in place.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 7/24/17

Time Effort Initiated: 0630

Time Effort Completed: 21:30

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
20:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
21:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:10 19:45	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibbing Sheep Piles I.V.
E ON PRE/POST CON S M OR E OFF		19:00 :	Grid N or S W or E		T.B CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
Vessel activity		19:50 20:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Alaskan Defender" headed to D.W. Fuel dock
E ON PRE/POST CON S M OR E OFF		20:20 20:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge work
E ON PRE/POST CON S M OR E OFF		20:50 21:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction observing no mammal activity
E ON PRE/POST CON S M OR E OFF		21:20 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off for day
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7/24/17

Time Effort Initiated: 0627

Time Effort Completed: 2120

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:00 11:05	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time, Begins soft start vibe.
E ON PRE/POST CON S M OR E OFF		11:05 12:20	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Begins vibbing sheet piles in place
E ON PRE/POST CON S M OR E OFF		12:20 13:40	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts OWC work with crane on BARGE.
E ON PRE/POST CON S M OR E OFF		14:10 15:15	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time, starts stabbing 18" sheet piles in place
E ON PRE/POST CON S M OR E OFF		15:15 16:00	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Begins vibbing on sheet piles
E ON PRE/POST CON S M OR E OFF		15:30 16:00	Grid N or S W or E		T.B CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:00 16:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Took vibe off, Transporting gear w/crane.
E ON PRE/POST CON S M OR E OFF		16:45 18:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		stabbing sheet piling.
E ON PRE/POST CON S M OR E OFF		18:10 19:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibbing sheet pilings

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7/24/17

Time Effort Initiated: 0630

Time Effort Completed: 2120

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
21:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation - no sea mammal act.
E ON PRE/POST CON S M OR E OFF		20:20 20:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts OWC, working on BARGE,
E ON PRE/POST CON S M OR E OFF		20:50 21:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc, stops work for the day (start post const Observations.
E ON PRE/POST CON S M OR E OFF		21:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off, Post construction Does no mammals observed, Zones all clear. Done!
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/25/17

Time Effort Initiated: 06:23

Time Effort Completed: _____

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:23	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer on site @ 06:23
E ON PRE/POST CON S M OR E OFF		06:23 07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear, A zone Contacted TA crew.
E ON PRE/POST CON S M OR E OFF		07:20 07:24	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start of crane.
E ON PRE/POST CON S M OR E OFF		07:24 09:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge work with crane.
E ON PRE/POST CON S M OR E OFF		09:40 09:42	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start for vibe activity.
E ON PRE/POST CON S M OR E OFF		09:42 09:47	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibe for 18" piling (cone only)
E ON PRE/POST CON S M OR E OFF		09:47 10:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge work again
E ON PRE/POST CON S M OR E OFF		10:05 10:14	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA crew at meeting.
E ON PRE/POST CON S M OR E OFF		10:14 10:19	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		crane/barge work.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/24/17

Time Effort Initiated: 06:27

Time Effort Completed: 2:20

Page 1 of 3

STSL

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer arrives at UMC site @ 06:27
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre-construction activity observe
E ON PRE/POST CON S M OR E OFF	18	06:56 07:52	Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): SW-S	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL swimming south heading toward UMC site.
E ON PRE/POST CON S M OR E OFF	11	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Contacted TACHUS work had not begun yet.
E ON PRE/POST CON S M OR E OFF	11	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No sighting again after one hour of observing.
E ON PRE/POST CON S M OR E OFF		07:25	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start of crane - transfer- ring gear - noise.
E ON PRE/POST CON S M OR E OFF		08:10 09:11	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Transferring beams to dock - welding.
E ON PRE/POST CON S M OR E OFF		09:11 10:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA crew begins placing sheet piling.
E ON PRE/POST CON S M OR E OFF		10:30 10:35	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotate. no other sea mammal activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/25/17

Time Effort Initiated: 0630

Time Effort Completed: _____

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
17:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation.
E ON PRE/POST CON S M OR E OFF		10:19 11:24	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		stabbing sheet piling. 10ea
E ON PRE/POST CON S M OR E OFF		11:25 13:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibbing the stabbed pillings 10ea 1303-Vibber off
E ON PRE/POST CON S M OR E OFF		13:12 14:17	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OWC-Slinging over Barge. Half of crew took break
E ON PRE/POST CON S M OR E OFF		14:17 14:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC stabbing in sheet piles
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation no mammal act.
E ON PRE/POST CON S M OR E OFF		15:20 15:23	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SSV sheet pillings.
E ON PRE/POST CON S M OR E OFF		15:23 17:26	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		driving sheet pillings again
E ON PRE/POST CON S M OR E OFF		17:26 17:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		stabbing sheet pillings

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/25/17

Time Effort Initiated: 0630

Time Effort Completed: 2130

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	1	NSEW	NSEW
20:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
21:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibing sheets piling - soft start
E ON PRE/POST CON S M OR E OFF		17:56 18:19	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		sheet pilings @ #26 currently for day
E ON PRE/POST CON S M OR E OFF		18:22 18:26	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		stabbing sheet piling.
E ON PRE/POST CON S M OR E OFF		18:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start + vibrate
E ON PRE/POST CON S M OR E OFF		18:29 19:39	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibing again.
E ON PRE/POST CON S M OR E OFF		18:35	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		20:02 21:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc begins oxc - crane slinging construction materials
E ON PRE/POST CON S M OR E OFF		21:00 21:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc done for day 28 pilings driven for day
E ON PRE/POST CON S M OR E OFF		21:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer done for day

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-25-17

Time Effort Initiated: 0630

Time Effort Completed: _____

Page 1 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive onsite RP 0620
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs Monitoring Level B zone @ 3300m - All clear 0654
Vessel Activity		06:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Skiff running high rate of speed from S end of Spit around to NPF dock
E ON PRE/POST CON S M OR E OFF		07:24 09:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts OWC - slinging cargo,
Vessel Activity		07:52 08:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Oceanus inbound into harbor Sto N to LCD dock
Vessel Activity		08:50 09:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FV Patricia Lee TR-S from Tide to DW No Associated mammal act.
Vessel Activity		08:59 09:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FV Ocean Hope 3 outbound the harbor TR-E from DW dock to outside Spit
E ON PRE/POST CON S M OR E OFF		09:42 09:47	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibbing 18" pilling (1)
E ON PRE/POST CON S M OR E OFF		09:47 10:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Back to owc-Barge work

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-25-17

Time Effort Initiated: 0630

Time Effort Completed:

Page 2 of 5

*Sighting #19

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:50	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	19	09:50 10:03	F-23 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): TR-W	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted 2 STSL TR-W in area F23, E22, C22 *See to out of Level B zone OWC const. 150ft offshore Weather Best guess
E ON PRE/POST CON S M OR E OFF		" : "	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No changes in mammal behavior due to cont.
E ON PRE/POST CON S M OR E OFF		10:05 10:14	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC crew possibly in meeting - no over water can. at this time.
E ON PRE/POST CON S M OR E OFF		10:14 10:19	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OWC Const. begins again-
E ON PRE/POST CON S M OR E OFF		10:30 -	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Rotation CB to UMC CR to RP
E ON PRE/POST CON S M OR E OFF		10:19 11:24	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Stabbing Sheet piles
E ON PRE/POST CON S M OR E OFF		11:25 13:02	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibber on. Begin vibe sheet pilings.
E ON PRE/POST CON S M OR E OFF		12:59 (SA, MB)	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		18" pile (same)
E ON PRE/POST CON S M OR E OFF		13:12 14:17	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		moved gear, etc.

V 11:25

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 07/25/17

Time Effort Initiated: 0630

Time Effort Completed: _____

Page 3 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	5%	(S) PC-L-R-F-OC-SN-HR	(L) Mod/Hvy	1	NSEW	NSEW
15:00	B-P-M-G-E	5%	(S) PC-L-R-F-OC-SN-HR	(L) Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	0%	(S) PC-L-R-F-OC-SN-HR	(L) Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:17 15:22	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		stabbing sheet piling.
E ON PRE/POST CON S M OR E OFF		14:30 :	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation no sea mammal act.
E ON PRE/POST CON S M OR E OFF		15:20 15:23	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		S.S.V prior to vibbing sheet piling
E ON PRE/POST CON S M OR E OFF		15:23 17:26	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc begins vibbing in sheet piles All clear
Vessel Activity		15:50 15:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V majesty inbound Harbor from the N. TR-N to Trident Rock
Vessel Activity		16:55 ↑	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Saratoga inbound harbor to DW dock Together w/ Pacific Raven
Vessel Activity		17:30 ↓	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug the Barge Cascade is moved from DW - no associated mammal
E ON PRE/POST CON S M OR E OFF		17:26 17:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Stabbing Sheet piles
E ON PRE/POST CON S M OR E OFF		17:55 17:56	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc initiates mitigation by performing S.S. on vibber

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-25-17

Time Effort Initiated: 0630

Time Effort Completed:

Page 4 of 5

STSL
#220

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
21:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
22:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:56 18:19	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibbing Sheet pillings #26 Today
E ON PRE/POST CON S M OR E OFF		18:22 18:26	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Stab 1 sheet pile next to position 5
E ON PRE/POST CON S M OR E OFF		18:28 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC initiates soft start before vibbing
E ON PRE/POST CON S M OR E OFF		18:29 19:39	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		18:35 :	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	20	19:36 19:37	G-19 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): SW & TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	1 STSL travelling south \approx G19 towards Front Beach/channel?
E ON PRE/POST CON S M OR E OFF		X :	Grid N or S W or E		//	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Briefly saw head/ neck area than went under.
E ON PRE/POST CON S M OR E OFF		20:02 20:23	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crane movement
Vessel activity		21:00 21:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Gold Rush inbound via channel towards Delta Wes, Fuel Dock.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 07/25/17

Time Effort Initiated: _____

Time Effort Completed: 21:30

Page 5 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel activity		21:10 21:16	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Starward in bound thru channel / DWF dock
E ON PRE/POST CON S M OR E OFF		21:00 21:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction - 2B sheet piling completed
E ON PRE/POST CON S M OR E OFF		21:30 —	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort off today.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-26-17

Time Effort Initiated: 0630

Time Effort Completed: 2030

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW

* Note - See umc data log for soft start of crane daily

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive onsite @ 0624 @ RP to monitor 3300 m Level B zone
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear on Pre-Con Obs. Call mmocr @ 0652
Vessel Activity		06:40 07:22	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tugs Gyrfaclon + millanet Falcon TR-N from umc to KDH dock to move ^{Cargo ship} _{Purvisian Reels}
Vessel Activity		06:45 07:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Gretchen Dunlap transports Cargo Barge Bristol Bay Trades Sto N outside channel
E ON PRE/POST CON S M OR E OFF		07:16 08:32	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts Lot B zone Stabbing in pillings plan is 10 in a row, All clear
E ON PRE/POST CON S M OR E OFF		08:32 09:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC crew working on Barge & prepping pillings
E ON PRE/POST CON S M OR E OFF		09:15 09:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Back to Stabbing Sheet pilling - All Clear
Vessel Activity		09:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FAI Commodore TR-E tow inbound harbor to DW dock - no mammal act.
E ON PRE/POST CON S M OR E OFF		09:45 10:08	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Stabbing ends > no mammal OWC begins activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: RP

Date: 7-26-17

Time Effort Initiated: 0630

Time Effort Completed: 2030

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:08 10:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time initiates soft start on vibber - Level A & B zone clear
E ON PRE/POST CON S M OR E OFF		10:10 11:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crew begins vibbing stabbed piles. 3300m zone clear
E ON PRE/POST CON S M OR E OFF		10:30 :	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation → Inbound.
Vessel activity		11:00 12:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug "Pacific Raven" pulling barge "Cascades" / DWFuel
Vessel activity		12:02 12:18	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Alaska Def- ender" inbound to DWFuel dock.
E ON PRE/POST CON S M OR E OFF		12:00 12:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		*Doing misc work on barge - very windy & rainy.
E ON PRE/POST CON S M OR E OFF		13:00 :	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		12:50 13:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA crew begins stabbing 18" sheet piles - poor weather
E ON PRE/POST CON S M OR E OFF		14:25 14:27	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start vibber.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7/26/17

Time Effort Initiated: 0630

Time Effort Completed: 2030

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
20:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:27 19:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Starts vibbing 18" sheet piles in place 1900-Vibber off
E ON PRE/POST CON S M OR E OFF		17:00 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc - continues to vibrate Observer Rotation
E ON PRE/POST CON S M OR E OFF	21	17:16 17:35	Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s): H10	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Sighted HSEA Hauled out on rock near RP-E-16 while TMC Vibbing out of water but then in water
Vessel Activity		17:24 17:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pacific Viking inbound harbor S to N head of bay - Idle dock no mammal activity
Vessel Activity		19:00 19:02	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Two skiffs side by side race into bay from N spit to magenta marine.
E ON PRE/POST CON S M OR E OFF		20:00 20:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Not much activity since 1900. Crew wrapping up for day
E ON PRE/POST CON S M OR E OFF		20:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post-con completed above. Obs effort off No mammal obs.
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC drove 8 sheet piles for the day
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/26/17

Time Effort Initiated: 06:30

Time Effort Completed: 20:30

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
08:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
10:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
<u>E ON</u> PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
<u>E ON</u> PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Made rounds for level A & B-ok all clear.
<u>E ON</u> PRE/POST CON S M OR E OFF		07:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		-soft start of crane use - beginning of day.
<u>E ON</u> PRE/POST CON S M OR E OFF		07:16 08:32	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA crew shall stab & then vibrate sheet piling.
<u>E ON</u> PRE/POST CON S M OR E OFF		08:32 09:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge work & dock prep/template
<u>E ON</u> PRE/POST CON S M OR E OFF		09:15 09:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		stabbing sheet piling & "H" beams
<u>E ON</u> PRE/POST CON S M OR E OFF		09:45 10:08	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge work.
<u>E ON</u> PRE/POST CON S M OR E OFF		10:08 10:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibe soft start begins
<u>E ON</u> PRE/POST CON S M OR E OFF		10:10 11:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibe down some of these sheet piling.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/26/17

Time Effort Initiated: 0630

Time Effort Completed: 2030

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
20:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		12:00 12:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc doing const. on BARGE, welding OWC.
E ON PRE/POST CON S M OR E OFF		12:50 13:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts stabbing 18" sheet piles into place! 1350 Stopped
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:25 14:27	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc initiated soft start Vibe No mammals
E ON PRE/POST CON S M OR E OFF		14:27 19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc vibbing stabbed in sheet piles
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation mammal All clear / No Activity
E ON PRE/POST CON S M OR E OFF		20:00 20:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crew of Tmc stop work for the day start post construction observations,
E ON PRE/POST CON S M OR E OFF		20:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post observations All clear, No mammals observed, Done.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-27-17

Time Effort Initiated: 0630

Time Effort Completed: 1950

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive onsite 0620 to monitor the level B zone - Rocky Point
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Construction Observations - OC skies making it hard to see taking longer to do rounds
E ON PRE/POST CON S M OR E OFF		↓ 07:08	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called All Clear - No mammals after it lightened up in B zone for better visibility
E ON PRE/POST CON S M OR E OFF		07:39 07:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC SS crane & starts working owc (Note SS on umc location)
E ON PRE/POST CON S M OR E OFF		07:52 09:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts stabling in sheet piles
Vessel Activity		08:38 08:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Ocean Leader inbound to P.W. No noticeable mammals
E ON PRE/POST CON S M OR E OFF		09:49 09:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC initiates Soft Start on Vibber All clear - Good Vis.
E ON PRE/POST CON S M OR E OFF		09:50 12:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB takes break

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-27-17

Time Effort Initiated: 0630

Time Effort Completed: 1950

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
17:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:35 13:53	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation.
E ON PRE/POST CON S M OR E OFF		13:53 14:34	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		only construction on shore.
E ON PRE/POST CON S M OR E OFF		14:41 14:42	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start vibbe
E ON PRE/POST CON S M OR E OFF		14:42 16:12	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Truc starts vibbing Sheet piles.
Vessel Activity		16:20	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Sea wolf Ties up @ Dwr. fuel Dock.
Vessel Activity		16:40	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SAMSON BARGE ties up @ Coast Guard Dock.
E ON PRE/POST CON S M OR E OFF		16:50 17:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Truc Starts Stabbing Sheet Piles in place
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-27-17

Time Effort Initiated: 0630

Time Effort Completed: 1950

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	1	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC initiates soft start on Vibber
E ON PRE/POST CON S M OR E OFF		17:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibbing sheet piles
Vessel Activity		17:58	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Chelsea K inbound Harbor from South to DW dock - No activity observed
Vessel Activity		18:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Araho inbound harbor
E ON PRE/POST CON S M OR E OFF		19:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post Construction Observation Complete - No mammals
E ON PRE/POST CON S M OR E OFF		19:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off for day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 01/27/17

Time Effort Initiated: 06:30

Time Effort Completed: 1950

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Began rounds @ UMC site. No light until 06:47
E ON PRE/POST CON S M OR E OFF		06:20 07:08	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		"All clear" by 07:08. Contacted TA JPBH & Chris.
E ON PRE/POST CON S M OR E OFF		07:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start of crane.
E ON PRE/POST CON S M OR E OFF		07:39 07:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Slings sheets & misc. piling work
E ON PRE/POST CON S M OR E OFF		07:52 09:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Slabbing sheet piling
E ON PRE/POST CON S M OR E OFF		09:49 09:	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start of vibe hammer
E ON PRE/POST CON S M OR E OFF		09:50 12:10	Grid N or S W or E		CR CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibing sheet "piling" @ "C" cell
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		12:10 12:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Time crew takes 1/2 hour lunch. most of the crew!

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7/27/17

Time Effort Initiated: 0630

Time Effort Completed: 1950

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:35 13:53	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Start Stabbing Sheet Piles in place
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation Tmc still Stabbing Sheet piles
E ON PRE/POST CON S M OR E OFF		13:53 14:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crane at a halt only construction on shore
E ON PRE/POST CON S M OR E OFF		14:41 14:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts vibber-SS first
E ON PRE/POST CON S M OR E OFF		14:42 16:12	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc vibbing Sheet piles
Vessel Activity		15:03 15:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Lilli Ann Outbound Coast Guard dock out around spit - no mammals
E ON PRE/POST CON S M OR E OFF		16:50 17:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts Stabbing Sheet piles into place
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:35 17:36	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time does SSV.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7-27-17

Time Effort Initiated: 0630

Time Effort Completed: 0630 1950

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:36	Grid N or S W or E		TJS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts jibbing Sheet Piles in Place
E ON PRE/POST CON S M OR E OFF		19:20	Grid N or S W or E		TJS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start post construction Observation
E ON PRE/POST CON S M OR E OFF		19:50	Grid N or S W or E		TJS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End post construction observations, no mammals observed, All clear, Done.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 7/28/17

Time Effort Initiated: 0745/07:45

Time Effort Completed: 2130

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Observer Effort On 3300m. Zone Arrive on site.
E ON PRE/POST CON S M OR E OFF		07:45 08:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Are vibbing observation B-Zone, 3300 Zone All Clear - no mammals observed.
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		F/V Bristol Explorer Enters Harbor & ties up @ NPF
E ON PRE/POST CON S M OR E OFF		08:05 09:43	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		F/V Berling Defender Enters Harbor & ties up @ DW Dock. Leaves DW Dock. Heads out to sea.
E ON PRE/POST CON S M OR E OFF		08:08	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		F/V golden Alaska enters Inner Harbor and ties up @ kloesterboer Dock.
E ON PRE/POST CON S M OR E OFF		08:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		F/V Pacific Fury Enters Inner Harbor & ties up @ DW Dock.
E ON PRE/POST CON S M OR E OFF		08:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		F/V unimak Enters Inner Harbor & ties up @ Kloesterboer Dock.
E ON PRE/POST CON S M OR E OFF		09:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		F/V Ocean Hope 3 Enters Inner Harbor ties up @ City Spit Dock
E ON PRE/POST CON S M OR E OFF		09:12	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		F/V ARADO Leaves Inner harbor & Heads out to sea (City Spit Dock)

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 7/28/17

Time Effort Initiated: 07:45

Time Effort Completed: 2130

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:40	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/v viking enters Inner B&H tie up @ D.W. Dock.
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		TB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SSvibe - mitigation begins for mammal activity.
E ON PRE/POST CON S M OR E OFF		11:17 11:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA vibes 18" pile out of template on "C" cell-dock.
E ON PRE/POST CON S M OR E OFF		11:30 12:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Stabbing sheet piles w/ barge crane, not the dock crane.
Vessel activity		11:40 11:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/v "Pacific Fury" leaves D.W. Fuel dock heading out of harbor.
E ON PRE/POST CON S M OR E OFF		12:10 12:13	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start for new vibe hammer on barge crane
E ON PRE/POST CON S M OR E OFF		12:13 15:49	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA starts vibing sheet piles on "C" cell w/ barge crane.
E ON PRE/POST CON S M OR E OFF		12:13	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/v "Sea Bird" inbound headed to Trident dock.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: RP
Date: 07/28/17
Time Effort Initiated: 0745
Time Effort Completed: 2130
Page 3 of 3

Sighting #22 HSEA.

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
20:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		12:24 12:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Viking" departs from inner harbor.
E ON PRE/POST CON S M OR E OFF		13:08 :	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		15:50 21:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time is Doing OWC on sheet piles.
E ON PRE/POST CON S M OR E OFF		17:00 :	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	22	17:31 17:50	D-17 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: 1 Max: Best:	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted HSEA Spyhopping 40ft from bow of APL Belgium Cargo ship. Sighted 2 times in 20 minutes of observing
↓		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mitigation required mammal is B zoned 500 meters from construction site during OWC activities
E ON PRE/POST CON S M OR E OFF		21:00 21:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done w/OWC Done for today. Start Post-Con. Observations
E ON PRE/POST CON S M OR E OFF		21:30 :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mammals Obs. Observer done for day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/28/17

Time Effort Initiated: 07:38

Time Effort Completed: 2130

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:38	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA crew transfers materials via crane to dock.
E ON PRE/POST CON S M OR E OFF		07:38 08:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Area cleared. Contacted TA Josh - clear.
E ON PRE/POST CON S M OR E OFF		08:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Still transferring materials to con. dock site.
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		11:15 11:17	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start vibbe, (shore crane)
E ON PRE/POST CON S M OR E OFF		11:17 11:45	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time, vibbs 18" pile out of template (testing) with shore crane
E ON PRE/POST CON S M OR E OFF		11:30 12:10	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts stabbing sheet piles in place with BARGE CRANE.
E ON PRE/POST CON S M OR E OFF		12:10 12:13	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time does a SS with the vibbs (BARGE CRANE)
E ON PRE/POST CON S M OR E OFF		12:13 15:49	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time - starts vibbing sheet piles in place with BARGE CRANE.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7/28/17

Time Effort Initiated: 0738

Time Effort Completed: 2130

Page 2 of 2

Sighting #23 - HSEA

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		15:50 21:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC waiting both cranes w/crew on platform-adjusting piles
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	#23	19:30 21:10	E15 Grid N or S W or E	B. 3300	T.B.	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s): HO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed H. Seal Hauled Out on Rock @ Rocky Pt. No Exposure, TMC. Doing OWC. HSEA out of water.
E ON PRE/POST CON S M OR E OFF		21:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC stops work for the DAY. Start Post construction
E ON PRE/POST CON S M OR E OFF		21:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction observation Done, 1 mammals observed. See #23 Done, Effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 7/29/17

Time Effort Initiated: 0630

Time Effort Completed: 2000

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lo/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on 3300 m. Zone B,
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const, Zone-B,
E ON PRE/POST CON S M OR E OFF		07:16 07:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SS Beach Crane & Removal of clam shell Dredge,
E ON PRE/POST CON S M OR E OFF		07:28 07:39	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time is doing OWC, with crane, Dead pulling template piles
E ON PRE/POST CON S M OR E OFF		07:39 07:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Dead Pulls template pile & some sheet pile.
E ON PRE/POST CON S M OR E OFF		07:45 08:13	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time stabs sheet piles in place,
Vessel Activity		08:09 08:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Half moon Bay Enters Inner Harbor & ties up @ DW Dock.
E ON PRE/POST CON S M OR E OFF		08:25 08:28	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time does a soft start on vibro,
E ON PRE/POST CON S M OR E OFF		08:28 11:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibbing sheet piles in place.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 7/29/14

Time Effort Initiated: 0630

Time Effort Completed: 2000

Page 2 of 4

Sighting #24

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #P	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	#24	08:45	B-14 Grid N or S W or E	B	T.B	BL BO BR DF SA OTHER	StSL	Min: Max: Best:	Beh code(s): DI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Observed 1 StSL surface @ The Stern of vessel @ DW. Dock while vibbing was taking place was NOT seen AGAIN.
vessel Activity		09:20	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Aleutian NO 1 Enters Inner Harbor & Ties up @ DW Dock. No mammal interaction
vessel Activity		09:25	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Arctic Explorer Enters Inner Harbor & Ties up @ Trident Dock. No mammal interaction.
E ON PRE/POST CON S M OR E OFF		10:35	Grid N or S W or E		T.B CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		stabbing sheet piling
E ON PRE/POST CON S M OR E OFF	25	11:20	E-14 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s): UN	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Harbor Seal (HSEA) resting on rock reef at tip of RP.
vessel activity		11:58	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Alaska Lady" inbound towards Trident Dock.
vessel activity		12:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Aleutian #1" left DW Fuel Dock towards mouth harbor
E ON PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 7/29/17

Time Effort Initiated: 0630

Time Effort Completed: 2000

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	N S E W	N S E W
14:00	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	N S E W	N S E W
16:00	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC. Takes a 40min Lunch Break.
E ON PRE/POST CON S M OR E OFF		13:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start viber BARGE CRANE
E ON PRE/POST CON S M OR E OFF		13:48	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Starting to viber Sheet piles in place.
E ON PRE/POST CON S M OR E OFF		14:54	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		S/V Redeemer Enters Inner Harbor & ties up @ Resolve marine
vessel Activity		14:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		S/V Redeemer Enters Inner Harbor & ties up @ Resolve marine
vessel Activity		15:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V NORSEMAN II Enters Inner BAY & ties up @ Trident Dock.
Dream Catcher		15:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Dreamcatcher Enters Inner BAY & Ties up @ City Spit Dock
vessel Activity		15:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pacific Prince Enters Inner BAY & Ties up @ DW Dock.
vessel Activity		15:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V Coastal Progress Enters Inner Harbor & goes to KDH.
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

SHAKI
Over
1455
1930
OWC

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-29-17

Time Effort Initiated: 0630

Time Effort Completed: 2000

Page 4 of 4

Sighting # 26 weather

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	26	18:05 18:17	G-17 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 3	Beh code(s): FI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	3 STSL look to be fighting over food-salmon jumping in bay all day. Seagulls all around TR-S forward Unalaska area. Watched for over 10 min & then not seen again. OWC going on no mitigation required - NO behavioral changes
↓		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
Vessel Activity		18:25 18:30	Grid N or S W or E	B	CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Large skiff/recreational fishing boat TR-S team spit RP+ on to unalaska - no mammal activity
E ON PRE/POST CON S M OR E OFF		19:30 2000	Grid N or S W or E	B	CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time wrapping up for Today. observers begin Post-Con observations
E ON PRE/POST CON S M OR E OFF		2000	Grid N or S W or E	B	CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off No mammals observed in Post-Con.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

24

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMCDate: 07/29/17Time Effort Initiated: 06:30Time Effort Completed: 2000Page | of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		At UMC site. clearing area.
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		UMC & RP site clear, contacted TA Josh.
E ON PRE/POST CON S M OR E OFF		07:16	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		soft start on dock/land crane.
E ON PRE/POST CON S M OR E OFF		07:28 07:39	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Extracting I Beam etc. / prep work
E ON PRE/POST CON S M OR E OFF		07:39 07:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Dead pull of misc. I beams / sheet pilings.
E ON PRE/POST CON S M OR E OFF		07:45 08:13	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		stabbing sheet pilings on "C" cell.
E ON PRE/POST CON S M OR E OFF		08:25 08:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		soft start on vibe
E ON PRE/POST CON S M OR E OFF		08:28 11:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		vibing sheet pilings.
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7/29/17

Time Effort Initiated: 0630

Time Effort Completed: 2000

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts stalling sheet piles in place Stopped at 1300 - taking break
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:00 13:39	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc taking lunch Break - approx. 40 min of no construction
E ON PRE/POST CON S M OR E OFF		13:45 13:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc initiates mitigation by performing SS on Vibber - Barge Crane
E ON PRE/POST CON S M OR E OFF		13:48 14:54	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc vibbing sheet piles w Barge Crane
Vessel Activity		14:13 14:17	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel makushin Bay inbound harbor to dock @ Magne - No mammal act.
E ON PRE/POST CON S M OR E OFF		14:55 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pulled & lifted gangway Crane down using 2 sluffs to turn barge & sling piles
Vessel Activity		15:27 15:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Magne/Resolve has a skiff in water running all around head of Bay
Vessel Activity		16:23 16:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Cape Horn outbound from KDH around spit TR- No associated mammal behavior to report

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7-29-17

Time Effort Initiated: 0630

Time Effort Completed: 2000

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:30 20:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Stops work & leaves site for the day
E ON PRE/POST CON S M OR E OFF		20:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction complete No mammals observed in 3300 m. zone, or a zone observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-30-17

Time Effort Initiated: 0630

Time Effort Completed: _____

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N S E W	N S E W
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N S E W	N S E W
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:13 13:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA crew taking a break.
E ON PRE/POST CON S M OR E OFF		13:46 13:48	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Mitigation for land based crane - SSONViber
E ON PRE/POST CON S M OR E OFF		13:48 14:26	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA crew is vibing sheet (land crane) piling.
E ON PRE/POST CON S M OR E OFF	28	13:49 17:25	E-15 Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s): HO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y N	Harbor seal is resting on Lone Rock reef. (Hauled out)
E ON PRE/POST CON S M OR E OFF		14:35	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OR - Observer Rotation - VF OFF
E ON PRE/POST CON S M OR E OFF		14:35 15:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC stabbing w/ shore crane - sheet piles
Vessel Activity		15:10 15:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Three skiffs heading (TR-S) S back to Unalaska Fog rolling in - no mammal activity
E ON PRE/POST CON S M OR E OFF		15:25 15:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OWC - welders, crew on platform adjusting sheet piles
E ON PRE/POST CON S M OR E OFF		15:40 16:00	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore based Crane stabbing in sheet piles

* Sighting started as No exposure & watched mammal carefully at 1725 it was gone but they were Vibbing
From 1710 to 1810 so had to be Exposed in B zone as it left rock.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 7-30-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	0-1 Mod/Hvy	0-1	NSEW	NSEW
19:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	0-1 Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		15:53 17:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug millinium falcon assisting APL Belgium farm APL to Outbound harbor (No sightings)
E ON PRE/POST CON S M OR E OFF		16:00 16:02	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc initiates SS of vibration shore based crane
E ON PRE/POST CON S M OR E OFF		16:02 18:38	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc begins vibbing in sheet piles w/ shore based crane
E ON PRE/POST CON S M OR E OFF		17:10 18:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starting to use Barge Crane to vibrate as well - no SS required
Vessel Activity		17:35 17:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pleasure Craft vessel cruised past worksite to S end of umc & over to
Vessel Activity		18:10 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		unalaska side. F/V Patricia L inbound harbor from N ground spit to NPF dock
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation All Clear - Vibbing
Vessel Activity		18:54 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V Ocean Star Enters Inner Harbor
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc. stops work for The DAY & leaves
Effort Off		19:30			T.B.					(None)			Observer Effort Off All clear, no mammals observed, - Done

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 7/30/17

Time Effort Initiated: 0630

Time Effort Completed: _____

Page 1 of 4

→ weather during sighting # 27

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	Q	NSEW	NSEW
08:25	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on, Arrive on site
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. observation, B-zone 3300m, All clear, no mammals observed.
Vessel Activity		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Majesty Tied up @ Trident Dock.
E ON PRE/POST CON S M OR E OFF		07:37	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start Dock crane
E ON PRE/POST CON S M OR E OFF		07:39	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crane work & welding
E ON PRE/POST CON S M OR E OFF		07:44	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start Barge crane.
E ON PRE/POST CON S M OR E OFF	# 27	08:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER	HSEA	Min: 1 Max: Best:	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	HSEA, surfaced & looked around & went down, see weather above watched approx 15 min.
E ON PRE/POST CON S M OR E OFF		08:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Truc. Soft start vibc,
E ON PRE/POST CON S M OR E OFF		08:52	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Truc. vibc. out 18" Steel piling S & I Beams. With barge crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky pt.

Date: 7/30/17

Time Effort Initiated: 0630

Time Effort Completed: _____

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		09:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Courageous enters Inner Harbor ties up @ city SPH dock
E ON PRE/POST CON S M OR E OFF		10:30 10:50	Grid N or S W or E		TB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation @ R.T.B. VF. Training
E ON PRE/POST CON S M OR E OFF		11:30 12:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Stabbing sheet piles w/shoredane
E ON PRE/POST CON S M OR E OFF		12:30 12:33	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins SS on Viber
E ON PRE/POST CON S M OR E OFF		12:33 13:12	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Begin Vibing Sheet Piling - Barge Crane
E ON PRE/POST CON S M OR E OFF		12:35 12:37	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Land crane SS on the Viber
E ON PRE/POST CON S M OR E OFF		12:37 12:54	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Land crane is vibing in sheet piles -
Vessel Activity		13:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug - Tug in bound vessel name not visible too letter too small
Vessel Activity		13:23	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug "Milenium Falcon" inbound mouth of harbor

next # 15 28

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 7-30-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 4

28

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E	A	CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer on site umc 10m level A zone
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Construction Obs. All clean from mmo TB/CB - call Josh
E ON PRE/POST CON S M OR E OFF		07:37 07:39	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Mitigation SS of dock crane -
E ON PRE/POST CON S M OR E OFF		07:39 08:49	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		owc begins-welding over water + on barge
E ON PRE/POST CON S M OR E OFF		07:44 07:46	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Mitigation SS of Barge Crane
E ON PRE/POST CON S M OR E OFF		08:50 08:52	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc initiates SS of Vibbers
E ON PRE/POST CON S M OR E OFF		08:52 11:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts Vibbing Vibe out old steel piling - 18" & i-beams to template
Vessel Activity		10:12 10:16	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tag millieum falcon outbound harbor. No related mammal Act.
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB takes 2 hr break Training @ RP going on

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7-30-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	<input checked="" type="checkbox"/>	NSEW	NSEW
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	<input checked="" type="checkbox"/>	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:30 12:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts stabbing sheet piles in place with shore crane. Vibbing continues with Barge crane.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation @ UMC Dock
E ON PRE/POST CON S M OR E OFF		12:30 12:33	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC - Barge crane begins SS on vibber
E ON PRE/POST CON S M OR E OFF		12:33 13:13	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts Vibber on Barge crane sheet piles
E ON PRE/POST CON S M OR E OFF		12:35 12:37	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Land crane SS on Vibber sheet piles
E ON PRE/POST CON S M OR E OFF		12:37 12:54	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Land crane vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		13:13 13:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC taking break approx 40 min.
E ON PRE/POST CON S M OR E OFF		13:46 13:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Land Based Crane Vibe SS
E ON PRE/POST CON S M OR E OFF		13:48 14:26	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibbing sheet piles w/ Land Crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMCDate: 7-30-17Time Effort Initiated: 0630Time Effort Completed: 1930Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		14:21	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug millennium falcon left position at umc to take ^{mr} ANDALUSIA out STAR
E ON PRE/POST CON S M OR E OFF		14:29	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB to RP
E ON PRE/POST CON S M OR E OFF		14:35 15:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC stabbing sheet piles w/shore crane
E ON PRE/POST CON S M OR E OFF		15:25 15:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts doing OWC with shore crane
E ON PRE/POST CON S M OR E OFF		15:40 16:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts stabbing sheet piles with shore crane
E ON PRE/POST CON S M OR E OFF		16:00 16:02	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc does SSV Shore crane
E ON PRE/POST CON S M OR E OFF		16:02 18:38	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts vibbing sheet piles in place. shore crane
E ON PRE/POST CON S M OR E OFF		17:10 18:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts vibbing with BARGE CRANE ALSO
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB @ umc TB @ RP.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7-30-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	(N)SEW	(N)SEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day Start Post-Construction observations - No mammals to report
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off for day.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 7/31/17

Time Effort Initiated: 0630

Time Effort Completed: 1945

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Observer Effort on observing B-zone 3300 m
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Pre const. observations 3300 m. B-Zone All clear-
E ON PRE/POST CON S M OR E OFF		06:57 07:00	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Time soft starts crane (shore)
Vessel Activity		07:15 07:25	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Tug: CHUCKLE Sea Fuel BARGE SCT-180 Ties up @ DW dock. No mammal interaction
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		07:23 07:25	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		TMC Does a SS ON BARGE 34 crane & starts moving Beams to shore OWC.
Vessel Activity		07:55 08:00	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		F/H Pacific Glacier, Enters Inner Harbor & ties up @ KDH No mammal interaction
Vessel Activity		08:30 08:38	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		F/H American Eagle enters Inner Harbor & ties up @ Ice Dock. No mammal interaction.
E ON PRE/POST CON S M OR E OFF		08:45 08:47	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		TMC does a soft start on vibro, BARGE crane,

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: Rocky Pt.
Date: 7/31/17
Time Effort Initiated: 0630
Time Effort Completed: 0630 1945
Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:48	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST <u>CON</u> S M OR E OFF		08:47 10:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibbing sheet Piles in place w/ Barge Crane.
E ON PRE/POST <u>CON</u> S M OR E OFF		09:04 09:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP <u>ST</u> OWC NOWC / NONE	SS/BC DE SD None		Time starts Stallding Sheet Piles In place with shore crane
E ON PRE/POST <u>CON</u> S M OR E OFF		09:40 11:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibbing sheet Piles with Shore Crane.
Vessel Activity		10:00 10:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V American Dynasty enters Harbor & ties up @ KDH
E ON PRE/POST <u>CON</u> S M OR E OFF		10:30 1:	Grid N or S W or E		T.B. V.F.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. V.F.
Vessel Activity		10:42 :	Grid N or S W or E		V.F.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Storm Petrel in bound Harbor ties up @ Delta Western CDW
Vessel Activity		11:26 :	Grid N or S W or E		V.F.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Great Pacific in bound into Harbor ties up @ DW
E ON PRE/POST <u>CON</u> S M OR E OFF		11:55 14:45	Grid N or S W or E		V.F.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time connects up to barge crane starts vibbing ^{Temporary} Piles
E ON PRE/POST <u>CON</u> S M OR E OFF		12:46 14:20	Grid N or S W or E		V.F.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Shore crane begins slinging sheet Piles To Cell

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 07-31-17

Time Effort Initiated: 0630

Time Effort Completed: 1945

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Mod/Hvy	0	N S E W	N S E W
14:03	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
15:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		14:02	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Mackushon bay inbound to Magone/Reslove marine
Vessel Activity		14:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V ARICA inbound into harbor ties up at
CON		14:22 15:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Put vib on shore crane - vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		14:32	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation occure @ 14:32 VF → CR
Vessel activity		15:30 15:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Commador" inbound - heading to Trident Dock.
E ON PRE/POST CON S M OR E OFF		15:48 17:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		put vib back on shore crane vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		17:13 17:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibe on the barge crane - pulled out
E ON PRE/POST CON S M OR E OFF		17:30 17:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		removed vib & stabbing piles w/ shore crane
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 07/31/17

Time Effort Initiated: 0630

Time Effort Completed: 1945

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST <u>CON</u> S M OR E OFF		18:15 18:32	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Time starts OWC
E ON PRE/POST <u>CON</u> S M OR E OFF		18:32 19:00	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibbing 18th pile over
E ON PRE/POST <u>CON</u> S M OR E OFF		19:15 19:45	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Time crew leaves for the day start post construction obs.
E ON PRE/POST CON S M OR <u>E OFF</u>		19:45 :	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Post construction obs. no mammals observed in 3300 m. zone all clear. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/31/17

Time Effort Initiated: 06:30

Time Effort Completed: _____

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		began clearing area
E ON PRE/POST CON S M OR E OFF		06:30 06:57	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Area A & B are clear. Contacted TA Josh
E ON PRE/POST CON S M OR E OFF		06:57	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start on shore crane. Ready to begin work.
E ON PRE/POST CON S M OR E OFF		07:23	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start on barge crane. transferring materials.
E ON PRE/POST CON S M OR E OFF		08:45 08:47	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start on vibe hammer - sheet pilings.
E ON PRE/POST CON S M OR E OFF		08:47 10:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibing sheet pilings on 40" cell #1/barge crane
E ON PRE/POST CON S M OR E OFF		09:04 09:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		stabbing sheet piling w/ shore crane
E ON PRE/POST CON S M OR E OFF		09:40 11:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		switched out stabbing w/vibe on shore crane
E ON PRE/POST CON S M OR E OFF		10:45	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer / TA crew rotation on break.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 07/31/17

Time Effort Initiated: 0630

Time Effort Completed: _____

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST <u>CON</u> S M OR E OFF		11:55 14:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc connects the Vibe to Barge CRANE & starts vibbing on sheet piles. sheet piles in -
E ON PRE/POST <u>CON</u> S M OR E OFF		12:34	Grid N or S W or E		T.B. CR.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B./CR.
E ON PRE/POST <u>CON</u> S M OR E OFF		12:46 14:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane begins slinging sheet piles to CR.
E ON PRE/POST <u>CON</u> S M OR E OFF		14:30	Grid N or S W or E		CR T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST <u>CON</u> S M OR E OFF		14:22 15:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		put vibe on shore crane - vibbing sheet piles
E ON PRE/POST <u>CON</u> S M OR E OFF		15:48 17:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc is vibbing I-Beam to clean a rock, for sheet pile, shore crane
E ON PRE/POST <u>CON</u> S M OR E OFF		17:13 17:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts vibbing with The Barge CRANE, vibbing I Beam OUT.
E ON PRE/POST <u>CON</u> S M OR E OFF		17:30 17:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts stabbing in sheet piles w/shore CRANE
E ON PRE/POST <u>CON</u> S M OR E OFF		18:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts OWC with BARGE CRANE

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 7/31/17

Time Effort Initiated: 0630

Time Effort Completed:

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Inspect Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		TB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation (BARGE CRANE OWC)
E ON PRE/POST CON S M OR E OFF		18:32 19:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Begin vibing w/ shore crane 18" pile.
E ON PRE/POST CON S M OR E OFF		19:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TACrew done for day.
E ON PRE/POST CON S M OR E OFF		19:15 19:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction observing
E ON PRE/POST CON S M OR E OFF		19:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort off. no sea mammal's today
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/01/17

Time Effort Initiated: 06:16

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON POST CON S M OR E OFF		06:16	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		effort on for Level A/B @ 06:16.
E ON PRE/POST CON S M OR E OFF		06:16 07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		pre construction activity. All clear @ 07:00.
E ON PRE/POST CON S M OR E OFF		07:07 07:29	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		soft start of shore crane. - idling.
E ON PRE/POST CON S M OR E OFF		07:17 07:29	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		TACrew begins work, welding etc. NOWC at this point.
E ON PRE/POST CON S M OR E OFF		07:23 07:25	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		soft start of barge crane. NOWC/idling
E ON PRE/POST CON S M OR E OFF		07:29 08:06	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		sheet piling sliding from shore crane/stab.
E ON PRE/POST CON S M OR E OFF		07:32 08:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		barge crane transferring gear from barge to dock.
E ON PRE/POST CON S M OR E OFF		08:10 08:12	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		soft start on vibe/shore crane - vibrating sheets.
E ON PRE/POST CON S M OR E OFF		08:12 09:07	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		vibrating sheet piling on "C" cell #1. / shore crane.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UML

Date: 08/21/17

Time Effort Initiated: 0616

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
1200	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:21 09:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins stabbing sheet piles on northern "C" cell #1
E ON PRE/POST CON S M OR E OFF		09:09 10:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane - took vibe off #15 stabbing sheets again.
E ON PRE/POST CON S M OR E OFF		09:15 11:38	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane puts vibe on, vibrating northern sheets "C"
E ON PRE/POST CON S M OR E OFF		10:42 :	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation TACrew on break. (back now)
E ON PRE/POST CON S M OR E OFF		10:55 10:57	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane back to vibbing - TMC initiates SS on vibber
E ON PRE/POST CON S M OR E OFF		10:57 17:22	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Vibbing Sheet piles
E ON PRE/POST CON S M OR E OFF		11:42 12:14	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane running pully on sheet piles + slinging overwater
E ON PRE/POST CON S M OR E OFF		12:16 14:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Stabbing in pillings
E ON PRE/POST CON S M OR E OFF		12:30 :	Grid N or S W or E		CB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-01-17

Time Effort Initiated: 0616

Time Effort Completed: 1930

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	1430 CB	14:05 15:17	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane done stabbing & returns to vibing sheet piles.
E ON PRE/POST CON S M OR E OFF	1430 CB	15:21 16:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		16:14 17:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibbing Sheet piles w/ Barge crane
E ON PRE/POST CON S M OR E OFF		17:30 19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		UMC dredging bottom near piling - in water work
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA Crew done for day
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction activity
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-01-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite 0620 Observer Effort on Rocky Point
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear in Level B zone-3300 m
Vessel Activity		06:30 07:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Mgersk Nikolai Cargo Ship inbound to umc dock post 5 assisted by two tugs millium falcon + Gyr falcon
E ON PRE/POST CON S M OR E OFF		07:07 07:09	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No associated mammal act. SS of shore crane (per CR)
E ON PRE/POST CON S M OR E OFF		07:17 07:29	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts work welding, prepping for day
E ON PRE/POST CON S M OR E OFF		07:23 07:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SS on Barge Crane (per CR)
E ON PRE/POST CON S M OR E OFF		07:29 08:06	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Slabbing w/ Shore crane
E ON PRE/POST CON S M OR E OFF		07:32 08:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane trans. equip to dock
E ON PRE/POST CON S M OR E OFF		08:10 08:12	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start on Vibrier - Shore Crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-01-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		8:12 09:07	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Vibration
E ON PRE/POST CON S M OR E OFF		08:21 09:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing Sheet piles
E ON PRE/POST CON S M OR E OFF		09:09 10:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Stabbing in Sheet piles
E ON PRE/POST CON S M OR E OFF		09:15 11:38	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration sheet piles
E ON PRE/POST CON S M OR E OFF		10:30 :	Grid N or S W or E		CB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation VF in for CB TMC on Break
Vessel Activity		10:42 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/Viking explorer inbound to harbor ties up @ 1011/2 dock
Vessel Activity		10:44 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Aldebaran inbound to harbor ties up @ 1011/2 dock
Vessel Activity		11:00 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V TUG Millennium Falcon inbound City Dock
E ON PRE/POST CON S M OR E OFF		10:55 10:57	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane back to vibing - TMC initiates SS on vibing

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV #29

Monitoring Location: RP

Date: 8-01-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 5

Time	Visibility	Glaue	Weather Condition	Wave Height	BSS	Wind	Swell
11:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
12:35	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
13:55	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:57 17:22	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibrating sheet piles
Vessel Activity		11:26	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V coral lee inbound to Delta Western dock no marine mammal activity
E ON PRE/POST CON S M OR E OFF		11:42 12:14	Grid N or S W or E		VF	BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge crane is running the piling on sheet pile + slinging over H ₂ O
E ON PRE/POST CON S M OR E OFF	#29	12:00	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	HPBK	Min: Max: Best:	Beh code(s): PO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	HPBK spotted @ grid #13 PO south toward APL dock
E ON PRE/POST CON S M OR E OFF		12:16 14:05	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane is stabbing sheet piling
Vessel Activity		12:31	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		m/v Delta Western Barge to DW
E ON PRE/POST CON S M OR E OFF	#30	12:35 12:53	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	HPBK #30	Min: Max: Best:	Beh code(s): PO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	HPBK inbound into harbor @ 12:35 - 10' in water of Harbor left water @ 12:53
Vessel Activity		13:46	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V star fish inbound to DW dock Normal activity obs
Vessel Activity		14:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Samson tug + Barge st. E/W inbound no marine mammal activity obs

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08-01-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/ (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:05 15:17	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stopped stabbing sheet piling return to vibing sheet piling
E ON PRE/POST CON S M OR E OFF		14:33	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vic Fisher out CR - in
E ON PRE/POST CON S M OR E OFF		15:21 16:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane returns to stabbing north side of cell
E ON PRE/POST CON S M OR E OFF		16:14 17:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibe sheet piles again.
Vessel activity		16:36 16:52	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "storm Petrel" outbound harbor from DW Fuel dock.
E ON PRE/POST CON S M OR E OFF		17:30 19:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Dredging, sling- ing I beams etc.
Vessel activity		18:02 18:12	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V (could not get name) inbound headed to Trident dock.
Vessel activity		18:14 ↓	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Royal Viking" inbound - headed to Alaska / Unisea area.
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08/01/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 5 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Const. at Rocky Point All Clear
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effect OFF
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 06/02/17

Time Effort Initiated: 06:30

Time Effort Completed: 1930

Page 1 of 3

dark

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
08:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		effort in for level A & parts of B zone.
E ON PRE/POST CON S M OR E OFF		06:30 07:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		very dark. Contacted TAJUE all clear @ 07:10
E ON PRE/POST CON S M OR E OFF		07:03 ↓	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		soft start of shore crane
E ON PRE/POST CON S M OR E OFF		07:20 ↓	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		soft start on barge crane
E ON PRE/POST CON S M OR E OFF		07:28 12:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Crane/shore transferring gear around
E ON PRE/POST CON S M OR E OFF		07:31 09:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Barge crane transferring gear around.
E ON PRE/POST CON S M OR E OFF		09:30 10:49	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Barge crane begins stabbng sheet piling - north end.
E ON PRE/POST CON S M OR E OFF		10:20	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		10:51 10:53	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		SSU-on Barge Crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-02-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:53 11:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time vibbing sheet piles w/ Barge crane
E ON PRE/POST CON S M OR E OFF		11:44 11:58	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time stabbing w/ Barge crane
E ON PRE/POST CON S M OR E OFF		12:02 12:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Vibbing sheet piles in place! with the BARGE CRANE,
E ON PRE/POST CON S M OR E OFF		12:41 13:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. on shift @ UMC e3-RP.
E ON PRE/POST CON S M OR E OFF		14:12 15:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time, Starts Owe, with the Barge crane, slinging template sections.
E ON PRE/POST CON S M OR E OFF		14:25 14:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time puts the Vibbe on the Shore crane & vibbs up sheet pile.
E ON PRE/POST CON S M OR E OFF		15:35 16:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time puts the Vibbe on the Barge crane & starts vibbing a I-Beam
E ON PRE/POST CON S M OR E OFF		15:40 16:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time, Starts stabbing sheet piles with the shore crane,

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Ume

Date: 8/2/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
19:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:10 16:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Puts The Vibe On The Shore Crane Starts Vibbing Sheet Piles
E ON PRE/POST CON S M OR E OFF		16:35 17:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts Stabbing Sheet Piles in place with Shore Crane
E ON PRE/POST CON S M OR E OFF		17:00 :	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:10 17:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing in Sheet piles
E ON PRE/POST CON S M OR E OFF		17:16 18:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts Vibbing Sheet piles
E ON PRE/POST CON S M OR E OFF		17:46 18:47	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing Sheet piles
E ON PRE/POST CON S M OR E OFF		18:34 18:52	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane stabbing Sheet piles
E ON PRE/POST CON S M OR E OFF		19:00 1930	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time done for day Start Post-Con observing - All clear
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off - nothing to report

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/2/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Observer Effort on, Arrive @ Rocky Pt. Effort on.
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Pre const. observation B-Zone 3300 m. All clear to CR.
E ON PRE/POST CON S M OR E OFF		07:00 07:03	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Time Does soft start on shore CRANE, (per CR)
E ON PRE/POST CON S M OR E OFF		07:20 07:22	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Time Does soft start on BARGE CRANE (per CR)
E ON PRE/POST CON S M OR E OFF		07:28 12:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does some slinging of material to shore with shore CRANE
E ON PRE/POST CON S M OR E OFF		07:31 09:28	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Barge CRANE Starts doing, OWC, Slinging,
Vessel Activity		07:55 08:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Bering Rose Enters Harbor & ties up @ DW Dock. No mammal interaction.
M/V JAMSTEK Vessel Activity		08:30 08:37	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V JAMSTEK Enters Harbor & ties up @ City-LC Dock. No mammal interaction.
E ON PRE/POST CON S M OR E OFF		09:30 10:49	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts Stabbing Sheet Piles in Place with BARGE crane.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/2/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		09:45 10:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		eg. cutter, midgett enters harbor, ties up @ C9 Dock No mammal interaction.
vessel Activity		10:05 10:12	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Arcturus enters harbor, ties up @ Trident Dock, No mammal interaction.
E ON PRE/POST CON S M OR E OFF		10:30 :	Grid N or S W or E		T.B. CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. off, CR on R.P.
Vessel activity		10:39 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V (cant see name) in bound mouth of harbor towards spit dock
E ON PRE/POST CON S M OR E OFF		10:51 10:53	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane soft start for vibing.
E ON PRE/POST CON S M OR E OFF		10:53 11:42	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing sheet piles "C" call.
E ON PRE/POST CON S M OR E OFF		11:44 11:58	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins stabbing again / sheet piles
E ON PRE/POST CON S M OR E OFF		12:02 12:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing sheets again.
E ON PRE/POST CON S M OR E OFF	31	12:34 :	L13 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	HPBK	Min: Max: Best:	Beh code(s): DI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Humpback whale dove under, saw tail by dump. Headed towards Front Beach.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08/02/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
15:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:41 13:25	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibing sheet piles on "C" cell.
E ON PRE/POST CON S M OR E OFF		1:13 :	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		14:12 15:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane doing OWC - Building Template
E ON PRE/POST CON S M OR E OFF		14:25 14:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibbing Sheet piles w/ Shore Crane
Vessel Activity		14:25 14:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Small Tug Saratoga inbound + outbound harbor No related Mammal Act.
E ON PRE/POST CON S M OR E OFF		15:35 16:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC put vibber on Barge crane + vibs it in place
Vessel Activity		15:30 15:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Ocean Leader outbound harbor from spit dock TR-N out of town - No mammals
Vessel Activity		15:35 15:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Half moon Bay inbound harbor to Trident dock No mammals seen
E ON PRE/POST CON S M OR E OFF		15:40 16:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts stabbing sheet piles w/ Shore Crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-02-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
19:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:10 16:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		16:35 17:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC start stabbing w/ Shore Crane
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Rotation
E ON PRE/POST CON S M OR E OFF		17:10 17:42	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		17:16 18:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibrating sheet piles.
E ON PRE/POST CON S M OR E OFF		17:46 18:47	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating sheet piles.
E ON PRE/POST CON S M OR E OFF		18:34 18:52	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC leaves work site for the day, start post const. obs.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort off, Done.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-03-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive onsite UMC Level A Zone @0625 10 meter
E ON PRE/POST CON S M OR E OFF		06:30 07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con. Obs. All Clear to JOSH @0703
E ON PRE/POST CON S M OR E OFF		07:15 07:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft Start of Shore Crane - idling
E ON PRE/POST CON S M OR E OFF		07:18 07:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft Start of Barge Crane - idling
E ON PRE/POST CON S M OR E OFF		07:20 07:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane begins slinging over water
E ON PRE/POST CON S M OR E OFF		07:20 07:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts working over
E ON PRE/POST CON S M OR E OFF		07:27 08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane stabbing in sheet piles
E ON PRE/POST CON S M OR E OFF		07:50 08:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts stabbing piles too
E ON PRE/POST CON S M OR E OFF		08:34 08:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts SS on Vibber

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-03-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:40	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:36 09:43	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		08:38 09:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts SS/starts vibbing SS not needed vibbing going
E ON PRE/POST CON S M OR E OFF		09:45 11:08	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		on Barge Crane already Barge Crane Stalldrinks Sheet piles
E ON PRE/POST CON S M OR E OFF		10:17 11:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane st in sheet piles after 15 min coffee break
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation @ UMC position ST in process / All clear
E ON PRE/POST CON S M OR E OFF		11:09 11:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start vibrate barge crane
E ON PRE/POST CON S M OR E OFF		11:10 12:33	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibbing "C" cell #1
E ON PRE/POST CON S M OR E OFF		11:20 13:00	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibbing - ends 13:00
E ON PRE/POST CON S M OR E OFF		12:34 13:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins ST sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-3-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S(E)W	N S E W
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S(E)W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:53 14:25	Grid N or S W or E		VF VR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing of sheet piles
E ON PRE/POST CON S M OR E OFF		14:17 14:18	Grid N or S W or E		CR VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins SSV
E ON PRE/POST CON S M OR E OFF		14:20 15:00	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibing
E ON PRE/POST CON S M OR E OFF		14:30 14:35	Grid N or S W or E		VF CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VF+CR → TB observer rotation
E ON PRE/POST CON S M OR E OFF		14:25 16:07	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE begins vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		15:05 15:45	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts Stabbing sheet piles with shore crane
E ON PRE/POST CON S M OR E OFF		15:47 16:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Starts Vibbing Sheet Piles Down. Shore crane
E ON PRE/POST CON S M OR E OFF		16:02 16:45	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Starts Stabbing Sheet Piles in place. Shore crane.
E ON PRE/POST CON S M OR E OFF		16:10 16:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Slings vibbe gen. set to shore. BARGE CRANE

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/3/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0-1	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:52 18:53	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts Vibbing Sheet Piles with Shore CRANE
E ON PRE/POST CON S M OR E OFF		17:30 17:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE is Doing OWC, Slinging
E ON PRE/POST CON S M OR E OFF		17:55 19:04	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Starts Vibbing Sheet Piles,
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:04 19:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con. All clear in A zone
E ON PRE/POST CON S M OR E OFF		19:34	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off for day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: Rocky pt.

Date: 8/3/17

Time Effort Initiated: 0630

Time Effort Completed:

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Effort on, observer on site.
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Pre const. obs. 3300 m zone B. All clear No mammals observed notified C.B. @ UAC.
E ON PRE/POST CON S M OR E OFF		07:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Soft start shore crane.
E ON PRE/POST CON S M OR E OFF		07:18	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Soft start BARGE CRANE.
E ON PRE/POST CON S M OR E OFF		07:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		BARGE CRANE Starts Slinging to Shore.
E ON PRE/POST CON S M OR E OFF		07:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Shore CRANE Starts over water const.
E ON PRE/POST CON S M OR E OFF		07:27	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Barge crane Starts stabbing Sheet Piles.
Vessel Activity		07:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		F/A American triumph ties up @ Klossbacker Dock.
Vessel Activity		08:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		M/V Oceana enters ties up @

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/3/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 2

→ weather at Sighting # 32

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	0%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:50 08:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		08:34 08:36	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Does a soft start on vibbc.
E ON PRE/POST CON S M OR E OFF		08:36 09:43	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		08:38 09:45	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles.
Vessel Activity		08:50 08:60	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V westward 1 comes in & ties up @ DWI Dock.
E ON PRE/POST CON S M OR E OFF		09:45 11:08	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		10:17 11:18	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts stabbing sheet piles in
E ON PRE/POST CON S M OR E OFF		10:41	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	32	10:56 11:06	E-15 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted Harbor Seal Spying off RP - No exposure due to Stabbing, pillings - not vibbing or impacting. watched for 10 minutes + gone to behavior changes - checked Back at 1115 and same

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-3-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	2	NSEW	NSEW
13:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Reading/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		10:58	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U AK leader inbound harbor TR-N to NPF dock - no mammal act.
E ON PRE/POST CON S M OR E OFF		11:09	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SS Vibe barge crane
E ON PRE/POST CON S M OR E OFF		11:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibbing
E ON PRE/POST CON S M OR E OFF		12:33	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Vibbing no SS necessary.
E ON PRE/POST CON S M OR E OFF		11:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB on break TB @ RP
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane starts stabbing Sheet Piles
E ON PRE/POST CON S M OR E OFF		12:34	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Columbia Enters Bay flies up @ Trident Dock.
E ON PRE/POST CON S M OR E OFF	33	13:30	Grid N or S W or E	B	TB	BL BO BR DF SA OTHER	stSL	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed (4) stSL Eating Salmon @ End of Rocky pt. Construction HAD STOPPED For lunch.
E ON PRE/POST CON S M OR E OFF		13:53	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Starts stabbing Sheet Piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky pt.

Date: 8/3/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation.
E ON PRE/POST CON S M OR E OFF		14:17 14:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore cranes begins soft start
E ON PRE/POST CON S M OR E OFF		14:20 15:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing
E ON PRE/POST CON S M OR E OFF		14:25 16:07	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane begins vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		15:05 15:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts stabbing sheet piles w/ Shore Crane
E ON PRE/POST CON S M OR E OFF		15:47 16:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts vibbing
E ON PRE/POST CON S M OR E OFF		16:02 16:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane begins stabbing
E ON PRE/POST CON S M OR E OFF		16:10 16:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slings equip shore side
E ON PRE/POST CON S M OR E OFF		16:52 18:53	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane is vibbing

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: RP

Date: 8-3-16

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 5 of 5

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if ro- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		17:05 17:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Small fishing vessel (could not get name) TR-N into harbor to Trident dock no related mammal activity
E ON PRE/POST CON S M OR E OFF		17:30 17:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane started slinging materials + Equip
E ON PRE/POST CON S M OR E OFF		17:55 19:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing Sheet piles
E ON PRE/POST CON S M OR E OFF		18:30 X	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time stops work for the day and leaves, start post const. obs.
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End post const. obs. no mammals observed. All clear, observer effort off.
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/4/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
09:00	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zoon/ Radius/ Impact File #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Arrived, Effort on
E ON PRE/POST CON S M OR E OFF		06:30 07:12	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction obs. A&B zones all clear,
E ON PRE/POST CON S M OR E OFF		06:55 06:56	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc. does a soft start on shore crane.
E ON PRE/POST CON S M OR E OFF		07:15 07:16	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts BARGE CRANE.
E ON PRE/POST CON S M OR E OFF		07:40 07:42	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Does a SSV ON The shore CRANE with The Vibro,
E ON PRE/POST CON S M OR E OFF		07:42 09:08	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Begins vibbing out 18" temp let pile, & sheet pile shore crane.
E ON PRE/POST CON S M OR E OFF		08:14 09:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts Stabbing Sheet Piles, BARGE CRANE.
E ON PRE/POST CON S M OR E OFF		09:05 10:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts vibbing sheet piles, BARGE CRANE.
E ON PRE/POST CON S M OR E OFF		09:08 09:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts Stabbing Sheet piles, SHORE CRANE

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/4/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:45 10:19	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibrating sheet piles, Shore crane
E ON PRE/POST CON S M OR E OFF		10:50	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC (NOWC) NONE	SS/BC DE SD None		Observer Rotation T.B. - CB.
E ON PRE/POST CON S M OR E OFF		11:00 12:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP (ST) OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabilizing in sheet piles
E ON PRE/POST CON S M OR E OFF		11:05 11:13	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane performing owc
E ON PRE/POST CON S M OR E OFF		11:20 11:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP (ST) OWC NOWC / NONE	SS/BC DE SD None		Shore crane now stabilizing sheet piles
E ON PRE/POST CON S M OR E OFF		12:10 12:12	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane performs SS on vibrator
E ON PRE/POST CON S M OR E OFF		12:12 13:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		12:23 12:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP (ST) OWC NOWC / NONE	SS/BC DE SD None		Shore crane - sheet stabilizing again piles
E ON PRE/POST CON S M OR E OFF		12:30 12:55	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB goes on break

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-4-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IHR	1/2 Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IHR	1/2 Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IHR	1/2 Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IHR	1/2 Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IHR	1/2 Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IHR	1/2 Mod/Hvy	0	NSEW	NSEW

* Noted on RP already

Event Code	Sight # (1 or L1 if no- night)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
PRE/POST CON S M OR E OFF	34	12:42	E-15 Grid	B	T.B.	BL BO BR DF SA OTHER	stcl	Min: Max: 2 Best:	Beh code(s): SA	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	2-stdl Observed B4 RP. Surface Activity. No Vessel Activity Obs
PRE/POST CON S M OR E OFF		13:00 13:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Starts vibbing sheet piles. Shore Crane
PRE/POST CON S M OR E OFF		13:30 14:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC crew goes to lunch.
PRE/POST CON S M OR E OFF		14:10 15:38	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Starts vibbing sheet piles with shore crane.
PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
PRE/POST CON S M OR E OFF		14:33 16:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing sheet piles
PRE/POST CON S M OR E OFF		16:25 17:06	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane is moving template- OWC
PRE/POST CON S M OR E OFF		17:09 17:13	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starting to Vibe & brought back down + stopped
PRE/POST CON S M OR E OFF		17:30 18:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging Equip + man basket

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-4-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgat- ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		OB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time stops work for the day & leaves. Start post const. obs.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End post const. obs. no mammals observed, observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/4/2017

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

mmo CB traing 4 mm on RP

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on at Rocky Point
E ON PRE/POST CON S M OR E OFF		06:30 07:12	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start pre-construction, Level B 3300 m no mammals obs.
E ON PRE/POST CON S M OR E OFF		06:55 06:58	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane soft start
E ON PRE/POST CON S M OR E OFF		07:15 07:16	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts barge crane vibe
E ON PRE/POST CON S M OR E OFF		07:40 07:42	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC soft start on shore crane
E ON PRE/POST CON S M OR E OFF		07:42 09:08	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC begins vibbing extraction 18" round piling from template w/ shore crane
Vessel Activity		07:54 08:05	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Alderbaran inbound harbor; trn N towards Trident dock, no related mammal activity obs.
E ON PRE/POST CON S M OR E OFF		08:14 09:05	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		09:05 10:45	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts vibbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: Rocky Point
Date: 8/4/2017
Time Effort Initiated: 0630
Time Effort Completed: 1930
Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:08 09:45	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts stabbing sheet piles w/ shore crane
E ON PRE/POST CON S M OR E OFF		09:45 10:19	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles
Vessel Activity		10:00 10:10	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Makushin Bay trv. S towards Delta Western Fuel D. no mammal related activity obs.
Vessel Activity		10:03 10:12	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TV Vanguard inbound heading W/towards P.W. dock no mammal related activity obs.
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		MM VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:00 12:05	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane ST Sheet Piles
E ON PRE/POST CON S M OR E OFF		11:05 11:13	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane performing OWC
E ON PRE/POST CON S M OR E OFF		11:20 11:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins ST sheet piles
E ON PRE/POST CON S M OR E OFF		12:10 12:12	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane performs SS on viber

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-4-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:17	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if no sight)	Time/Date (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:12 13:25	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane is vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		12:23 12:55	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane ST sheet pileings
E ON PRE/POST CON S M OR E OFF	#34	12:42 :	E15 Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: 2 Max: Best:	Beh code(s): PL	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	2 STSL surfaced seemed to be playing After 12:45 did not see them again
E ON PRE/POST CON S M OR E OFF		13:00 13:30 13:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibrating sheet piles. TMC TMC @ Lunch 13:30 Vibes ends
Vessel Activity		13:55 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Leslie Lee in back and to the port ties up E DIP Dock Normal Activity
E ON PRE/POST CON S M OR E OFF		14:10 15:38	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts vibrating sheet piles w/shore crane
E ON PRE/POST CON S M OR E OFF		14:32 :	Grid N or S W or E		VF T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observed Rotating
E ON PRE/POST CON S M OR E OFF		14:33 16:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts vibrating with the BARGE CRANE,
E ON PRE/POST CON S M OR E OFF		16:25 17:06	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC is moving sections of template, OWC, shore crane,

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/4/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radio/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		16:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V Island Packer Enters Harbor, Ties up @ DW, Dock.
E ON PRE/POST CON S M OR E OFF		17:09 17:13	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibbing with the BARGE CRANE
E ON PRE/POST CON S M OR E OFF		17:30 18:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time is slinging equip, 5 man Baskets BARGE CRANE!
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post Can Observations -AU Clear
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off @Rocky Point
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/5/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
09:00	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
11:00	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive on Site, start Pre-const. Obs. Observer Effort on
E ON PRE/POST CON S M OR E OFF		06:30 07:41	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer observations A-B Zones Drive Around All other Fore Haze, Contacted Wash Time.
E ON PRE/POST CON S M OR E OFF		06:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does SS on Both cranes.
E ON PRE/POST CON S M OR E OFF		07:50 07:52	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does a SSV on Shore CRANE vibber
E ON PRE/POST CON S M OR E OFF		07:52 08:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts vibbing 18' template pile's shore crane
E ON PRE/POST CON S M OR E OFF		07:55 11:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts OWC, with The BARGE CRANE, Slings,
E ON PRE/POST CON S M OR E OFF		10:05 10:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts OWC, with Shore CRANE
E ON PRE/POST CON S M OR E OFF		10:47	Grid N or S W or E		T.B. CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation,
E ON PRE/POST CON S M OR E OFF		11:22 11:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane transfers gear on shore to water

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08-05-17

Time Effort Initiated: 06:30

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
6:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
8:12	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
9:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if no sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer VF arrives @ RP effort on.
E ON PRE/POST CON S M OR E OFF		06:30 07:41	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		MMO - PROVE TO FRONT BEACH + LAND fill cleared B zone 07:41
E ON PRE/POST CON S M OR E OFF		6:45	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC does SS on both cranes
E ON PRE/POST CON S M OR E OFF		07:50 07:52	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC does SSV on shore crane
E ON PRE/POST CON S M OR E OFF		07:52 08:20	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts vibrating 18" template piles on shore crane
E ON PRE/POST CON S M OR E OFF		07:55 08:21	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts over water const. w/ large crane.
Vessel activity		09:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V major in bound to harbor ties up @ DW dock. No PSE or MM activity
E ON PRE/POST CON S M OR E OFF		10:05 11:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts OWC with shore crane
Vessel activity		10:16	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Marine F/V - unknown name in bound no mm activity observed

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-5-17

Time Effort Initiated: _____

Time Effort Completed: _____

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:30	B-P-M-G-E	%	S-PC-L-R- OC -SN-HR	Lg/Mod/Hvy	7	NSEW	NSEW
11:25	B-P-M-G-E	0%	S-PC-L-R- OC -SN-HR	Lg/Mod/Hvy	8	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lg/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lg/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lg/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lg/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:17	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Sea Wolf inbound to DW Dock no mm activity observed
E ON PRE/POST CON S M OR E OFF		10:27	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		two tug vessel inbound simultaneously after escort mason vessel out no mm activity
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		VF TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observed Rotation TZ @ RP
vessel activity		11:16	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		tug "Undaunted" transverse harbor to UMC dock
vessel activity		11:21	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		tug "Undaunted" UMC → out
E ON PRE/POST CON S M OR E OFF		11:22	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane
E ON PRE/POST CON S M OR E OFF		11:25	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane
E ON PRE/POST CON S M OR E OFF		11:40	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane done w/ OWC
vessel activity		11:54	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Sea Wolf from DW Dock to out of Harbor

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UAC

Date: 06/05/2017

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:25 11:58	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibrating north end "C" cell #1
E ON PRE/POST CON S M OR E OFF		12:00 13:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slings "I" beams etc to shore.
E ON PRE/POST CON S M OR E OFF		12:28	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation TB/CR
E ON PRE/POST CON S M OR E OFF		13:50 15:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		The starts OWC with the barge crane
E ON PRE/POST CON S M OR E OFF		13:54 15:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		The starts OWC with the shore crane.
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		TB TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB - TZ @ UAC.
E ON PRE/POST CON S M OR E OFF		15:04	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane uses template pulber
E ON PRE/POST CON S M OR E OFF		16:11	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Nordic Ferry in to Magone
E ON PRE/POST CON S M OR E OFF		16:11	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Commodore From Ice Dock Out

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 02/15/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:20	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crane on large stabbing sheet pile
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Template piles vibe, none large
E ON(VA) PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Foreigner inbound to Spit dock
E ON(VA) PRE/POST CON S M OR E OFF		17:01	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Patricia Lee DW Dock to Tide Rack
E ON(VA) PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Cyprus Falcon leaves UMC Dock w/ Iliad Bay Barge
E ON(VA) PRE/POST CON S M OR E OFF		17:42	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Alaska Defender inbound to DW Dock
E ON PRE/POST CON S M OR E OFF		17:45	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Template Piles
E ON PRE/POST CON S M OR E OFF		17:58	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Foreigner from Spit Dock to OUT
E ON PRE/POST CON S M OR E OFF		18:03	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End Vibe barge Crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/5/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:08	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Take sheet pill, barge crane switch to big hammer
E ON PRE/POST CON S M OR E OFF		18:15	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Rebecca Irene inbound to
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		TZ TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer notation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew ends work please start post const. observations.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End post const. obs. no mammals observed. Observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8/5/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:55	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Vile stopped on Barge crane
E ON PRE/POST CON S M OR E OFF		12:00 13:00	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Barge crane slinging material
E ON PRE/POST CON S M OR E OFF		12:40 12:44	Grid N or S W or E		TZ CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation.
E ON PRE/POST CON S M OR E OFF	35	13:48 13:50	9-13 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): TR CE	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Stellar Sea Lion swimming direction east out of harbor area.
E ON PRE/POST CON S M OR E OFF		13:50 15:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane - OWC.
E ON PRE/POST CON S M OR E OFF		13:54 15:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins over h2o construction.
Vessel activity		14:09 14:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Patricia L." enters mouth of harbor to D.W. Fuel dock.
Vessel activity		14:30 ↓	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mammal activity USCG #726 out bound of harbor.
E ON PRE/POST CON S M OR E OFF		15:00 ≡	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08/05/2017

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	1	NSEW	NSEW
18:30	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel activity		14:37 14:46	Grid N or S W or E		C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug "Millenium Falcon" enters harbor, to city dock.
E ON PRE/POST CON S M OR E OFF		15:02 16:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane is vibing.
E ON PRE/POST CON S M OR E OFF		16:10 17:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts stabbing sheet piles with BARGE CRANE
E ON PRE/POST CON S M OR E OFF		17:05 18:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts vibbing sheet piles & template pile's BARGE CRANE
Vessel Activity		17:40 17:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/v Alaskan Defender Enters Harbor & ties up @ DWI Dock, no mammal interaction
Vessel Activity		18:18 18:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/v Rebecca Irene Enters Harbor & ties up @ KDH no mammal interaction
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		T.B. T.Z.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.Z.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Ends Work for day Start Post Construction
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		T.Z.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End Post Construction No Mammals Observed

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: LMC

Date: 8/6/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort ON Arrive on site.
E ON PRE/POST CON S M OR E OFF		06:30 07:26	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Preconstruction obs. prior visibility due to light. AF B-Zone 3300 All clear.
E ON PRE/POST CON S M OR E OFF		07:40 08:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts stabbing Sheet Piles with BARGE CRANE
E ON PRE/POST CON S M OR E OFF		08:20 08:22	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft Start vibbe
E ON PRE/POST CON S M OR E OFF		08:22 09:40	Grid N or S W or E		T.B. T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibbing Sheet Piles. BARGE CRANE
E ON PRE/POST CON S M OR E OFF		09:55 11:33	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts stabbing Sheet Piles, BARGE CRANE,
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.S.-CB
E ON PRE/POST CON S M OR E OFF		11:35 11:37	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts Vibbe & does a soft start
E ON PRE/POST CON S M OR E OFF		11:37 12:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts Vibbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-6-17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:40	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:50 14:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts staging sheet piles with BARGE CRANE
E ON PRE/POST CON S M OR E OFF		14:45	Grid N or S W or E		TB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.S. - VF
E ON PRE/POST CON S M OR E OFF		15:06 15:08	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SSV on barge crane
E ON PRE/POST CON S M OR E OFF		15:08 15:55	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begin vibing
E ON PRE/POST CON S M OR E OFF		15:54 17:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begin st sheet piles 15:54
E ON PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		TB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:30 18:25	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing
E ON PRE/POST CON S M OR E OFF	# 39	17:50 18:30	Grid N or S W or E	B	TB	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Time vibbing sheet piles in place, yes exposure, STSL foraging food went under and lost sight NO Vessel Interaction

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/6/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Inspec File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		The crew done for the day, start post construction observations. (All clear)
E ON PRE/POST CON S M OR (E OFF)		19:30 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Post construction obs. Done, no mammals observed, A-B zone All clear! Observer Effort Off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 08/06/2017

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 5

(36)

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:45	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		Arrive onsite at Rocky Point to monitor level B zone at 0630
E ON PRE/POST CON S M OR E OFF		06:30 07:26	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		Preconstruction observed no mammals obs.
E ON PRE/POST CON S M OR E OFF		07:40 08:20	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins stabbing
E ON PRE/POST CON S M OR E OFF		08:20 08:22	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins soft start on the ribs, no mammals obs.
E ON PRE/POST CON S M OR E OFF		08:22 09:40	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts vibbing sheet piles
Vessel Activity		09:17 09:24	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/v Alaska Rose inbound & heading SW towards Delta Western Fuel Dock. No mammal activity obs.
Vessel Activity		09:33 09:39	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/v Pacific Prince inbound & heading SW towards P.W. F.D
Vessel Activity		09:40 09:50	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/v Fierce Allegiance inbound & heading N to Light Cargo Dock
E ON PRE/POST CON S M OR E OFF	36	09:45	E15 Grid N or S W or E	B	MM	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 3	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None	N	Sighted STSL, group of 3 in E15, no vessel activity/interaction mammals were milling about

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/6/2017

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
11:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Repos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:55 11:33	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC begins stabbing sheet piles w/ barge crane
E ON PRE/POST CON S M OR E OFF		10:30 :	Grid N or S W or E		MM CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation no mammal activity
vessel activity		10:50 11:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Alaska Rose" departs DW Fuel dock - outbound.
vessel activity		11:15 J	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug inbound pulling barge.
E ON PRE/POST CON S M OR E OFF	37	11:20 11:33	F13 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 3	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	sighted three STSL's off RP tip. Milling about.
E ON PRE/POST CON S M OR E OFF		11:35 11:37	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane soft start on vibe
E ON PRE/POST CON S M OR E OFF		11:37 12:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibes sheet pilings
E ON PRE/POST CON S M OR E OFF	37.1	11:43 11:53	F16 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 3	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	same 3 STSL's milling - moved south from last
vessel activity		11:54 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pacific Prince outbound from DW Fuel dock.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08/06/2017

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
13:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:43	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	37.2	12:16 12:32	F16-G13 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: 2 Max: 3 Best: 3	Beh code(s): MI/TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	3 STSL's at F-16. Than swam north to G-13/2 STSL's later.
Vessel activity		12:31	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Fierce Allegiance out- bound from DWF.
E ON PRE/POST CON S M OR E OFF	37.3	12:47 12:56	F17 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 3	Beh code(s): MI/FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Same three STSL's at F17. Milling and eating salmon.
E ON PRE/POST CON S M OR E OFF	38	12:47 12:56	F12 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	2 different STSL's milling at F-12 just at mouth/water
E ON PRE/POST CON S M OR E OFF	38.1	13:12 13:32	F12 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): MI/FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	2 STSL's feeding on salmon. TA crew at lunch/no exposure.
E ON PRE/POST CON S M OR E OFF	38.2	13:39 13:43	F16 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): MI/FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Same 2 STSL's feeding on salmon. No behavioral Δ's.
E ON PRE/POST CON S M OR E OFF		13:50 14:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA crew begins stabbing w/ barge crane after lunch.
E ON PRE/POST CON S M OR E OFF	38.3	14:14 14:23	F16 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	2 same STSL's eating salmon - thrashing above H2O.
E ON PRE/POST CON S M OR E OFF		14:55	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer CR/HB rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 08/06/2017

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:48	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:06 15:08	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time # Does a SS on Vibe, BARGE crane
E ON PRE/POST CON S M OR E OFF		15:08 15:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Vibbes sheet Piles, BARGE crane
E ON PRE/POST CON S M OR E OFF		15:57 17:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts Stabing Sheet Piles, BARGE crane
E ON PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotob
E ON PRE/POST CON S M OR E OFF		17:30 18:25	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts vibbing sheet, BARGE crane,
E ON VA PRE/POST CON S M OR E OFF		18:25	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V Tub + container TUG inbound to canal Vessel Activity no ASD. mm observed
E ON VA PRE/POST CON S M OR E OFF		18:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity Nordic Ferry NO MM observed w/ vessel
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC crew leaves for The day start post construction observation
E ON VA PRE/POST CON S M OR E OFF		19:24	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V Alaska Reefer inbound to KDH Rock Dune in star No MM observed

VA = Vessel Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-6-17

Time Effort Initiated: 06:30

Time Effort Completed: 19:30

Page 5 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:29	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction mm observation complete effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/07/2017

Time Effort Initiated: 06:33

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:33	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		effort on at UMC level A & part of B.
E ON PRE/POST CON S M OR E OFF		07:02 07:25	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		pre construction activity - cant see until ↑
E ON PRE/POST CON S M OR E OFF		07:25 07:43	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		crane begins to move, transferring gear.
E ON PRE/POST CON S M OR E OFF		07:44 08:31	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		stabbing sheet piles from barge crane / "C" cell #4.
E ON PRE/POST CON S M OR E OFF		08:38 10:52	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		soft start on vibe
E ON PRE/POST CON S M OR E OFF		08:38 08:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		SSV / barge crane.
E ON PRE/POST CON S M OR E OFF		10:55	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		observer rotation.
E ON PRE/POST CON S M OR E OFF		10:53 11:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:42 11:44	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Trac starts SSV on BARGE CRANE

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/7/17

Time Effort Initiated: 0633

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:44 13:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts vibbing Sheet Piles, BARGE CRANE
E ON PRE/POST CON S M OR E OFF		13:00 X	Grid N or S W or E		T.B. CR.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CR @ UMC, T.B. ~15 Hr. Lunch
E ON PRE/POST CON S M OR E OFF		13:50 15:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TACrew begins stabbing sheet piles / barge crane.
E ON PRE/POST CON S M OR E OFF		14:30 X	Grid N or S W or E		CR T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CR @ RP, T.B @ UMC.
E ON PRE/POST CON S M OR E OFF		15:16 15:18	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time soft starts The vibbe, BARGE CRANE
E ON PRE/POST CON S M OR E OFF		15:18 18:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts Vibbing Sheet Piles, BARGE CRANE
E ON PRE/POST CON S M OR E OFF	Fog	16:00 16:30	Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		50% LOSS of visibility of Total B-Zone A-Zone All Clear.
E ON PRE/POST CON S M OR E OFF	Fog	17:00 08:15	Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		100% LOSS of visibility of Total B-Zone A-Zone All Clear.
E ON PRE/POST CON S M OR E OFF		18:16 18:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts Slinging From BARGE to Shore OWC.

weather
OPS
↓

*
Fog

*

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/07/2017

Time Effort Initiated: 0633

Time Effort Completed: 19:30

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	7	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		TB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		18:42 19:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge crane vibing round & sheet pilings.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vibing done. TA crew retires. post activity cons.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD # 41

Project Name: UAC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/7/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive on site, observer effort on!
E ON PRE/POST CON S M OR E OFF		06:30 07:27	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const: observation Low light due to on. f Fog. All clear, no mammals observed.
E ON PRE/POST CON S M OR E OFF		07:25 07:43	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time is slinging equip. OWC.
E ON PRE/POST CON S M OR E OFF		07:44 08:37	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		08:38 08:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time does a SSV on BARGE crane vibber
E ON PRE/POST CON S M OR E OFF		08:40 10:52	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibbing sheet piles. BARGE crane
E ON PRE/POST CON S M OR E OFF	40	10:00 10:20	B-14 Grid N or S W or E	15	T.B.	BL BO BR DF SA OTHER	StSL	Min: ① Max: Best:	Beh code(s): FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Observed StSL @ Dw Dock Feeding, no vessel interaction TR-N
E ON PRE/POST CON S M OR E OFF	40.1	10:30 10:50	E-15 Grid N or S W or E	13	T.B.	BL BO BR DF SA OTHER	StSL	Min: ① Max: Best:	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Followed to tip of Rocky Point, observed milling around floating Swimming, Y TR-N
E ON PRE/POST CON S M OR E OFF		10:50	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 9-7-17

Time Effort Initiated: 06:30

Time Effort Completed: 19:30

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:18	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:53 11:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins slabbing sheet piling
Vessel activity		11:08 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V VASSE inbound into harbor no assoc. MM observed
E ON PRE/POST CON S M OR E OFF	40,2	11:18 :	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): STSL SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL steps and EMT say no piling
E ON PRE/POST CON S M OR E OFF		11:42 11:44	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts soft start vib on barge crane
E ON PRE/POST CON S M OR E OFF		11:44 13:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibrating sheet piles
E ON PRE/POST CON S M OR E OFF	#41	12:00 :	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	STSL traveling to DW dock from Rocky Point Grid 14C
Vessel activity		12:01 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel activity Tug pulling container Barge
E ON PRE/POST CON S M OR E OFF		13:50 15:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins st sheet piles not TMC crew
Vessel activity		14:00 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V unknown name in bound - no Assoc MM Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-7-17

Time Effort Initiated: 06:30

Time Effort Completed: 1930

Page 3 of 4

FOO
level B

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:26	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	10	NSEW	NSEW
15:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	10	NSEW	NSEW
15:45	B-P-M-G-E	NA%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	10	NSEW	NSEW
17:00	B-P-M-G-E	NA%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	10	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
Vessel activity		15:00 15:25	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug "Chukchi Sea" towing barge out- bound from DWf dock.
E ON PRE/POST CON S M OR E OFF		15:16 15:18	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA crew begins vibing/barge crane soft start
E ON PRE/POST CON S M OR E OFF		15:16 15:18	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start vib Duplicate of ABOVE
E ON PRE/POST CON S M OR E OFF		15:18 18:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibing sheet piles from barge crane.
E ON PRE/POST CON S M OR E OFF	FOG	15:32 15:53	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		21 minutes of fog. 0% visibility from mouth of harbor
E ON PRE/POST CON S M OR E OFF		NA	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		out bound. for level B - see attached notes
E ON PRE/POST CON S M OR E OFF	FOG	15:53 16:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		~ 30 minutes of level B at 10% visibility - see notes
E ON PRE/POST CON S M OR E OFF	FOG	16:20 17:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10% visibility of entire Level B. Only Level A clear.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 08/07/2017

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 4 of 4

→ can't see H2O - B zone → can't see H2O, B zone

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	NA%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	NA	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	FOG	17:00 18:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		zero percent visibility of entire level B. only level A clear.
E ON PRE/POST CON S M OR E OFF	FOG	18:15 18:42	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		30% visibility of Level B only. (see Level A clear. notes)
E ON PRE/POST CON S M OR E OFF		18:16 18:42	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA starts slinging from barge to shore.
E ON PRE/POST CON S M OR E OFF		08:30 X	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF	FOG	18:42 19:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE vibbing piles 30% visibility of B-Zone
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew stops wk. & leaves for the day. Start post const. obs.
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post const. Observations FOG
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/08/2017

Time Effort Initiated: 06:26

Time Effort Completed: 1935

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:26	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		effort on @ UMC site at 06:26
E ON PRE/POST CON S M OR E OFF		06:55 07:25	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Can not see until 06:55. Area cleared 07:25
E ON PRE/POST CON S M OR E OFF		07:40 09:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Transferring beams, etc from barge to land.
E ON PRE/POST CON S M OR E OFF		09:11 09:13	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Barge crane begins soft start of vib hammer
E ON PRE/POST CON S M OR E OFF		09:14 10:04	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Vibing sheet piles on "C" cell. from barge crane.
E ON PRE/POST CON S M OR E OFF		10:05 12:04	Grid N or S W or E		CR TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Barge crane is being used as a plank for TACrew.
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CR TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		observer rotation.
E ON PRE/POST CON S M OR E OFF		12:05 12:17	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Start Vibe Template Piles Barge Crane
Vessel activity		12:09	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Tug Millenium Falcon UMC Dock → KDH Area

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/8/17

Time Effort Initiated: 0624

Time Effort Completed: 1935

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
vessel activity		12:17	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Guffalcon from UMC Dock → north vicinity
E ON PRE/POST CON S M OR E OFF		12:18 14:04	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging materials
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		TZ CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation.
E ON PRE/POST CON S M OR E OFF		14:06 14:08	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start on vibe, barge crane
E ON PRE/POST CON S M OR E OFF		14:09 14:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge crane vibing "I" beams & sheet piling.
E ON PRE/POST CON S M OR E OFF		14:20	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		15:15 15:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time slinging sheet pile, OWC shore crane
E ON PRE/POST CON S M OR E OFF		15:45 16:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts stabbing sheet piles with BARGE crane
E ON PRE/POST CON S M OR E OFF		16:05 16:32	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibbing Template I Beams - Probing - shore crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/8/17

Time Effort Initiated: 0626

Time Effort Completed: 19:35

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:45 17:45	Grid N or S W or E		TR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibbing sheet piles with BARGE crane
E ON PRE/POST CON S M OR E OFF		18:35	Grid N or S W or E		TR CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:05 19:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA crew done for day, post construction act.
E ON PRE/POST CON S M OR E OFF		19:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 08/08/2017

Time Effort Initiated: 0630

Time Effort Completed: 1935

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	15 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:11	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		-Arrive on site at Rocky Point
E ON PRE/POST CON S M OR E OFF		06:30 07:25	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		-Visibility unclear, B zone cleared at 0725, no mammals observed
E ON PRE/POST CON S M OR E OFF		07:40 09:10	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Transferring beams etc to land from barge
Vessel Activity		08:25 08:29	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pacific Prince inbound headed SW to Delta Western Fuel Dock, no mammal activ
Vessel Activity		08:38 08:44	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Patricia L headed SW to Delta Western Dock no mammal activity obs.
Vessel Activity		09:07 09:13	Grid N W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pacific Prince headed outbound from Delta Western Dock did not affect behavior of STSL
E ON PRE/POST CON S M OR E OFF	42	08:58	F15 Grid N or S W or E	B	MM	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed STSL in F15 heading SE towards Unalaska
E ON PRE/POST CON S M OR E OFF		09:11 09:13	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC has barge crane begin soft start of vibrate hammer
E ON PRE/POST CON S M OR E OFF		09:14 10:04	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC begins vibrating sheet piles from barge crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 08/08/2017

Time Effort Initiated: 0630

Time Effort Completed: 1935

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if no sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:05 12:04	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses barge crane as plank for TA crew
E ON PRE/POST CON S M OR E OFF		10:30 1:1	Grid N or S W or E		MM VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation at Rocky Point
E ON PRE/POST CON S M OR E OFF		12:05 12:17	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Begins Vibration with barge crane End @ 12:17
E ON PRE/POST CON S M OR E OFF		12:18 14:04	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging materials.
E ON PRE/POST CON S M OR E OFF		14:06 14:08	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Does SSV for mitigation
E ON PRE/POST CON S M OR E OFF		14:09 14:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Barge crane Begins Vibration I Beam + Sheet Piles
E ON PRE/POST CON S M OR E OFF		14:30 :	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
Vessel activity		15:00 15:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Gold Rush" Inbound mouth of harbor to DWF dock.
Vessel activity		15:12 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Defender" Inbound to level B headed south.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08/08/2017

Time Effort Initiated: _____

Time Effort Completed: _____

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
17:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
17:40	B-P-M-G-E	NA%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	NA	NSEW	NSEW
18:20	B-P-M-G-E	NA%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	NA	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:15 15:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane - TA crew starts slinging steel
E ON PRE/POST CON S M OR E OFF		15:45 16:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA starts stabbing sheet piles w/ barge crane
E ON PRE/POST CON S M OR E OFF		16:05 16:32	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane starts vibing "I" beams.
E ON PRE/POST CON S M OR E OFF		16:45 17:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing sheet pilings.
vessel activity		17:20 17:38	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Great Pacific inbound to DWF dock.
E ON PRE/POST CON S M OR E OFF	FOG	17:40 17:45	Grid N or S W or E	B	CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Level B complete 25% visibility → within 10 minutes
E ON PRE/POST CON S M OR E OFF	FOG	17:45 19:35	Grid N or S W or E	B	CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Level B still at 25% visibility but no mitigation
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

(see notes)

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08/08/2017

Time Effort Initiated: 0630

Time Effort Completed: 1935

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:05 19:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Time leaves wk, site for the DAY, start post con. obs.
E ON PRE/POST CON S M OR <u>E OFF</u>		19:35 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		End post construction observation, no mammals observed, observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/09/2017

Time Effort Initiated: 06:31

Time Effort Completed: 2130

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:31	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort on @ UMC
E ON PRE/POST CON S M OR E OFF		06:31 07:23	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		preconstruction activity contacted TA Josh
E ON PRE/POST CON S M OR E OFF		07:25 07:54	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins slinging gear to H20 site.
E ON PRE/POST CON S M OR E OFF		07:55 08:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheet piles to "C" cell #5.
E ON PRE/POST CON S M OR E OFF		09:00 09:02	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start of vibe hammer on sheet piles.
E ON PRE/POST CON S M OR E OFF		09:02 10:24	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Began vibing sheet piles on "C" cell #5.
E ON PRE/POST CON S M OR E OFF		10:36 11:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheet piles to "C" cell
E ON PRE/POST CON S M OR E OFF		11:42	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TB - CR.
E ON PRE/POST CON S M OR E OFF	#43	11:20 11:40	D-7 Grid N or S W or E	B	TB	BL BO BR DF SA OTHER	StL	Min: ① Max: Best:	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	① StL observed traveling E towards DW Dock. No vessel interaction. Tmc is stabbing pile.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/9/17

Time Effort Initiated: 0630

Time Effort Completed: 2130

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgait ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:40 12:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts Stabbing Sheet Piles
E ON PRE/POST CON S M OR E OFF		12:16 12:18	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does a Soft start on Vibbe Barge crane
E ON PRE/POST CON S M OR E OFF		12:18 12:56	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts vibbing sheet pile. Barge crane.
E ON PRE/POST CON S M OR E OFF		12:41 X	Grid N or S W or E		T.B. C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. ECR
E ON PRE/POST CON S M OR E OFF		13:42 15:08	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheet piling on "C" cell #6.
E ON PRE/POST CON S M OR E OFF		14:45 :	Grid N or S W or E		CR VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		15:12 15:14	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Begins SSV with Barge crane
E ON PRE/POST CON S M OR E OFF		15:14 16:10	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Begins vibbing sheet piles with Barge crane
E ON PRE/POST CON S M OR E OFF		16:10 16:34	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Begins OWC w/ Barge crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-9-17

Time Effort Initiated: 06:30

Time Effort Completed: 2130

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:50	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
21:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:35 16:45	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Land crane begins SWC.
E ON PRE/POST CON S M OR E OFF		16:38 20:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane picks up the vib
E ON PRE/POST CON S M OR E OFF		16:46 17:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Land crane begins st sheet piles
E ON PRE/POST CON S M OR E OFF		17:16 17:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Land crane begins vibbing
E ON PRE/POST CON S M OR E OFF		17:44 18:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane begins st sheet piles
E ON PRE/POST CON S M OR E OFF		18:30 18:40	Grid N or S W or E		VF TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		18:43 18:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		The starts vibbing with the shore crane
E ON PRE/POST CON S M OR E OFF		21:00 21:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		The stop work for the day, start post const. observations.
E ON PRE/POST CON S M OR E OFF		21:30 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post const. obs. Done no mammals observed observer effort off

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/9/17

Time Effort Initiated: 0630

Time Effort Completed: 2130

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:25	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
09:25	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
10:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on.
E ON PRE/POST CON S M OR E OFF		06:30 07:23	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre. const. observation B-zone 3300m All clear - no mammals obs.
E ON PRE/POST CON S M OR E OFF		07:25 07:54	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts slinging, from BARGE to shore.
E ON PRE/POST CON S M OR E OFF		07:55 08:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts stabbing sheet piles w/ BARGE crane.
E ON PRE/POST CON S M OR E OFF		09:00 09:02	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does a SSV on the BARGE crane.
E ON PRE/POST CON S M OR E OFF		09:02 10:24	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibrating sheet piles, BARGE crane.
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation, TB-VF.
E ON PRE/POST CON S M OR E OFF		10:36 11:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts ST sheet piles w/ Barge crane
E ON PRE/POST CON S M OR E OFF		11:40 12:10	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts ST sheet piles w/ Barge crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-9-17

Time Effort Initiated: 06:30

Time Effort Completed: 2130

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:10	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	7	NSEW	NSEW
13:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	8	NSEW	NSEW
15:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	8	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:16 12:18	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Does SS on the Vib
E ON PRE/POST CON S M OR E OFF		12:18 12:56	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Begins Vibrating Sheet Piles w/ Barge Crane
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Republic inbound No Assoc. MAMMO Activity.
E ON PRE/POST CON S M OR E OFF		13:42 15:08	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins st sheet piles
E ON PRE/POST CON S M OR E OFF		14:30 X	Grid N or S W or E		VF TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OR VF
E ON PRE/POST CON S M OR E OFF		15:12 15:14	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time soft start on Vibb-e BARGE CRANE,
E ON PRE/POST CON S M OR E OFF		15:14 16:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Vibbs Sheet Piles, BARGE CRANE,
Vessel Activity		15:30 15:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V Makushira BAH Ties UP @ Resolve marine no mammal interaction
E ON PRE/POST CON S M OR E OFF		16:10 16:34	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts OWC, BARGE CRANE,

VA = vessel activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8/9/17

Time Effort Initiated: 0630

Time Effort Completed: 2130

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:35 16:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		LAND CRANE OWC, Tmc.
E ON PRE/POST CON S M OR E OFF		16:38 20:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Starts vibrating sheet piles, BARGE crane
E ON PRE/POST CON S M OR E OFF		16:46 17:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		17:16 17:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc. Starts vibrating with shore crane.
E ON PRE/POST CON S M OR E OFF		17:44 18:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Starts stabbing sheet pile.
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB - VF,
E ON PRE/POST CON S M OR E OFF		18:43 18:55	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts vibrating w/shore crane
E ON (VA) PRE/POST CON S M OR E OFF		18:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		MV/Coastal Progress inbound, No MM observed
E ON (VA) PRE/POST CON S M OR E OFF		19:51	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Defender inbound to dock No Assoc. MM Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-9-17

Time Effort Initiated: 06:30

Time Effort Completed: 21:30

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
20:20	B-P-M-G-E	7%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		20:20	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel activity F/V Alaska Pearl inbound to harbor NO ASSOC. MM Activity observed
E ON PRE/POST CON S M OR E OFF		21:00 21:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Finish for the day - Start Postconst observations
E ON PRE/POST CON S M OR E OFF		21:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post const. observation complete NO MM observed.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/10/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:40	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction observations.
E ON PRE/POST CON S M OR E OFF		07:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Starts SSV on shore CRANE
E ON PRE/POST CON S M OR E OFF		07:41	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Starts vibbing with shore CRANE
E ON PRE/POST CON S M OR E OFF		07:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Starts vibbing with BARGE CRANE
E ON PRE/POST CON S M OR E OFF		08:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Starts vibbing with BARGE CRANE
E ON PRE/POST CON S M OR E OFF		09:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Starts stabbing with shore CRANE.
E ON PRE/POST CON S M OR E OFF		10:11	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation C.R., T.B.
E ON PRE/POST CON S M OR E OFF		10:27	Grid N or S W or E		T.B. C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation C.R., T.B.
E ON PRE/POST CON S M OR E OFF		10:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing.
E ON PRE/POST CON S M OR E OFF		11:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging gear.
E ON PRE/POST CON S M OR E OFF		11:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging gear.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/10/17

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:40 12:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		12:18 13:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane-DP extracting, etc w vibe / no vib. activity.
E ON PRE/POST CON S M OR E OFF		12:28 12:31	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane soft start on vibe / mitigation.
E ON PRE/POST CON S M OR E OFF		12:32 13:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibing sheet piles - "C" cell #6.
E ON PRE/POST CON S M OR E OFF		13:56 14:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts slinging materials, etc.
E ON PRE/POST CON S M OR E OFF		14:03 14:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		soft start vibe on shore crane. sheet piles
E ON PRE/POST CON S M OR E OFF		14:05 16:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibes sheet pilings w/ vibe hammer
E ON PRE/POST CON S M OR E OFF		14:40	Grid N or S W or E		CR VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		14:55 15:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vib pulling beams

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-10-17

Time Effort Initiated: 06:30

Time Effort Completed: 1930

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:35	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if so- night)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:33 18:35	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins OWC
E ON PRE/POST CON S M OR E OFF	#45	16:25 16:45	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	#45 STSL sited S. end of East Guard Dock
E ON PRE/POST CON S M OR E OFF		16:58 18:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins OWC
E ON PRE/POST CON S M OR E OFF		18:38	Grid N or S W or E		VF TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation VF → TB
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew leaves for the day; start post construction observation.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction observation; 10 m A-zone All clear no mammals observed in zones.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/10/2017

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive on site at 2 P. area visibility poor due to lack of light. Unable to clear the level zone
E ON PRE/POST CON S M OR E OFF		06:30 07:40	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Cleared area at 0740, levels A & B zones... no mammals of interest observed
E ON PRE/POST CON S M OR E OFF		07:40 07:41	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts SSV on vibber.
E ON PRE/POST CON S M OR E OFF		07:41 09:45	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane begins vibbing. No marine mammals observed.
Vessel Activity		08:13 08:17	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Cape Horn headed inbound travelling NW towards KDH dock, no marine mammals obs.
Vessel Activity		08:17 08:23	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge being pushed SW towards Delta Western Dock, no marine mammals observed
E ON PRE/POST CON S M OR E OFF		08:10 09:15	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts vibbing with barge crane
Vessel Activity		08:20 08:31	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Sea Dawn inbound headed W towards City Dock
E ON PRE/POST CON S M OR E OFF		10:11 10:40	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts ST w/shore crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/10/2017

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11 : 00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10 : 40	Grid N or S W or E		MM T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation at Rocky Point
Vessel Activity		10 : 40 10 : 45	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Westward / outbound of harbor headed E no mammal activity observed
E ON PRE/POST CON S M OR E OFF		10 : 40 11 : 15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		10 : 40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		(Duplicate)
E ON PRE/POST CON S M OR E OFF		11 : 15 11 : 45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts OWC. (slings)
E ON PRE/POST CON S M OR E OFF		11 : 40 12 : 20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts stabbing sheet piles,
E ON PRE/POST CON S M OR E OFF		12 : 18 13 : 15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts OWC. DP
Vessel Activity		12 : 25 12 : 37	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		HAS SILVER ARROW, Ties up @ Resolve,
Vessel Activity		12 : 28	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/A American Eagle Ties up @ DW Dock,

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky pt

Date: 8/10/2017

Time Effort Initiated: 0630

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
14:06	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		TB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB VF.
E ON PRE/POST CON S M OR E OFF		12:28 12:31	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane ssv starts mitigation ends @ 12:31
E ON PRE/POST CON S M OR E OFF		12:32 13:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		13:46	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity F/V Golden Dawn inbound No Assoc. MM Activity.
E ON PRE/POST CON S M OR E OFF		13:56 14:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging sheet piles
E ON PRE/POST CON S M OR E OFF		14:03 14:05	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts SSV w/ sheet piles
E ON PRE/POST CON S M OR E OFF		14:05 16:55	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibrating with shore crane sheet piles
E ON PRE/POST CON S M OR E OFF	#44	14:06	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	STSL spy hopping 50m North of Haul out rock Grid F15
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		VF TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB & VF.

VA = vessel activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky pt

Date: 8/10/17

Time Effort Initiated: 0630

Time Effort Completed: 19:30

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgait ion Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:55 15:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		15:33 18:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts owd
E ON PRE/POST CON S M OR E OFF		16:58 18:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts owd.
E ON PRE/POST CON S M OR E OFF		17:00 X	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post coast observation No marine mammal observed
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Ume

Date: 8/11/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on.
E ON PRE/POST CON S M OR E OFF		07:00 07:34	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. observation All clear,
E ON PRE/POST CON S M OR E OFF		07:55 08:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts stabbing sheet pile, BARGE CRANE,
E ON PRE/POST CON S M OR E OFF		08:51 08:52	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time does a SSV on BARGE CRANE
E ON PRE/POST CON S M OR E OFF		08:53 09:52	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibrating on the BARGE CRANE
E ON PRE/POST CON S M OR E OFF	# 46	09:55 10:50	I-15 Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER	Hpbk	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed ① Hump Back whale, floating - sleeping & milling
E ON PRE/POST CON S M OR E OFF	# 47	10:00 10:55	F-14 Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER	StSL	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed ③ StSL @ End of Rocky pts traveling To End of SpH,
E ON PRE/POST CON S M OR E OFF		11:00 12:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:05	Grid N or S W or E		T.B. CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 03/11/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:40	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:02	B-P-M-G-E	15%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:06 12:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging materials, etc
E ON PRE/POST CON S M OR E OFF		12:22 12:24	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibing - soft start.
E ON PRE/POST CON S M OR E OFF		12:24 13:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane extracting J-beams & driving misc.
E ON PRE/POST CON S M OR E OFF		12:38 13:54	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing sheet piles
E ON PRE/POST CON S M OR E OFF		14:38 :	Grid N or S W or E		CR VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		14:57 15:55	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins gt sheet piles
E ON PRE/POST CON S M OR E OFF		15:58 16:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs a SSV with barge crane
E ON PRE/POST CON S M OR E OFF		16:00 16:47	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC begins vibing sheet piles
E ON PRE/POST CON S M OR E OFF		16:51 17:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts OWC

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-11-17

Time Effort Initiated: 07:00

Time Effort Completed: 1930

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	30%	S-PC-L-R-F-OC-SN-HR	(Lt)Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	(Lt)Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if no sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change / Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:02	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starting vibrating out I beams
E ON PRE/POST CON S M OR E OFF		17:43	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Begins - OWC
E ON PRE/POST CON S M OR E OFF		17:46 18:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:31	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time stops work for The DAY & leaves. Start post const. obs.
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post, const. obs. done. no mammals observed in zones. observer effort off.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/11/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
06:45	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
07:30	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
(E ON) PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort ON!
(E ON) PRE/POST CON S M OR E OFF		07:08 07:34	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Re Construction Obs
(E ON) PRE/POST CON S M OR E OFF		07:44	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tiglex inbound to USCG Dock
(E ON) PRE/POST CON S M OR E OFF		07:55 08:45	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		stabbing Piles Barge Crane
(E ON) PRE/POST CON S M OR E OFF		08:12	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Small Skiff from East Channel outbound
(E ON) PRE/POST CON S M OR E OFF		08:13	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Ocean Hope 3 DW Dock → Outbound
(E ON) PRE/POST CON S M OR E OFF		08:23	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Lucile East Channel outbound
(E ON) PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Fishing Trawl Vessel Inbound to Trident Dock
(E ON) PRE/POST CON S M OR E OFF		08:51 08:52	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by performing SS ON Vibbers

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Portley Point

Date: 8/11/17

Time Effort Initiated: 0900

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
8:55	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		8:53 09:52	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Starts VIBING on barge crane
E ON PRE/POST CON S M OR E OFF	Vessel	10:34	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Alsea East Channel out
E ON PRE/POST CON S M OR E OFF	Vessel	10:34	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tiglar USCG Dock Traverse out
E ON PRE/POST CON S M OR E OFF		11:10	Grid N or S W or E		TZ	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TZ-CR-TZ
E ON PRE/POST CON S M OR E OFF		12:06 12:22	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time is Slinging From shore to BARGE Shore crane.
E ON PRE/POST CON S M OR E OFF		12:22 12:24	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Does a SSV.
E ON PRE/POST CON S M OR E OFF		12:24 13:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE Starts VIBING Sheet Piles
E ON PRE/POST CON S M OR E OFF		12:35	Grid N or S W or E		TB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		12:38 13:54	Grid N or S W or E		VP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC begin VIBING Sheet Pile

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-11-17

Time Effort Initiated: 07:00

Time Effort Completed: 17:30

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		VF TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation VF TB
E ON PRE/POST CON S M OR E OFF		14:54 15:55	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing sheet piles,
Vessel Activity		15:10 15:22	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Flu Quest ties up @ DW. Dock.
Vessel Activity		15:56 16:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Flu BARANOF Ties up @
E ON PRE/POST CON S M OR E OFF		15:58 16:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Does a SSV. on Vibbe
E ON PRE/POST CON S M OR E OFF		16:00 16:47	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing sheet pile,
Vessel Activity		16:55 17:40	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Fuel BARGE one Dream tug - Bill Gobel tie up @
E ON PRE/POST CON S M OR E OFF		16:51 17:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts OWC.
E ON PRE/POST CON S M OR E OFF		17:02 17:43	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing,

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8/11/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:50	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:46 18:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE OWC.
E ON PRE/POST CON S M OR E OFF		18:30 X	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB V.F.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Begin post coast observation. No marine mammal observed
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort + off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/12/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:40	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
09:40	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. observations 10, m Azone & B-3300
E ON PRE/POST CON S M OR E OFF		07:35 08:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE is doing OWC, slinging.
E ON PRE/POST CON S M OR E OFF		09:04 09:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time soft starts the vibration BARGE CRANE.
E ON PRE/POST CON S M OR E OFF		09:05 09:23	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts vibrating with BARGE CRANE
E ON PRE/POST CON S M OR E OFF		09:36 10:44	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE is doing OWC, slinging.
E ON PRE/POST CON S M OR E OFF		10:30 X	Grid N or S W or E		T.B. CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. CR. Ased Jo
E ON PRE/POST CON S M OR E OFF		10:50 11:02	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Dead pull & replace- ment of "I" beams w/vibe/no mitigation.
E ON PRE/POST CON S M OR E OFF		11:03 11:04	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibing soft start on "I" beams, Barge crane

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/12/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
14:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radins/ Impact Pile #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:04 11:36	Grid N or S W or E		CR AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibing in and out "I" beams. Barge crane
E ON PRE/POST CON S M OR E OFF		11:38 11:52	Grid N or S W or E		CR AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane beains slinging gear
E ON PRE/POST CON S M OR E OFF		11:54 12:20	Grid N or S W or E		CR AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane is slinging gear.
E ON PRE/POST CON S M OR E OFF		11:54 12:49	Grid N or S W or E		CR AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane is stabbing sheet piling.
E ON PRE/POST CON S M OR E OFF		12:40 13:20	Grid N or S W or E		CR AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheets
E ON PRE/POST CON S M OR E OFF		12:50 13:20	Grid N or S W or E		CR AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibing sheet piling.
E ON PRE/POST CON S M OR E OFF		13:54 14:35	Grid N or S W or E		CR AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheet piling
E ON PRE/POST CON S M OR E OFF		14:05 14:49	Grid N or S W or E		CR AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane stabbing sheet piling
E ON PRE/POST CON S M OR E OFF		14:40	Grid N or S W or E		CR/AS VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC
Date: 08/12/2017
Time Effort Initiated: 07:00
Time Effort Completed: 1930
Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:40 14:42	Grid N or S W or E		CR/AS VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SS DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibing with barge crane SOFT start
E ON PRE/POST CON S M OR E OFF		14:42 15:25	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing sheet piling.
E ON PRE/POST CON S M OR E OFF		14:50 16:18	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibing
E ON PRE/POST CON S M OR E OFF		15:30 15:48	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins OWC
E ON PRE/POST CON S M OR E OFF		15:49 17:32	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins stabbing
E ON PRE/POST CON S M OR E OFF		16:21 16:49	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins ST Sheet Piles
E ON PRE/POST CON S M OR E OFF		16:50 17:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins Vibing Sheet Piles
E ON PRE/POST CON S M OR E OFF		17:16 18:12	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins ST S.P.
E ON PRE/POST CON S M OR E OFF		17:35 18:54	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins Vibing

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-12-17

Time Effort Initiated: 07:00

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:54	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:17 18:54	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins Vibros sheet pile
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time stops work & leaves for the DAY Start Post const. Obs.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End Post const. Obs. No mammals observed Observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/12/2017

Time Effort Initiated: 0700

Time Effort Completed: 1950

Page 1 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
7:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N 6 E W	N-S-E-W
09:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N 6 E W	N-S-E-W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive at Rocky Point begin to clear level B zone 3300m
E ON PRE/POST CON S M OR E OFF		07:30 07:35	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called TMC to inform levels A/B were clear no mammals of interest observed
E ON PRE/POST CON S M OR E OFF		07:35 08:50	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses barge crane for owc, slinging/welding
Vessel Activity		07:55 08:02	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Commodore headed E outbound of Harbor no mammal related activity
Vessel Activity		08:54 08:58	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Caitia Ann inbound SW towards Delta W. Dock, no related mammal activity
E ON PRE/POST CON S M OR E OFF		09:04 09:05	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts SSV on barge crane
E ON PRE/POST CON S M OR E OFF		09:05 09:23	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts nibbing w/barge crane
E ON PRE/POST CON S M OR E OFF		09:36 10:44	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses barge crane for slinging metal
E ON PRE/POST CON S M OR E OFF		10:45	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation at R.P.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/12/2017

Time Effort Initiated: 0700

Time Effort Completed: 1950

Page 2 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
12:45	B-P-M-G-E	⑦%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	⑦	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Dead Pull a Pile
E ON PRE/POST CON S M OR E OFF		11:02	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SSW on vibbe
E ON PRE/POST CON S M OR E OFF		11:03	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE
E ON PRE/POST CON S M OR E OFF		11:04	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibbing piles
E ON PRE/POST CON S M OR E OFF		11:36	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane
E ON PRE/POST CON S M OR E OFF		11:38	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE
E ON PRE/POST CON S M OR E OFF		11:52	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		slinging. owc
E ON PRE/POST CON S M OR E OFF		11:54	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE
E ON PRE/POST CON S M OR E OFF		12:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		starts owc, slinging,
E ON PRE/POST CON S M OR E OFF		12:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		starts Slabbing Sheet Piles
E ON PRE/POST CON S M OR E OFF		12:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer
E ON PRE/POST CON S M OR E OFF		13:20	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Rotation
E ON PRE/POST CON S M OR E OFF		12:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins st sheet Piles
E ON PRE/POST CON S M OR E OFF		13:20	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Begins vib w sheet Piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8-12-17

Time Effort Initiated: 07:00

Time Effort Completed: 1950

Page 3 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	N S/E W	N S E W
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	N S E W	N S E W
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:20	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel activity ocean ROVER in bound to Harbor then leaves
E ON PRE/POST CON S M OR E OFF		13:54 14:35	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins st sheet pile
E ON PRE/POST CON S M OR E OFF		14:05 14:49	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane st sheet pile
E ON PRE/POST CON S M OR E OFF	#48	14:17 15:00	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL FO Below observer vehicle location D14
E ON PRE/POST CON S M OR E OFF		14:32	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:40 14:42	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge shore crane does a SSV
E ON PRE/POST CON S M OR E OFF		14:42 15:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge shore crane starts vibbing
E ON PRE/POST CON S M OR E OFF		14:50 16:18	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane starts vibbing,
E ON PRE/POST CON S M OR E OFF		15:30 15:48	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane doing owe.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8/12/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 4 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:49 17:32	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Starts stabbing
E ON PRE/POST CON S M OR E OFF		16:21 16:49	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts stabbing sheet pile
E ON PRE/POST CON S M OR E OFF		16:50 17:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE Starts vibbing,
E ON PRE/POST CON S M OR E OFF		17:16 18:12	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE Starts stabbing,
E ON PRE/POST CON S M OR E OFF		17:35 18:54	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Starts vibbing,
Vessel Activity		17:37 17:47	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/u ARGOSY ties up @ DW Dock,
Vessel Activity		17:43 18:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/u Ocean Rover Ties up @ Kloosterboer Dock,
E ON PRE/POST CON S M OR E OFF		18:17 18:56	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE Starts vibbing
E ON PRE/POST CON S M OR E OFF		18:30 X	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. & V.F.

MARINE MAMMAL

OBSERVATION RECORD # 49

Project Name: U/MC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/12/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 5 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:57	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	# 49	18:57	E15 Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL #49 near haul Rx spy hopping E15 normal activity
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Begin post const Observation
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		MMO VF effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/13/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
10:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgat ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. Observation All Clear.
E ON PRE/POST CON S M OR E OFF		07:33 08:21	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		07:40 08:12	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts owe. (slinging)
E ON PRE/POST CON S M OR E OFF		08:14 09:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		08:23 08:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE does a SSV.
E ON PRE/POST CON S M OR E OFF		08:25 15:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		09:22 12:01	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		10:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. V.F.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/13/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:05	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Ex/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Ex/Mod/Hvy	0	NSEW	NSEW
15:05	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Ex/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Ex/Mod/Hvy	0	NSEW	NSEW
18:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Ex/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:09 14:58	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins OWC
E ON PRE/POST CON S M OR E OFF		12:30 12:35	Grid N or S W or E		VF T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation VF-TB
E ON PRE/POST CON S M OR E OFF		14:30 14:35	Grid N or S W or E		TB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B.-VF
E ON PRE/POST CON S M OR E OFF		15:01 16:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins Vibing
E ON PRE/POST CON S M OR E OFF		16:00 17:31	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane ^{two} Nowc conducts maintenance on vib hydraulics line
E ON PRE/POST CON S M OR E OFF		17:54 17:56	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins SSV
E ON PRE/POST CON S M OR E OFF		17:56 18:05	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins Vibing
E ON PRE/POST CON S M OR E OFF		18:15 18:45	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins Vibing
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/13/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:30	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	(Lt)Mod/Hvy	Q	(N)SEW	(N)SEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Time stops work & leaves for the day, start post construction obs.
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		End Post construction Observation, no mammals observed, all clear, observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Pack 10.14

Date: 08-13-17

Time Effort Initiated: 07:00

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		conducted precast MMD VF effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		conducted precast observations All clear
E ON PRE/POST CON S M OR E OFF		07:33 08:21	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Shore crane begins st sheet pile
E ON PRE/POST CON S M OR E OFF		07:40 08:12	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Barge crane begins OWC
E ON PRE/POST CON S M OR E OFF		08:14 09:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC Barge crane begins st sheet piles
E ON PRE/POST CON S M OR E OFF		8:23 08:25	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Shore crane preforms SSV
E ON PRE/POST CON S M OR E OFF		08:25 15:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC Shore crane starts vibrating sheet pile.
E ON PRE/POST CON S M OR E OFF		8:26 8:31	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Vessel activity crane ship "The world" in band NO MM Activity
E ON PRE/POST CON S M OR E OFF		8:27 08:34	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Vessel Activity FN Ocean Explorer No mammal Activity

VA = vessel activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 08-13-17

Time Effort Initiated: 07:00

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
8:40	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	2/Mod/Hvy	0	SEW	SEW
10:05	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	4/Mod/Hvy	0	SEW	SEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	4/Mod/Hvy	0	SEW	SEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		SEW	SEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		SEW	SEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		SEW	SEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:22 12:01	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		The TMC Barge crane begins to vib sheet pile
E ON PRE/POST CON S M OR E OFF	#50	10:05 10:25	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): SP	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	STSL sited @ Grid K15 SPY hopping
E ON PRE/POST CON S M OR E OFF		10:15 10:25	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		vessel activity The 3 bears no mamm activity
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		VF MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
Vessel Activity		11:16 11:24	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Ocean Explorer headed NE outbound of harbor, no mammal activity observed
Vessel Activity		11:18 11:23	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Two Bears headed SE outbound of harbor, no related mammal activity observed
Vessel Activity		11:43 11:49	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V American Beauty inbound & headed SW to Delta Western Dock no related mammal activity obs.
E ON PRE/POST CON S M OR E OFF		12:09 14:58	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses barge crane for OWC
Vessel Activity		12:12 12:18	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Wellington Star headed So then outbound of harbor, no marine mammal related activity observed

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/13/2013

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		14:12 14:17	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pacific Prince headed NE outbound, no marine related activity obs.
E ON PRE/POST CON S M OR E OFF		14:30 14:35	Grid N or S W or E		MM T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation at Rocky Point
Vessel Activity		14:28 14:34	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Ocean Hope 3 headed S then NE outbound of harbor, no marine mammal activity obs.
E ON PRE/POST CON S M OR E OFF		15:01 16:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing.
E ON PRE/POST CON S M OR E OFF		16:00 17:31	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		crew of tmc doing general const. NO OWC.
Vessel Activity		17:50 17:53	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Defender ties up @ DW dock. no mammal interaction
E ON PRE/POST CON S M OR E OFF		17:54 17:56	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE does a SSV.
E ON PRE/POST CON S M OR E OFF		17:56 18:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		18:15 18:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing sheet pile

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/13/2017

Time Effort Initiated: 0700

Time Effort Completed: 19:30

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B - V.F.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Mmo V.F. conducts post construction observations
Vessel Activity		19:11	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel activity F/V Commander No Assoc. Marine Mammal activity
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off Mmo VF done for the day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/14/2017

Time Effort Initiated: 06:55

Time Effort Completed: 1530

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD <u>None</u>		effort on
E ON PRE/POST CON S M OR E OFF		06:55 07:32	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD <u>None</u>		All clear. Contacted new TA rep, Mark
E ON PRE/POST CON S M OR E OFF		07:57 08:47	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD <u>None</u>		Dahmen. Barge crane slings gear.
E ON PRE/POST CON S M OR E OFF		08:04 09:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD <u>None</u>		Shore crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		08:49 10:22	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD <u>None</u>		Barge crane stabbing sheet piling.
E ON PRE/POST CON S M OR E OFF		09:06 09:08	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD <u>None</u>		Shore crane has soft start for vibs
E ON PRE/POST CON S M OR E OFF		09:08 09:48	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD <u>None</u>		Shore crane is vibing sheet piles on "C" cell.
E ON PRE/POST CON S M OR E OFF		10:30 10:31	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD <u>None</u>		Barge crane soft start on vibe
E ON PRE/POST CON S M OR E OFF		10:31 11:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD <u>None</u>		Barge crane vibes sheet piles on "C" cell

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UML

Date: 08/14/2017

Time Effort Initiated: 0700

Time Effort Completed: 1530

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #P	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:40	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		11:50 12:15	Grid N or S W or E		TIS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts OWC, slings -
E ON PRE/POST CON S M OR E OFF		12:40	Grid N or S W or E		TIS CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TIS .CR.
E ON PRE/POST CON S M OR E OFF		14:34	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation.
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		TIS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Did not use cranes Done for the day, no mammals observed
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/14/17

Time Effort Initiated: 0700

Time Effort Completed: 1530

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	1/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. obs. 3300m. zone. All clear. NO mammals observed.
E ON PRE/POST CON S M OR E OFF		07:54 08:47	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts OWE.
Vessel Activity		08:06 08:17	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Half Moon BM, Ties up @ D.W. NO mammal interaction
E ON PRE/POST CON S M OR E OFF		08:04 09:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		08:49 10:22	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		9:06 9:08	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Does a SSV, on Shore CRANE.
E ON PRE/POST CON S M OR E OFF		9:08 09:48	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts vibrating sheet piles. Shore CRANE
E ON PRE/POST CON S M OR E OFF		10:30 10:31	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Does a SSV.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 8/14/17

Time Effort Initiated: 0700

Time Effort Completed: 1530

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Note
E ON PRE/POST CON S M OR E OFF		10:31 11:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE, starts vibbing. Sheet piles
E ON PRE/POST CON S M OR E OFF		10:30 /	Grid N or S W or E		T.B. MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:50 12:15	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses barge crane for slinging
Vessel Activity		11:42 11:46	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Ocean Hope 3 inbound headed SW to DW Dock, no marine related activity obs.
Vessel Activity		11:45 11:51	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Evening Star outbound headed NE no marine mammals sighted
Vessel Activity		11:56 12:01	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Bering Defender headed outbound NE from DW Dock. no mammals sighted
Vessel Activity		12:02 12:07	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Ocean Hope 3 outbound headed NE, no activity observed
Vessel Activity		12:36 12:44	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Half Moon Bay outbound NE no mammals obs.
Vessel Activity		13:00 13:20	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Cruise ship Bremen headed inbound SW towards D.W. Dock

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/14/2017

Time Effort Initiated: 0700

Time Effort Completed: 05:30

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgat ion Type	Expos- ture? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E	MM CR		BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation at Rocky Point,
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E	CR		BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Done for day. NO crane use
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: U.M.C

Date: 08/15/17

Time Effort Initiated: 06:47

Time Effort Completed: 1945

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:50	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:47	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort on @ UMC site.
E ON PRE/POST CON S M OR E OFF		06:47 07:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre construction activity. All clear contacted TA Mark
E ON PRE/POST CON S M OR E OFF		07:40 08:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge & shore crane slinging gear.
E ON PRE/POST CON S M OR E OFF		10:35	Grid N or S W or E		CR VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		13:12 16:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge crane begins work
E ON PRE/POST CON S M OR E OFF		13:55 14:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane begins stopping
E ON PRE/POST CON S M OR E OFF		14:35	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		14:45 14:46	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane begins soft start on vibs
E ON PRE/POST CON S M OR E OFF		14:46 16:02	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane begins vibrating sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/15/2017

Time Effort Initiated: 0647

Time Effort Completed: 1945

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:20 16:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Slinging "I" beams and Mt. gear with large crane
E ON PRE/POST CON S M OR E OFF		16:47 16:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Welding on "I" beam over H2O w/ use of barge crane.
E ON PRE/POST CON S M OR E OFF		16:50 17:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane stabbing sheet piles on "C" cell, 2 (tail wall)
E ON PRE/POST CON S M OR E OFF		17:23 17:24	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane uses vibe-soft start
E ON PRE/POST CON S M OR E OFF		17:25 17:39	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibing tail wall on "C" cell.
E ON PRE/POST CON S M OR E OFF		17:43 18:27	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins stabbing sheet piles on tail wall.
E ON PRE/POST CON S M OR E OFF		18:30 —	Grid N or S W or E		CR VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		18:30 19:14	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibing with shore crane.
E ON PRE/POST CON S M OR E OFF		19:15 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Preformed Post const observation No MM observed

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-15-17

Time Effort Initiated: 07:00

Time Effort Completed: 19:45

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:30	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:45	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		MMD VF Effort OFF.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8/15/2017

Time Effort Initiated: 0700

Time Effort Completed: 1945

Page 1 of 4

Time	Visibility	Glaze	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00 / : /	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive onsite Rocky Point, gate locked clearly level B zone was delayed
E ON PRE/POST CON S M OR E OFF		07:30 07:40	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Level B zone cleared 3300 m
E ON PRE/POST CON S M OR E OFF		07:40 08:30	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses barge/shore crane for slinging gear
E ON PRE/POST CON S M OR E OFF		10:30 :	Grid N or S W or E		MM CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation at Rocky Point, no mammal activity obs.
E ON PRE/POST CON S M OR E OFF		12:30 12:35	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
Vessel Activity		12:42 12:52	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Ocean Hope 3 Ties up @ DW Dock.
Vessel Activity		13:09 13:25	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pacific Explorer Ties up @ City L.S.D. Dock.
E ON PRE/POST CON S M OR E OFF		13:12 16:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts OWC.
E ON PRE/POST CON S M OR E OFF		13:55 14:40	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time: ^{Shore} BARGE CRANE starts stubbing sket files.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/15/17

Time Effort Initiated: 0700

Time Effort Completed: 1945

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-1	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-1	NSEW	NSEW
16:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S (M) OR E OFF		14:45 14:46	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE Starts vibbe SSV.
E ON PRE/POST CON S M OR E OFF		14:46 16:02	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE Starts Vibbing Sheet Piles
E ON PRE/POST CON S M OR E OFF		14:51 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. - V.F.
Vessel Activity		15:56 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity Dunked Tag NO ASSOC. MM activity
Vessel Activity		16:02 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity Tag - Pulling Barge NO ASSOC. MM activity.
E ON PRE/POST CON S M OR E OFF		16:20 16:28	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins OWC
Vessel Activity		16:26 X	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity Alaska Chilcat Reefer Tug NO ASSOC. MM Activity
E ON PRE/POST CON S M OR E OFF		16:47 16:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins OWC
E ON PRE/POST CON S M OR E OFF		16:50 17:20	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins st. Sheet Piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8-15-17

Time Effort Initiated: 0:700

Time Effort Completed: 1945

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:55	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Exp/Mod/Hvy	1	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Exp/Mod/Hvy	1	NSEW	NSEW
19:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Exp/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		17:03	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel activity FV St. Dominik NO ASSOC. MM Activity
Vessel Activity		17:04	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel activity FV American triumph NO ASSOC. MM Activity
E ON PRE/POST CON S M OR E OFF		17:23 17:24	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC gsv for mitigation using shore crane
E ON PRE/POST CON S M OR E OFF		17:25 17:39	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Shale crane begins vibing
E ON PRE/POST CON S M OR E OFF		17:43 18:27	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins st sheet piles
Vessel Activity		18:14	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity Chelsea K. NO ASSOC. MM Activity
E ON PRE/POST CON S M OR E OFF		18:30 19:14	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibing
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		19:15 19:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post const. observations

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08/15/2017

Time Effort Initiated: 0700

Time Effort Completed: 19:45

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort off at RP.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/16/17

Time Effort Initiated: 06:45

Time Effort Completed: 1700

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
<u>E ON</u> PRE/POST CON S M OR E OFF		06:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		effort on.
<u>E ON</u> PRE/POST CON S M OR E OFF		06:55 07:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		pre construction activity, still dark @ 07:27.
<u>E ON</u> PRE/POST CON S M OR E OFF		07:45 08:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Shore crane stabs sheet pilings
<u>E ON</u> PRE/POST CON S M OR E OFF		08:42 08:43	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		shore crane vibes does a soft start
<u>E ON</u> PRE/POST CON S M OR E OFF		08:44 13:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		shore crane begins to vibrate.
<u>E ON</u> PRE/POST CON S M OR E OFF		10:47	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		observer rotation.
<u>E ON</u> PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		Observer Rotation
<u>E ON</u> PRE/POST CON S M OR E OFF		14:40	Grid N or S W or E		CR VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / <u>NONE</u>	SS/BC DE SD None		observer rotation no construction act.
<u>E ON</u> PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		monitored post cast. 16:30 - 17:00 (did it but not required)

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-16-2017

Time Effort Initiated: 0700

Time Effort Completed: 17:00

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	(Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if ro- night)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		Effort + off MMS VF done for day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/16/17

Time Effort Initiated: 0700

Time Effort Completed: 1700

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Observer Effort ON, Arrival.
E ON PRE/POST CON S M OR E OFF		07:00 07:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Pre-const. obs. 3300 m. Zone B. All clear, NO mammals observed.
E ON PRE/POST CON S M OR E OFF		7:45 08:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE begins stopping sheet piles
Vessel Activity		08:15 08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		CRUSE SHIP - Silver Discoverer Ties up @
Vessel Activity		08:20 08:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Rebecca Irene Ties up @
E ON PRE/POST CON S M OR E OFF		08:42 08:43	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE Does a soft start on shore CRANE.
E ON PRE/POST CON S M OR E OFF		08:44 13:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE Starts Vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Retat. T.B. - VF -
Vessel Activity		13:31	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity F/V American gaslo NO Assoc. MM Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8-16-17

Time Effort Initiated: 07:00

Time Effort Completed: 1700

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radline/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		LB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Released by turning in Observer effort * off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	*	No Post required - no crane/awc use in hours
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/17/17

Time Effort Initiated: 0700

Time Effort Completed: 1920

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	(1)	NSEW	NSEW
11:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Observer Effort on.
E ON PRE/POST CON S M OR E OFF		07:00 07:34	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Pre const. obs. A-Zone 10 m. All clear. B-Zone 3300 m. All clear.
E ON PRE/POST CON S M OR E OFF		09:27 09:28	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane does a SSV.
E ON PRE/POST CON S M OR E OFF		09:28 10:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		T.B. A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:50 13:50	Grid N or S W or E		A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane, slinging gear round pile's
E ON PRE/POST CON S M OR E OFF		14:00 14:02	Grid N or S W or E		A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane, soft start, vibbing
E ON PRE/POST CON S M OR E OFF		14:03 14:08	Grid N or S W or E		A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane extracting T-beam, stopping A-beam
E ON PRE/POST CON S M OR E OFF		14:19 15:52	Grid N or S W or E		A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane, slinging gear

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 8/17/17

Time Effort Initiated: 0700

Time Effort Completed: 1920

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
17:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:45	Grid N or S W or E		AS CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation Took longer than usual
E ON PRE/POST CON S M OR E OFF		16:05 18:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Range Crane continues w/ OWC - slinging materials & dirt work
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time stops work for the day & leaves. Start Post const. obs.
E ON PRE/POST CON S M OR E OFF		19:20	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End Post const. obs No mammals observed All clear, obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-17-17

Time Effort Initiated: 0700

Time Effort Completed: 1920

Page 1 of 3

*Sighting #51

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0-1	NSEW	NSEW
08:05	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
09:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
11:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite RP to clear B zone 3300 m
E ON PRE/POST CON S M OR E OFF		07:00 07:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Observations - All Clear @ 7:34 Am
E ON PRE/POST CON S M OR E OFF	51	08:05 08:57	E-14 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: 1 Max: Best:	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted HSEA Spying off RP - watched area 10-15 min saw only twice & lost sight. No construction or OWC has started
Vessel Activity		09:00 09:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Gyrfalcon moving freight barge around in middle of harbor
E ON PRE/POST CON S M OR E OFF		09:27 09:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft Start of Barge Crane Vibration
E ON PRE/POST CON S M OR E OFF		09:28 10:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is now vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB on Break TB to RP
E ON PRE/POST CON S M OR E OFF		11:50 13:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IS doing OWC. Sighting,
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-17-17

Time Effort Initiated: 0700

Time Effort Completed: 1920

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radline/ Inspect Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		13:00	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Cargo Ship Coastal Standard inbound bay to KDH dock No mammal activity
Vessel Activity		13:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Patricia L inbound harbor transiting to delta western fuel dock
E ON PRE/POST CON S M OR E OFF		13:59	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane begins vibber - SS first
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibbing i-beams from template
E ON PRE/POST CON S M OR E OFF		14:02	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tiny skiff enters harbor traveling N to head of Bay-docks @ NPF - no related mammals
E ON PRE/POST CON S M OR E OFF		14:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging gear - owc
E ON PRE/POST CON S M OR E OFF		14:08	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB to LMC TB back from break
E ON PRE/POST CON S M OR E OFF		14:07	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts doing owc, slinging
E ON PRE/POST CON S M OR E OFF		14:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation J.B. CB
E ON PRE/POST CON S M OR E OFF		14:19	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		16:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		18:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-17-17

Time Effort Initiated: 0700

Time Effort Completed: 1920

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post Construction ① RP
E ON PRE/POST CON S M OR E OFF		19:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-18-17

Time Effort Initiated: 0700

Time Effort Completed: 1600

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite UMC @ 0649 - Level A zone - 10m
E ON PRE/POST CON S M OR E OFF		07:00 07:32	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called all clear to TMC MARC @ 0732
E ON PRE/POST CON S M OR E OFF		07:50 07:52	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC initiates mitigation by performing softstart on Shore Crane
E ON PRE/POST CON S M OR E OFF		07:52 08:21	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane vibrating
E ON PRE/POST CON S M OR E OFF		08:21 08:39	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane doing over water construction
E ON PRE/POST CON S M OR E OFF		08:40 08:54	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging i-beams
E ON PRE/POST CON S M OR E OFF		10:17 12:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging again.
E ON PRE/POST CON S M OR E OFF		10:30 10:35	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		12:30 12:35	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-18-17

Time Effort Initiated: 0700

Time Effort Completed: 1600

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radials/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation @ umc
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off, called off by TMC, no crane use in 4 hrs, no post const. obs.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		needed.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/18/17

Time Effort Initiated: 0700

Time Effort Completed: 1600

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	Q%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	Q	NSEW	NSEW
10:00	B-P-M-G-E	Q%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on.
E ON PRE/POST CON S M OR E OFF		07:00 07:32	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre. Construction Obs. 3300 M. B-Zone All clear.
Vessel Activity		07:35 07:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Cruise Ship, Crystal Serenity, Ties up @ city eastward Dock no mammal interaction
E ON PRE/POST CON S M OR E OFF		07:50 07:52	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Does a SSV.
E ON PRE/POST CON S M OR E OFF		07:52 08:21	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		08:21 08:39	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts OWC.
E ON PRE/POST CON S M OR E OFF		08:40 08:54	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts OWC. slinging
Vessel Activity		09:35 09:47	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		P/V Siberian Sea, Ties up @ NPF.
E ON PRE/POST CON S M OR E OFF		10:30 10:35	Grid N or S W or E		T.B. MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8.18.2017

Time Effort Initiated: 0700

Time Effort Completed: 1600

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		11:37 11:44	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC	SS/BC DE SD None		F/V Viking inbound SW towards Delta Western Dock no mammal activity/obs.
Vessel Activity		11:45 11:54	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC/NONE	SS/BC DE SD None		Makushin Bay headed outbound of harbor headed SE no related mammal activity/obs.
E ON PRE/POST CON S M OR E OFF		10:17 12:30	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC/NONE	SS/BC DE SD None		TMC uses barge crane for slinging (notes: forgot to record on 1st page)
Vessel Activity		12:05 12:11	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC/NONE	SS/BC DE SD None		F/V Bering Rose headed outbound NE from P.W. Dock no marine activity/observed
Vessel Activity		12:27 12:32	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC/NONE	SS/BC DE SD None		F/V Foreigner headed out bound SE from North Pacific dock, no mammals obs.
Vessel Activity		13:32 13:40	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC/NONE	SS/BC DE SD None		F/V Storm Petrel outbound from Del' NE, no mammals obs.
Vessel Activity		13:47 13:54	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC/NONE	SS/BC DE SD None		F/V Partial outbound SE from North Pacific Fuel dock, no mammals obs.
Vessel Activity		14:10 14:19	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC/NONE	SS/BC DE SD None		F/V Viking outbound NE from Delta Western Dock no mammals obs.
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		MM CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC/NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-18-17

Time Effort Initiated: 0700

Time Effort Completed: 1600

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No Construction activity for awhile - mmo TB contacted TMC
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		mmc - mmo not needed for rest of day - no post con.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		obs. needed
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 8-19-17

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or L1 if so- night)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		arrive Onsite umc @ 0650 to observe Level A zone
E ON PRE/POST CON S M OR E OFF		07:00 07:38	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs. Call All Clear to TMC marc @ 0738
E ON PRE/POST CON S M OR E OFF		07:45 12:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Large Crane slinging i-beams over water
E ON PRE/POST CON S M OR E OFF		09:38 09:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs SS on Vibber w/shore crane
E ON PRE/POST CON S M OR E OFF		09:40 13:07	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibbing/ extraction of i-beam shoreside
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		12:30 12:35	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation @ TB-TB
E ON PRE/POST CON S M OR E OFF		13:45 13:47	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane performs SS on vibber
E ON PRE/POST CON S M OR E OFF		13:47 17:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Vibbing

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-19-17

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:30 15:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts OWC w/ Barge Crane
E ON PRE/POST CON S M OR E OFF		15:25 16:12	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts Stabbing on the BARGE CRANE
E ON PRE/POST CON S M OR E OFF		16:18 16:55	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts vibrating Sheet Piles, BARGE CRANE
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time NOT using CRANES for the Rest of DAY, Stopped for 1 1/2 Hrs.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No Post Done, Due to NO CRANE use & constant observation.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/19/17

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
07:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on. @ RP.
E ON PRE/POST CON S M OR E OFF		07:00 07:38	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction obs. 3309m. All clear. To TMC.
E ON PRE/POST CON S M OR E OFF		07:45 12:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE slinging
Vessel Activity		08:20 08:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Alaska Ocean's Enters ties up @ Kleckstarber NO mammal Interaction.
Vessel Activity		09:00 09:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TUG - Pacific RAVEN fuel BARGE - easelides ties up @ D.W. Dock. no mammal Interaction
E ON PRE/POST CON S M OR E OFF		09:38 09:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Performs SS. on shore crane vibbe.
E ON PRE/POST CON S M OR E OFF		09:40 13:07	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts vibbing out I-Beams? sheet piles from shore.
Vessel Activity		10:20 10:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		USCG cutter Sherman Ties up @ city-Cg. Dock
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		T.B. A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 8/19/17

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 2 of 3

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	52	11:16 11:27	E15 Grid N or S W or E	B	A.S.	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): MI	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Two STSL milling in E15
E ON PRE/POST CON S M OR E OFF	52.1	11:28 11:32	E14 Grid N or S W or E	B	A.S.	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): TR-W	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	One STSL left E15 and travelled W around RP; submerged/ lost contact
Vessel Activity		11:20 11:25	Grid N or S W or E		A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		2 tugs-G & MF-inbound from Maersk assist
Vessel Activity		12:16 12:36	Grid N or S W or E		A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Northern Eagle inbound to KBDH dock
E ON PRE/POST CON S M OR E OFF		13:45 13:47	Grid N or S W or E		A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane, performs soft start on viber
E ON PRE/POST CON S M OR E OFF		13:47 17:25	Grid N or S W or E		A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane, vibing
E ON PRE/POST CON S M OR E OFF		14:30 15:20	Grid N or S W or E		A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts slinging with barge crane
E ON PRE/POST CON S M OR E OFF		14:30 :	Grid N or S W or E		A.S. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
Vessel Activity		14:45 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FN Defender inbound to D.W fuel dock. No related mammal activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-19-17

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		15:03 15:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Saratoga inbound harbor TR-N to Magore Marine - no mammal act.
E ON PRE/POST CON S M OR E OFF		15:25 16:12	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is stabbing sheet piles
Vessel Activity		15:30 16:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Gretchen Dunlap inbound harbor to move cargo barge from LCD to unice
E ON PRE/POST CON S M OR E OFF		16:18 16:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts vibbing sheet piles w/ barge crane
Vessel Activity		17:03 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug James Dunlap inbound harbor w/ cargo barge to LCD dock - no mammal S
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done w/ vibbing + owc for day per Mire mmo done for day
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No Post-Con. required due to constant monitoring and 1.5 hrs of no owc
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Constructn.
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-20-17

Time Effort Initiated: 0700

Time Effort Completed: 2115

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
08:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
08:45	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		Arrive Onsite @ UMC Level A zone @ 0650
E ON PRE/POST CON S M OR E OFF		07:00 07:33	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		Start Pre-Can Obs. Called All Clear to TMC main @ 0733
E ON PRE/POST CON S M OR E OFF		07:40 11:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane working over water + onshore slinging work
E ON PRE/POST CON S M OR E OFF		07:45 11:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane moving wy beams onshore for Barge Crane to sling to Barge
E ON PRE/POST CON S M OR E OFF	53	08:45 09:12	C-8 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 3	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted 3 STSL pop up for 5 seconds + down again. Did not see again. Not
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Traveling or swimming in any known direction. Contacted mmo TB - never
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Sighted again after 30 minutes active searching + driving the area. OWC only
E ON PRE/POST CON S M OR E OFF		11:03 11:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:07 11:12	Grid N or S W or E		CB T/B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/20/17

Time Effort Initiated: 0700

Time Effort Completed: 2115

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
14:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
16:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:27 11:28	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Does a SSV.
E ON PRE/POST CON S M OR E OFF		11:28 15:05	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing out sheet piles on shore.
E ON PRE/POST CON S M OR E OFF		12:00 13:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Starts vibbing sheet piles in.
E ON PRE/POST CON S M OR E OFF		12:30 12:35	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB - CB
E ON PRE/POST CON S M OR E OFF		14:05 15:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		14:30 14:35	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		15:20 16:08	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		16:10 16:58	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		17:10 18:17	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/20/17

Time Effort Initiated: 0700

Time Effort Completed: 2115

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
20:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:20 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing sheet piles. no mammals observed. 10m.
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER Rotation
E ON PRE/POST CON S M OR E OFF		19:47 19:49	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing an SS on Vibber
E ON PRE/POST CON S M OR E OFF		19:49 20:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts Vibbing in sheet piles
E ON PRE/POST CON S M OR E OFF		20:45 21:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day. Start Post-Con. Observations
E ON PRE/POST CON S M OR E OFF		21:15 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No issues to report or mammal sighting observers done
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rock 7 Pt.

Date: 8/20/17

Time Effort Initiated: 0700

Time Effort Completed: 2115

Page 1 of 4

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:05	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Respo- nse? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:33	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear. To mark @ Time. Per umc obs. L.B.
E ON PRE/POST CON S M OR E OFF		07:40 11:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane is slinging steel.
E ON PRE/POST CON S M OR E OFF		07:45 11:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane, moving New steel on shore. (unload Flat) Slinging.
Vessel Activity		08:47 09:03	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		JAMES Dunlop Enters Inner Harbor & goes to: Tug - NPF Dock.
Vessel Activity		09:05 09:14	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V chelsie R. Enters Harbor & goes to DW Dock. No mammal interaction
Vessel Activity		09:18 09:28	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Seawolf Enters Inner Harbor & goes to DW Dock. No mammal interaction.
E ON PRE/POST CON S M OR E OFF		11:01	Grid N or S W or E		T.B. C.R.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB & CR
E ON PRE/POST CON S M OR E OFF		11:03 11:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheer pilings.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08/20/17

Time Effort Initiated: 0700

Time Effort Completed: 2115

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N S E W	N S E W
13:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N S E W	N S E W
14:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misdiag- noses Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel activity		11:12	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Storm Petrel" outbound mouth of harbor area.
E ON PRE/POST CON S M OR E OFF		11:27 11:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane soft start.
E ON PRE/POST CON S M OR E OFF		11:28 15:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibing sheet piles
E ON PRE/POST CON S M OR E OFF		12:00 13:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing sheet piling.
Vessel activity		14:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Commodore" inbound. No sea mammal associated.
Vessel activity		14:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Westward I" inbound. No sea mammal associated.
E ON PRE/POST CON S M OR E OFF		14:05 15:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheet piles.
Vessel activity		14:20 14:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		James Dunlop Tug outbound harbor TE-S No mammal activity.
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-20-17

Time Effort Initiated: 0700

Time Effort Completed: 2115

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:20 16:08	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is vibrating again. Shore Crane also vibrating - no SS required
Vessel Activity		15:20 15:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FN Pacific Challenger inbound harbor TR-W to D.W. Fuel dock - No mammal activity
E ON PRE/POST CON S M OR E OFF		16:10 16:58	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane stabbing sheet piles
Vessel Activity		16:23 16:37	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Small skiff by spit area TR-S back to Unalaska side near front beach area
E ON PRE/POST CON S M OR E OFF		17:10 18:17	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		no associated mammal activity Vibrating starts w/ Barge Crane
E ON PRE/POST CON S M OR E OFF		18:20 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		18:30 18:35	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
Vessel Activity		18:40 18:47	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		m/v makushin Bay ties up a Resolve marine
Vessel Activity		18:42 18:56	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Flv. Columbia Ties up @ Trident dock

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/20/17

Time Effort Initiated: 0700

Time Effort Completed: 2115

Page 4 of 4

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
20:00	B-P-M-G-E	Q%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Inspect Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:47	Grid		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Does a.s.s.v.
E ON PRE/POST CON S M OR E OFF		19:49	Grid		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Starts Vibbing Sheet Piles
E ON PRE/POST CON S M OR E OFF		20:45	Grid		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post const. obs.
E ON PRE/POST CON S M OR E OFF		21:15	Grid		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End Post const. obs. NO mammals observed, zones All Clean Observer Effort off,
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/21/2017

Time Effort Initiated: 07:00

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		Effort on.
E ON PRE/POST CON S M OR E OFF		07:00 07:37	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		pre construction activity - all clear @ 07:37
E ON PRE/POST CON S M OR E OFF		07:37 08:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts slinging misc materials.
E ON PRE/POST CON S M OR E OFF		09:04 09:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane soft start on vibe
E ON PRE/POST CON S M OR E OFF		09:05 10:43	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing sheet piles.
E ON PRE/POST CON S M OR E OFF		10:42 10:47	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		10:27 13:03	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IS DOING OWC, slinging non BASKETT & Beams.
E ON PRE/POST CON S M OR E OFF		12:36 X	Grid N or S W or E		TB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB - CR.
E ON PRE/POST CON S M OR E OFF		14:10 14:46	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane used for slinging misc materials.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/21/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if so- night)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgait Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:33	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		14:52 14:53	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Does a SSV on vibbe,
E ON PRE/POST CON S M OR E OFF		14:53 15:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Vibbs out 18" Template Piles
E ON PRE/POST CON S M OR E OFF		15:37 16:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IS Slinging Sheet Piles.
E ON PRE/POST CON S M OR E OFF		16:53 16:55	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Does a SSV on vibbe
E ON PRE/POST CON S M OR E OFF		16:55 17:28	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Starts Vibbing Template Beams
E ON PRE/POST CON S M OR E OFF		18:20 18:40	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Starts vibbing Template Piles
E ON PRE/POST CON S M OR E OFF		18:45 18:55	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts Slinging Equip.
E ON PRE/POST CON S M OR E OFF		18:56	Grid N or S W or E		TB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB - CR Delay Due to Sighting

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/21/2017

Time Effort Initiated: 0700

Time Effort Completed: 19:30

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construct. activity no further HPBK sighting.
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off -
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/21/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Observer Effort on.
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Pre. Const. 3300 m. RP. All clear, no mammals observed.
E ON PRE/POST CON S M OR E OFF		07:37	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		BARGE CRANE starts OWC. Slings.
E ON PRE/POST CON S M OR E OFF		08:28	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		F/V Katie ANN enters Harbor. Ties up @ Kloosterboer. No mammal interaction
Vessel Activity		08:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Alaskan Defector enters Harbor & ties up @ DW. No mammal interaction
Vessel Activity		08:51	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		BARGE CRANE Does a SSV, on vibbe.
E ON PRE/POST CON S M OR E OFF		09:04	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		BARGE CRANE Starts Vibbing OUT Template Piles 18"
E ON PRE/POST CON S M OR E OFF		09:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		F/V Cape Horn enters Inner Harbor & ties up @ Kloosterboer
Vessel Activity		09:48	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		F/V storm petrel enters Inner Harbor & ties up @
Vessel Activity		10:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		
Vessel Activity		10:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: Rocky Pt.
Date: 8/21/17
Time Effort Initiated: 0700
Time Effort Completed: 1930
Page 2 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:30 10:35	Grid N or S W or E		1. B MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
Vessel Activity		10:41 10:52	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Alaskan Defender outbound heading NE from D.W. Dock
Vessel Activity		10:54 10:57	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pacific Glacier outbound heading SE from KDH, no mammal related activity
Vessel Activity		11:22 11:32	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Research vessel Jamstec headed NW inbound towards Light Cargo Dock
Vessel Activity		11:30 11:40	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Golden Alaskan inbound heading SW then N, no marine related activity
E ON PRE/POST CON S M OR E OFF		10:27 13:03	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses barge crane for OWC, sling man basket
Vessel Activity		13:19 13:24	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Viking Explorer headed outbound SE from KDH no mammal activity
E ON PRE/POST CON S M OR E OFF		14:10 14:46	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses barge crane for slinging materials
E ON PRE/POST CON S M OR E OFF		14:30 14:40	Grid N or S W or E		MM CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation at Rocky Point

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Repairs III and IV

Monitoring Location: Rocky Point

Date: 8.21.2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 3 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		14:34 14:39	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Vanguard outbound headed NE from Delta W. Dock, no mammals observed
E ON PRE/POST CON S (M) OR E OFF		14:52 14:53	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge crane soft start
E ON PRE/POST CON S M OR E OFF		14:53 15:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge crane begins vibrating 18" template piles
Vessel activity		15:20 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Caitlin Ann" inbound, no sea mammals associated.
E ON PRE/POST CON S M OR E OFF		15:37 16:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging sheet piling.
Vessel activity		15:36 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		P/V "Ocean Rover" inbound heading to Kloosterboer dock.
Vessel activity		16:00 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V "NYK Constel- lation" container barge outbound.
E ON PRE/POST CON S (M) OR E OFF		16:53 16:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start for vibing / barge crane
E ON PRE/POST CON S (M) OR E OFF		16:55 17:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibing template beams

17:34
blow by
large
3 blows
until
17:45

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 08/21/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 4 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:35	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	54	17:35 17:45	E-12 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	HPBK	Min: Max: Best:	Beh code(s): BR & TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	HPBK breached at grid F-12 travelling East towards air- port runway @ 17:35. At 17:40 "blow" 3 times at
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		same location on grid # E-10. Appeared to be feed-
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		ing as stayed at same location for 5 minutes.
E ON PRE/POST CON S M OR E OFF	54.1	17:56	D-8 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	HPBK	Min: Max: Best:	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N called TMC	Same HPBK seen by UMC MMD (TB) about 100 feet off of city dock site travelling N. Told MMD to call
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Turnigan Mark immediately in lieu of proximity to Level A (close) same weather conditions.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		cont pg 5 ↓

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 08/21/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 5 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Circ	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	54.2	18:03	E7 Grid N or S W or E	B	CR TB	BL BO BR DF SA OTHER	HPBK	Min: 1 Max: Best:	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Approx 8 minutes later, HPBK seen again travelling
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		North, location 150 feet off USCG dock, headed N.
E ON PRE/POST CON S M OR E OFF		18:20 18:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibing template piles.
E ON PRE/POST CON S M OR E OFF		18:45 18:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts slinging misc equipment.
E ON PRE/POST CON S M OR E OFF		18:56	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation-delay due to HPBK sight.
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start post const. obs. Time. Done For The Day.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End Post const. obs. No mammals observed. HPBK. Not seen again.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/22/2017

Time Effort Initiated: 07:00

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	(L)Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort on @ umc site. pitch black.
E ON PRE/POST CON S M OR E OFF		07:00 07:42	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre construction activity. Clear. Contacted Mark.
E ON PRE/POST CON S M OR E OFF		07:20 07:29	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Area has not been cleared yet. Slingsheet sheets.
E ON PRE/POST CON S M OR E OFF		07:30 08:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore + barge crane stabbing sheet piles. Area not cleared yet. OWC.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		08:15 08:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane only stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		08:22 08:23	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane begins soft start with vibs
E ON PRE/POST CON S M OR E OFF		08:26 09:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibing sheet piles - shore crane.
E ON PRE/POST CON S M OR E OFF		08:35 09:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins to vibs sheet piling.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/22/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:15 10:18	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		09:24 11:03	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		10:25 11:08	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibing sheet piling.
E ON PRE/POST CON S M OR E OFF		10:30 10:37	Grid N or S W or E		CR MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation. MM @ UMC
E ON PRE/POST CON S M OR E OFF		10:02 12:39	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing sheet piles
E ON PRE/POST CON S M OR E OFF		11:09 11:43	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:45 12:24	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibing sheet piles
E ON PRE/POST CON S M OR E OFF		12:27 13:16	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses shore crane for stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		12:30 12:34	Grid N or S W or E		MM CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/22/2017

Time Effort Initiated: 1700

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:40 13:52	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stops vibing & begins stabbing.
E ON PRE/POST CON S M OR E OFF		13:40 14:03	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane begins vibing sheet pilings.
E ON PRE/POST CON S M OR E OFF		13:58 15:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing sheet pilings.
E ON PRE/POST CON S M OR E OFF		14:04 14:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane is stabbing sheet pilings
E ON PRE/POST CON S M OR E OFF		14:34 15:21	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane is vibing sheet pilings.
E ON PRE/POST CON S M OR E OFF		14:35 14:40	Grid N or S W or E		CR AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		15:17 16:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		15:23 15:55	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		15:56 16:28	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane vibing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/22/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glaze	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	4	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radline/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Exposure? (Y/N)	Behavior Change / Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:29 17:39	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane, vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		17:05 17:12	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slings gear
E ON PRE/POST CON S M OR E OFF		17:16 17:29	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		17:32 18:54	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane, vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		18:26 18:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slings gear
E ON PRE/POST CON S M OR E OFF		19:00 :	Grid N or S W or E		AS CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation (delayed due to MM sighting from RE)
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction activity.
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8.22.2017

Time Effort Initiated: 0655

Time Effort Completed: 1930

Page 1 of 5

Time	Visibility	Glass	(date) Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	10%	(S) PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
07:00	B-P-M-G-E	5%	(S) PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Obs	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:55	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive on scene at Rocky P. too dark to clear level B zone 330m
E ON PRE/POST CON S M OR E OFF		07:00 07:29	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses shore crane for slinging sheet piles, area not been cleared yet
E ON PRE/POST CON S M OR E OFF		07:30 08:10	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore/barge crane begin stabbing sheet piles, owc
Vessel Activity		07:55 08:04	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel unknown, inbound headed W NW towards Trident dock. no marine related activity observed
E ON PRE/POST CON S M OR E OFF		8:15 08:28	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses barge crane only for stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		08:22 08:23	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins SS w/vibe.
E ON PRE/POST CON S M OR E OFF		08:26 09:10	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		08:35 09:20	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		09:15 10:18	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins stabbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8.22.2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cno	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgait ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:24 11:03	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		10:30 :	Grid N or S W or E		MM AST	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation at Rocky Point
E ON PRE/POST CON S M OR E OFF		10:25 11:08	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC uses shore crane & begins vibbing
Vessel Activity		10:30 :	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pacific Prince inbound to DW Fuel dock
Vessel Activity		10:30 10:40	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Afric Star inbound to KBDH with tug assist- MF & G
Vessel Activity		10:45 :	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Golden Alaska outbound
E ON PRE/POST CON S M OR E OFF		11:02 12:39	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:09 11:43	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:45 12:24	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 8/22/2014

Time Effort Initiated: 0655

Time Effort Completed: 1930

Page 3 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgait ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		12:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Maersk ship 'Om Agarum' inbound to city dock tug assist x2 - MB & Q
E ON PRE/POST CON S M OR E OFF		12:27 13:16	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF	55	12:30 12:40	Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): TR(S)	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	2 STSL traveling south E15-E18, then lost sight
E ON PRE/POST CON S M OR E OFF		12:40 13:52	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		13:48 14:03	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane vibing sheet pilings
E ON PRE/POST CON S M OR E OFF		13:58 15:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane, vibing sheet pilings
E ON PRE/POST CON S M OR E OFF		14:04 14:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane, stabbing sheet pilings
E ON PRE/POST CON S M OR E OFF		14:30 X	Grid N or S W or E		AS CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		14:34 15:21	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibing sheet pilings

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 08/22/2017

Time Effort Initiated: 0655

Time Effort Completed: 1930

Page 4 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	4+	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Date (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:17 16:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheet pilings
E ON PRE/POST CON S M OR E OFF		15:23 15:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane stabbing sheet pilings
vessel activity		15:50 16:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Gold Rush" inbound towards Delta West, Feul dock.
E ON PRE/POST CON S M OR E OFF		15:56 16:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibing sheet pilings.
E ON PRE/POST CON S M OR E OFF		16:28 17:39	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing sheet piles.
E ON PRE/POST CON S M OR E OFF		17:05 17:12	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging gear.
E ON PRE/POST CON S M OR E OFF		17:16 17:29	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		shore crane stabbing sheet piles.
vessel activity		17:22 17:32	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Pacific Prince" outbound from DW Feul dock.
E ON PRE/POST CON S M OR E OFF		17:32 18:54	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibing sheets.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 08/22/2017

Time Effort Initiated: 0655

Time Effort Completed: 1930

Page 5 of 5

Time	Visibility	Glaze	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
18:21	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
FOG		17:40 17:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		-70% visibility of level B zone.
FOG		17:55 18:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		-Now 80% visibility @ 17:55 - 18:00.
Vessel activity		18:02 ↓	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V "Makushin Bay" inbound & headed to Magones.
E ON PRE/POST CON S M OR E OFF	56	18:21 :	Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	HPBK	Min: 1 Max: Best:	Beh code(s): TR & BR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	HPBK sighted, travelling NE inner harbor area.
E ON PRE/POST CON S M OR E OFF		18:26 18:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slings gear.
Vessel activity		18:46 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug "Airfalcon" inbound. No mammal activity.
E ON PRE/POST CON S M OR E OFF		19:00 :	Grid N or S W or E		CR AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation. late due to HPBK sighting.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction activity
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/23/2017

Time Effort Initiated: 06:58

Time Effort Completed: 19:34

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
09:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
10:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:58	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort on @ UMC Level A & B zones.
E ON PRE/POST CON S M OR E OFF		06:58 07:55	Grid N or S W or E		OR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre activity construction. Contacted TAMark
E ON PRE/POST CON S M OR E OFF		07:28 08:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		08:18 08:19	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibe soft start
E ON PRE/POST CON S M OR E OFF		08:19 08:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibing sheet piling.
E ON PRE/POST CON S M OR E OFF		08:35 09:26	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing sheet piling.
E ON PRE/POST CON S M OR E OFF		08:37 08:48	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging man basket/gear.
E ON PRE/POST CON S M OR E OFF		08:50 09:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane stabbing sheet piling.
E ON PRE/POST CON S M OR E OFF		09:30 10:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging misc. gear.

*Tmc begins Stabbing before mmo's call All Clear

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: U.M.C

Date: 08/23/2017

Time Effort Initiated: 0658

Time Effort Completed: 1934

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	DSS	Wind	Swell
11:00	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
12:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
13:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
14:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Redline/ Impact Pile #2	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:32 10:35	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation, TA crew on break.
E ON PRE/POST CON S M OR E OFF		11:00 11:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging materials over water
E ON PRE/POST CON S M OR E OFF		11:06 11:07	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane initiates SS on vibber
E ON PRE/POST CON S M OR E OFF		11:07 11:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		11:30 12:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibrating sheet piles & i-beams
E ON PRE/POST CON S M OR E OFF		12:19 13:32	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane slinging Template
E ON PRE/POST CON S M OR E OFF		12:30 :	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:20 13:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging misc. gear.
E ON PRE/POST CON S M OR E OFF		14:10 15:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging "I" beams

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UML

Date: 8-23-17

Time Effort Initiated: 0658

Time Effort Completed: 1934

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		15:40 15:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane initiates mitigation by performing SS on Vibber
E ON PRE/POST CON S M OR E OFF		15:42 15:58	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing
E ON PRE/POST CON S M OR E OFF		16:15 16:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane doing owc building template
E ON PRE/POST CON S M OR E OFF		17:04 17:06	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs SS on Vibber
E ON PRE/POST CON S M OR E OFF		17:06 18:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibbing i-beams on template
E ON PRE/POST CON S M OR E OFF		18:18 18:33	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:04 19:34	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construct. activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/23/2017

Time Effort Initiated: 0658

Time Effort Completed: 19:34

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Redline/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:34	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort off!
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-23-17

Time Effort Initiated: 0700

Time Effort Completed: 1934

Page 1 of 5

* 57 sighting

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change / Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive onsite RP @ 0655 Observer Efforts ON
E ON PRE/POST CON S M OR E OFF		07:00 07:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Observing of level B 3300m zone CR calls All clear @ 0755
E ON PRE/POST CON S M OR E OFF		07:28 08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts stabbing sheet piles * Before CR called All clear
E ON PRE/POST CON S M OR E OFF	57	08:05 08:15	E-16 Grid N or S W or E		CB	BL BO BR DF SA OTHER	STSL	Min: Max: 3 Best:	Beh code(s): TR-S	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted 3 STSL area E-16 off RP TR-S. Saw heads twice & then not again w/ 10 minutes active obs.
E ON PRE/POST CON S M OR E OFF		08:18 08:19	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane initiates mitigation by performing SS on vibbers
E ON PRE/POST CON S M OR E OFF		08:19 08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		08:35 09:26	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		08:37 09:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane slinging gear
Vessel Activity		09:12 09:59	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Gretchen Dunlap inbound harbor TR-NW to assist w/ CG Cutter 700

no mm activity associated

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-23-17

Time Effort Initiated: 0700

Time Effort Completed: 1934

Page 2 of 5

Time	Visibility	Glece	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIB of tunnel	Zone/ Radial/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:50 09:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		09:30 10:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging gear
Vessel Activity		10:12 10:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Magone Vessel makushini Bay outbound harbor. No assoc. mm activity
E ON PRE/POST CON S M OR E OFF		10:30 :	Grid N or S W or E		CB AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer TmCon Rotation - coffee break
E ON PRE/POST CON S M OR E OFF		11:00 11:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Barge crane slinging materials
Vessel Activity		11:04 :	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Tonnage Provider inbound to city dock with tug assist Gretchen Maldonado
E ON PRE/POST CON S M OR E OFF		11:06 11:07	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		tmc shore crane soft start on vibe
E ON PRE/POST CON S M OR E OFF		11:07 11:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc shore crane vibrating sheet piles
Vessel Activity		11:25 :	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Columbia inbound to Trident dock

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8-23-2017

Time Effort Initiated: 0700

Time Effort Completed: 1934

Page 3 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N(S)E/W	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N(S)E/W	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	N(S)E/W	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgut ion Type	Exposure? (Y/N)	Behavior Change/Response to Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:30 12:40	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibrating
E ON PRE/POST CON S M OR E OFF	58	11:50 12:05	D14 Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): TR(W)	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	One STSL traveling into inner harbor, DW dock, then back out, D14-C13-B2
E ON PRE/POST CON S M OR E OFF		12:19 13:32	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane D14 swinging template
E ON PRE/POST CON S M OR E OFF		13:20 13:35	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slinging misc gear
E ON PRE/POST CON S M OR E OFF	59	13:45 14:03	D14 Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): MI & TR(W)	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	One STSL traveling back & forth D14-E14-C14-D13
Vessel Activity		13:54 13:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Research skiff inbound to Spit Dock
Vessel Activity		14:04 14:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Makushin Bay in bound
Vessel Activity		14:17 14:27	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		CG ice breaker inbound with tug assist to CG dock Gretchen Dunlap
E ON PRE/POST CON S M OR E OFF		14:10 15:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slinging I-beams

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 9-23-2017

Time Effort Initiated: 0700

Time Effort Completed: 1934

Page 4 of 5

#60

Time	Viability	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
16:42	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misdiag- noses Type	Exposure? (Y/N)	Behavior Change/Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		14:20 14:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Great Pacific inbound to DW Fuel dock
E ON PRE/POST CON S M OR E OFF		14:35 :	Grid N or S W or E		AS CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
Vessel activity		14:58 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug outbound of inner harbor. No mammal activity.
E ON PRE/POST CON S M OR E OFF		15:40 15:42	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane soft start of vibe.
E ON PRE/POST CON S M OR E OFF		15:42 15:58	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibrating "I" Beam.
Vessel activity		16:00 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Great Pacific" outbound from DW Fuel dock. No sea mammal association
Vessel activity		16:25 16:32	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Jamstec" CG cutter outbound.
E ON PRE/POST CON S M OR E OFF		16:15 16:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane supporting template to build "C" cell #10.
E ON PRE/POST CON S M OR E OFF	60	16:42 17:00	Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): TR(s) & FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL headed East out of harbor (D-13) & going south (G-17). Feeding on fish

& DI. note-Tug becomes parallel to STSL & dove.
≈ 100-150' apart from each other.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08/23/2017

Time Effort Initiated: 0700

Time Effort Completed: 1934

Page 5 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radina/ Impact File #9	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel activity		17:02 17:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FIV "Commodore" in bound to DW dock. no mammal activity.
E ON PRE/POST CON S M OR E OFF		17:04 17:06	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane soft start on vibe mitigation
E ON PRE/POST CON S M OR E OFF		17:06 18:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing. "I" beams.
Vessel activity		17:26 17:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FIV "Commodore" outbound from DW Fuel dock. No mammal activity.
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC _q	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		18:18 18:33	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging
E ON PRE/POST CON S M OR E OFF		19:04 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time done for day Start Post Con. Observations
E ON PRE/POST CON S M OR E OFF		19:34 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-24-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:40	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite UMC Level A Zone - 10 m @ 0643
E ON PRE/POST CON S M OR E OFF		07:00 08:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs. Call all clear to marc @ 0800
E ON PRE/POST CON S M OR E OFF		07:41 08:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Staldbing Sheet piles *
E ON PRE/POST CON S M OR E OFF		07:46 08:21	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Staldbing Sheet piles *
E ON PRE/POST CON S M OR E OFF		08:29 08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane initiates mitigation by performing SS on Vibber
E ON PRE/POST CON S M OR E OFF		08:30 09:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is starting to Vibe in sheet piles
E ON PRE/POST CON S M OR E OFF		08:33 09:17	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts Vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		09:20 09:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane now Staldbing in Sheet piles
E ON PRE/POST CON S M OR E OFF	61	09:40	Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	HSEA sighted 100ft offshore Behind Magone Barge spyhopping Seen head only once in 10 minutes - noticed it is same

* Construction takes place prior to calling All clear to marc @ 0800
Time Time stopped Vibbing
But still Exposed. No noticeable
change in behavior of mammal.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: umc

Date: 8-24-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Exposure? (Y/N)	Behavior Change / Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:55 10:23	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slings & materials - OWC
E ON PRE/POST CON S M OR E OFF		09:59 10:38	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts to Vibe sheet piles
E ON PRE/POST CON S M OR E OFF		10:25 11:14	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		10:48 10:55	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:15 11:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:19 11:53	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		12:00 12:36	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		11:59 12:55	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		12:30 12:39	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 8-24-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact PHE #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgait ion Type	Exposure (Y/N)	Behavior Change / Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:39 14:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane is now ST sheet piles
E ON PRE/POST CON S M OR E OFF		12:58 13:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is Vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		14:07 14:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane begins Vibbing
E ON PRE/POST CON S M OR E OFF		14:30 14:35	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:55 15:13	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		15:18 16:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts Vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		15:50 16:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IS slinging sheet pile stacks on BARGE.
E ON PRE/POST CON S M OR E OFF		16:10 17:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		17:18 18:16	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/24/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:31 18:54	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts slinging materials
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con. Observations - Au Clear
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off for day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/24/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on,
E ON PRE/POST CON S M OR E OFF		07:00 08:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction obs. start,
E ON PRE/POST CON S M OR E OFF		07:41 08:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabling sheet piles, zones NOT cleared by obs. yet.
E ON PRE/POST CON S M OR E OFF		07:46 08:21	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts stabling sheet piles, zones NOT cleared by observer yet.
E ON PRE/POST CON S M OR E OFF		08:29 08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane does asssv. on vibber.
E ON PRE/POST CON S M OR E OFF		08:30 09:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		08:33 09:17	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane is vibbing sheet piles.
Vessel Activity		09:00 09:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U morning star enters harbor & ties up @ DW. Deck. No mammal interaction.
E ON PRE/POST CON S M OR E OFF		09:20 09:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts stabling sheet piles.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/24/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:23	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:55 10:23	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts slinging materials,
E ON PRE/POST CON S M OR E OFF		09:59 10:38	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE starts vibbing sheet piles,
Vessel Activity		10:23 10:38	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V North west Explorer Extends Harbor ties up @ Spit dock
E ON PRE/POST CON S M OR E OFF		10:25 11:14	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts stabbing sheet piles,
E ON PRE/POST CON S M OR E OFF		10:30 :	Grid N or S W or E		TB AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
Vessel Activity		10:32 10:56	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Matson barge inbound with tug Gyr Falcon to city dock (No MM around it)
Vessel Activity		11:00 11:12	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Patricia L inbound to DW Fuel dock (No associated MM activity)
E ON PRE/POST CON S M OR E OFF		11:15 11:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Shore crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:19 11:53	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Barge crane Vibbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 8/24/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 3 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:23	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	62	11:23 11:36	H15 Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): TR(N)	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD (None)	Y	One STSL traveling north (fast) from H15
Vessel Activity		11:58 12:06	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Progress inbound for DW fuel dock (No assoc. mm activity)
E ON PRE/POST CON S M OR E OFF		11:59 12:55	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		12:00 12:36	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane vibing sheet piles
Vessel Activity		12:00 12:12	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Sunset Bay inbound for Ice dock (No assoc. mm activity)
E ON PRE/POST CON S M OR E OFF		12:39 14:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane stabbing sheet piles
Vessel Activity		12:45 12:56	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pacific Fury inbound to DW fuel dock (No assoc. mm activity)
E ON PRE/POST CON S M OR E OFF		12:58 13:40	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibing sheet piles
Vessel Activity		13:01 13:17	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Misty Dawn inbound to Spit Dock (No assoc. mm activity.)

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt #63

Date: 8/24/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 4 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:50	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:07 14:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Shorecrane, vibing sheet piles
E ON PRE/POST CON S M OR E OFF		14:30 :	Grid N or S W or E		AS CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF	63	14:47 15:04	C-13 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: Max: 1 Best:	Beh code(s): FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	STSL 100ft off dock foraging for food surrounded by seabirds TR-E another 150-200ft. No behavior changes
E ON PRE/POST CON S M OR E OFF	" "	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		due to vibbing. Sighted several times in 15 minutes time, moving to D-13. Lost sight of it - far from A
E ON PRE/POST CON S M OR E OFF		14:55 15:13	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		15:18 16:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		15:50 16:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging stacks of sheet piles
Vessel Activity		15:57 16:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Progress leaves DW TR-E outbound harbor
E ON PRE/POST CON S M OR E OFF		16:10 17:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts stabbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-24-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 5 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Redline/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		16:36 16:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Half Moon Bay inbound harbor TR-W to D.W dock. No related mm activity
E ON PRE/POST CON S M OR E OFF		17:18 18:16	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration Sheet piles
Vessel Activity		17:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Mark 1 inbound TR-N to NPF dock. Did not see any associated mm activity
Vessel Activity		18:40 18:47	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Galea Ties up @ D.W. Fuel Dock. No mammal interaction
E ON PRE/POST CON S M OR E OFF		18:30 18:37	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB - CB.
E ON PRE/POST CON S M OR E OFF		18:31 18:54	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts slinging materials.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew leaves for the day. Start post cast obs.
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End Post Construction Observations.
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 8-25-17

Time Effort Initiated: 0700

Time Effort Completed: 1900

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort on for day - umc Level A 10 m zone
E ON PRE/POST CON S M OR E OFF		07:00 07:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Call All Clear to TMCmarc 0748
E ON PRE/POST CON S M OR E OFF		07:55 08:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts slinging template
E ON PRE/POST CON S M OR E OFF		08:23 08:24	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane initiates SS on Vibber
E ON PRE/POST CON S M OR E OFF		08:24 08:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane vibrating out i-beams
E ON PRE/POST CON S M OR E OFF		08:25 09:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is also vibrating i-beams
E ON PRE/POST CON S M OR E OFF		08:55 11:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane moving template parts around over water
E ON PRE/POST CON S M OR E OFF		09:38 11:58	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging
E ON PRE/POST CON S M OR E OFF		10:30 10:37	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-25-17

Time Effort Initiated: 0700

Time Effort Completed: 1900

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:10 12:11	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE DOES a SSV,
E ON PRE/POST CON S M OR E OFF		12:11 12:28	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing out Template piles.
E ON PRE/POST CON S M OR E OFF		12:30 12:37	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:35 14:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging owc
E ON PRE/POST CON S M OR E OFF		13:50 15:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane working over water
E ON PRE/POST CON S M OR E OFF		14:30 14:35	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:50 14:51	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE DOES a soft start on vibbe
E ON PRE/POST CON S M OR E OFF		14:51 15:29	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing out template piles,
E ON PRE/POST CON S M OR E OFF		16:00 17:01	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IS slinging sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/25/17

Time Effort Initiated: 0700

Time Effort Completed: 1900

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radio/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:06 17:51	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		17:58 17:59	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE does a soft start on vibbe.
E ON PRE/POST CON S M OR E OFF		17:59 18:31	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB-CIS.
E ON PRE/POST CON S M OR E OFF		18:30 19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day Start Post-Cons. Observations - All clear
E ON PRE/POST CON S M OR E OFF		19:00 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off for day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/25/17

Time Effort Initiated: 0700

Time Effort Completed: 1900

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:50	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:50	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:48	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Preconstruction Obs.
E ON PRE/POST CON S M OR E OFF		07:55 08:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE Starts OWC, slinging template before All Clear
E ON PRE/POST CON S M OR E OFF		08:23 08:24	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Does a SSV.
E ON PRE/POST CON S M OR E OFF		08:24 08:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE vibrating out template 18" piles.
E ON PRE/POST CON S M OR E OFF		08:25 09:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Starts vibrating out 18" template piles.
E ON PRE/POST CON S M OR E OFF		08:55 11:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE moving template sections.
Vessel Activity		09:15 09:27	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Alaskan Defender Ties up @ D.W. Dock. NO mammal interaction
E ON PRE/POST CON S M OR E OFF		09:38 11:58	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE is slinging materials.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/25/17

Time Effort Initiated: 0700

Time Effort Completed: 1900

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	8	NSEW	NSEW
12:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	8	NSEW	NSEW
13:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	8	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		10:01 10:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		CARGO SWP - matson Kodiak Ties up @ UMC Dock. no mammal interaction.
E ON PRE/POST CON S M OR E OFF		10:30 :	Grid N or S W or E		T.B. A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. - A.S.
Vessel Activity		11:39 11:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Coastal Nomad inbound to KBDH dock No mm activity.
Vessel Activity		11:42 12:05	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Millennium Falcon inbound to assist than to No mm activity city dock
E ON PRE/POST CON S M OR E OFF		12:10 12:11	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane soft start on vibrate
E ON PRE/POST CON S M OR E OFF		12:11 12:28	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibrating out template piles
Vessel Activity		12:15 12:25	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Western Dawn inbound to Trident dock No assoc mm activity.
Vessel Activity		12:56 13:05	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Small Craft Two Bears inbound to NPF dock No assoc. mm activity.
Vessel Activity		13:00 13:13	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Woldstad inbound to Spit Dock No assoc. mm activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 8/25/17

Time Effort Initiated: 0700

Time Effort Completed: 1900

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:35 14:40	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slinging materials
E ON PRE/POST CON S M OR E OFF		13:50 15:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane slinging materials
Vessel Activity		14:13 14:26	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Patricia L inbound to Icicle dock No assoc. mm activity
Vessel Activity		14:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Small vessel Sunward inbound to No assoc. mm activity
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		AS CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		14:50 14:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane initiates Soft Start on Vibber
E ON PRE/POST CON S M OR E OFF		14:51 15:29	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is Vibbing templet 18" round piles
E ON PRE/POST CON S M OR E OFF	64	14:56 16:45	E-16 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: 1 Best:	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	HSEA Spyhopping between RP+APL - sighted 4 times in 1/2 hr time period - same
E ON PRE/POST CON S M OR E OFF	" "	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		area - has not moved - NO behavior changes to vibbing. Sighted 3 more times slightly North of E-16 off

Rocky Point not vibbing this
time - 1634, 1637 + 1645.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-25-17

Time Effort Initiated: 0700

Time Effort Completed: 1900

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgait ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:00 17:01	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging sheet piles - owc
E ON VA PRE/POST CON S M OR E OFF		16:55 17:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity - F/V Commodore inbound TR-W to DW fuel dock. No mm activity
E ON PRE/POST CON S M OR E OFF		17:06 17:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane stabbing sheet piles
E ON VA PRE/POST CON S M OR E OFF		17:52 18:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity F/V Enterprise inbound TR-N to NPF dock. No associated mm activity
E ON PRE/POST CON S M OR E OFF		17:58 17:59	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane does a SS on Vibbers
E ON PRE/POST CON S M OR E OFF		17:59 18:31	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:30 19:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew leaves for the day. start post construction obs. All clear
E ON PRE/POST CON S M OR E OFF		19:00 :	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Efforts off.

VA = Vessel Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-26-17

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	20%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite UMC level A zone - 10 m @ 0649
E ON PRE/POST CON S M OR E OFF		07:00 07:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs. Call All Clear to Main @ 0750
E ON PRE/POST CON S M OR E OFF		07:47 08:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane stabbing in sheet piles before All Clear
E ON PRE/POST CON S M OR E OFF		08:37 08:38	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane performs mitigation by doing a SS on Vibro
E ON PRE/POST CON S M OR E OFF		08:38 09:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		08:35 09:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is moving - possible maintenance
E ON PRE/POST CON S M OR E OFF		09:12 09:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane is now stabbing in sheet piles
E ON PRE/POST CON S M OR E OFF		09:19 10:58	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is stabbing in sheet piles
E ON PRE/POST CON S M OR E OFF		09:48 10:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts vibrating sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: WMC

Date: 8-26-17

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change / Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:45 10:50	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:03 11:33	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Starts vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		11:00 11:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		11:37 12:16	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:38 12:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		12:18 12:47	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE Starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		12:30 :	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB-CB.
E ON PRE/POST CON S M OR E OFF		12:38 12:39	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc does SS w/ Barge Crane Vibber
E ON PRE/POST CON S M OR E OFF		12:39 13:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-26-17

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	15%	(S)PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:49 13:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane begins vibbing sheet pile S
E ON PRE/POST CON S M OR E OFF		14:30 14:35	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:31 14:34	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Stalobing
E ON PRE/POST CON S M OR E OFF		14:35 16:06	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		14:51 16:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts Stalobing sheet Piles.
E ON PRE/POST CON S M OR E OFF		16:17 17:06	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Starts vibbing Sheet Piles.
E ON PRE/POST CON S M OR E OFF		17:54 18:18	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Starts vibbing 18" template Piles
E ON PRE/POST CON S M OR E OFF	66	18:21 18:49	E-7 Grid N or S W or E	B	TB	BL BO BR DF SA OTHER	StSL	Min: Max: Best:	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed StSL, came up looked around, & headed East to Barge went down, did not see again.
E ON PRE/POST CON S M OR E OFF		18:30 18:35	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB - CB.

Started by mmo TB - 10-12 min.
Finished by mmo CB - 15 min
> Observation Time > AT Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 8-26-17

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
20:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:41	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Slinging Template - owc
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con. Observations - no mammals sighted
E ON PRE/POST CON S M OR E OFF		20:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky pt.

Date: 8/26/17

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 1 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgait ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on.
E ON PRE/POST CON S M OR E OFF		07:00 07:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post Const. Obs. All clear, no mammals observed 3300 m. Zone.
E ON PRE/POST CON S M OR E OFF		07:47 08:34	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts stabbing Befeall clear.
E ON PRE/POST CON S M OR E OFF		08:37 08:38	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Does a SSV on vibbe
E ON PRE/POST CON S M OR E OFF		08:38 09:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing Sheet Piles
E ON PRE/POST CON S M OR E OFF		08:35 09:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts OWC.
E ON PRE/POST CON S M OR E OFF		09:12 09:42	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts stabbing Sheet Piles.
E ON PRE/POST CON S M OR E OFF		09:19 10:58	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing Sheet Piles.
E ON PRE/POST CON S M OR E OFF		09:48 10:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts vibbing Sheet Piles.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/26/17

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 2 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
Vessel Activity		10:02 10:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI ① DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V kustumina Ferry Enters & ties up @ city useg dock.
Vessel Activity		10:25 10:34	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI ① DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Commodore Enters Harbor & ties up. @ Ice Dock.
E ON PRE/POST CON S M OR E OFF		10:30 10:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI ① DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B./m.m.
E ON PRE/POST CON S M OR E OFF		11:00 11:35	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins staking sheet piles
E ON PRE/POST CON S M OR E OFF		11:03 11:33	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI ① DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:37 12:16	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI ① DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:38 12:35	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins staking sheet piles
E ON PRE/POST CON S M OR E OFF		12:18 12:47	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins staking sheet piles
E ON PRE/POST CON S M OR E OFF		12:38 12:39	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane initiates soft start on vibber

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8.26.2017

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 3 of 5

#65

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:39	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane begins vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		12:49	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibrating sheet piles
E ON PRE/POST CON S M OR E OFF	65	13:42	H10 Grid N or S W or E		MM	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): SW, 9T, REUS	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	STSL spotted in H10, travelling E, actively searched for 20 min. w/no additional sightings
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		MM CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation at Rocky Point
E ON PRE/POST CON S M OR E OFF		14:31	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		14:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane vibrating sheet piles
E ON VA PRE/POST CON S M OR E OFF		14:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity- F/V Pacific Prince inbound harbor TR-W to DW dock (no mm activity)
E ON PRE/POST CON S M OR E OFF		14:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane stabbing sheet pile
E ON VA PRE/POST CON S M OR E OFF		15:26	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Gold Rush TR-S from inner harbor to DW dock. No mm activity

VA = vessel activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-26-17

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 4 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON VA PRE/POST CON S M OR E OFF		15:25 15:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Island Packee inbound TR-N to LCD dock Did not see any mm activity
E ON VA PRE/POST CON S M OR E OFF		15:17 17:06	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts vibbing sheet piles -no mitigation needed due to fast time vibbing - recent
E ON VA PRE/POST CON S M OR E OFF		16:40 16:52	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V AK mist inbound harbor TR-W to DW dock No associated mm activity
E ON VA PRE/POST CON S M OR E OFF		17:17 17:39	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Golden Dawn inbound harbor TR-N to Trident dock No mm activity associated
E ON VA PRE/POST CON S M OR E OFF		17:17 17:33	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		State Ferry Tustumena outbound harbor TR-S around Spit & then TR-N
E ON VA PRE/POST CON S M OR E OFF		17:55 18:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Gretchen Outlap & Tug James Dunlap inbound harbor from South TR-NW to assist w/ cargo barge
E ON VA PRE/POST CON S M OR E OFF		17:54 18:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing
E ON HA PRE/POST CON S M OR E OFF		18:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Human Activity - Person fishing from shore by Airport runway casting out
E ON VA PRE/POST CON S M OR E OFF		18:30 18:35	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

VA = vessel activity

HA = Human Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-26-17

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 5 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:41 19:21	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Slinging Templet Sections,
E ON PRE/POST CON S M OR E OFF		19:30 20:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Two crew leaves for the day. Start Post. Construction observations.
E ON PRE/POST CON S M OR E OFF		20:00 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End Post. Const. obs. All clear, NO mammals observed. Observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 8-27-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
08:17	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Respon se? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite umc Level A zone @ 0657
E ON PRE/POST CON S M OR E OFF		07:00 07:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con @ 0700 All Clear to Chris @ 0748
E ON PRE/POST CON S M OR E OFF		07:50 10:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Starts slinging Equip+ materials
E ON PRE/POST CON S M OR E OFF	67	08:17 08:45	G-4 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: Max: 1 Best:	Beh code(s): TR-S	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL sighted TR-S past maghe, TMC Barge + umc Last sight end(S) of umc see 67.1 Below
E ON PRE/POST CON S M OR E OFF		08:49 08:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane performs mitigation by performing SS on Vibhere
E ON PRE/POST CON S M OR E OFF		08:51 09:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Vibbing
E ON PRE/POST CON S M OR E OFF	67.1	09:03 09:21	B-13 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: Max: 1 Best:	Beh code(s): DI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Resight of STSL behind vessels @ DW dock diving? possibly feeding - saw several times there in a Half hour time.
E ON PRE/POST CON S M OR E OFF		09:07 10:31	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Performing owc-slinging Template
E ON PRE/POST CON S M OR E OFF		10:30 10:35	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

* Contacted TMC Chris N. situation
Good idea to Debby Vibbing

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-27-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #	Obs.	Sighting Chs	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:10 11:11	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Starts a soft start vibrate.
E ON PRE/POST CON S M OR E OFF		11:11 12:10	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Starts vibrating template piles
E ON PRE/POST CON S M OR E OFF		12:30 12:35	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation TB - CB
E ON PRE/POST CON S M OR E OFF		12:33 12:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging materials
E ON PRE/POST CON S M OR E OFF		12:58 13:22	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane now vibrating
E ON PRE/POST CON S M OR E OFF		13:48 13:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane performing o/c - slinging
E ON PRE/POST CON S M OR E OFF		13:57 14:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		14:10 15:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging materials
E ON PRE/POST CON S M OR E OFF	68	14:15 14:30	E-7 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL sighting TR-N 100 ft off Tmc Barge. Searched for over 15 minutes by both

mmds - lost him. No noticeable
behavior changes to stabbing

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-27-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:30	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane does a soft start on vibbe.
E ON PRE/POST CON S M OR E OFF		14:51	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF	69	15:04	C-8 Grid N or S W or E	B	TB	BL BO BR DF SA OTHER	stsl	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	① stsl surfaced in front of UMC Dock Trans. South to DW. Dock. 75 ft. from UMC dock.
E ON PRE/POST CON S M OR E OFF		15:55	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		15:34	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		16:04	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibbing template piles
E ON PRE/POST CON S M OR E OFF		15:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		15:48	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		16:40	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		16:06	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		16:51	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		16:48	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		17:34	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8/29/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radion/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misdiag Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:56 17:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		17:37 18:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		18:00 18:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		18:24 18:33	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B.-CB
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day-observers start Post Con Obs.
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post complete. no mammals Obs. Effort off
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: U/MC Dock Positions III and IV

Monitoring Location: Rocky pt.

Date: 8/27/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
10:30	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgait ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Observer Effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:48	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / (NONE)	SS/BC DE SD None		Pre construction obs. B-zone 3300m. All clear, no mammals obs.
E ON PRE/POST CON S M OR E OFF		07:50 10:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge CRANE starts Owe. Slings gear.
E ON PRE/POST CON S M OR E OFF		08:49 08:51	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane does in soft start on vibc.
E ON PRE/POST CON S M OR E OFF		08:51 09:03	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane is vibbing
E ON PRE/POST CON S M OR E OFF		09:07 10:31	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane is slinging Template Sections.
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Rotation VF-T.B.
E ON (VA) PRE/POST CON S M OR E OFF		10:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V connector inbound to Harbor NO ASSOC. MM Activity
E ON PRE/POST CON S M OR E OFF		11:10 11:11	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins soft start on Vib

VA = Vessel Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8-27-17

Time Effort Initiated: 07:00

Time Effort Completed: 1930

Page 2 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:15	B-P-G-E	7%	S-PC-L-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-E	7%	S-PC-L-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:33	B-P-M-E	7%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure/ (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:11 12:10	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibrating template piles
E ON VA PRE/POST CON S M OR E OFF		11:22 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V Guechar Dumping Barges in bound into Dutch Harbor No Assoc. MMA
E ON VA PRE/POST CON S M OR E OFF		12:12 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V Tag Guechar Dumping in bound to Dutch Harbor No Assoc. MMA
E ON PRE/POST CON S M OR E OFF		12:33 12:54	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging materials
E ON PRE/POST CON S M OR E OFF		12:58 13:22	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins Vibrating
E ON VA PRE/POST CON S M OR E OFF		13:35 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Cornelia make in bound to Dutch Harbor No Assoc. MMA
E ON PRE/POST CON S M OR E OFF		13:48 13:55	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Begins slinging
E ON PRE/POST CON S M OR E OFF		13:57 14:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins st sheet piles
E ON PRE/POST CON S M OR E OFF		14:10 15:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins slinging materials

VA = vessel activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8-27-17

Time Effort Initiated: 07:00

Time Effort Completed: 19:30

Page 3 of 5

Time	Visibility	Gloze	Weather Condition	Wave Height	BSS	Wind	Swell
14:15	B-P-M-G-E	①%	S-PC-L-R-F-OC-SN-IIR	③/Mod/Hvy	①	NSEW	NSEW
15:00	B-P-M-G-E	①%	S-PC-L-R-F-OC-SN-HR	③/Mod/Hvy	①	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if no sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:40	Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OK VF-CB
E ON PRE/POST CON IS (M) OR E OFF		14:50 14:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane performs SS on Vibblers
E ON PRE/POST CON S M OR E OFF		14:51 15:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane vibbing
E ON PRE/POST CON S M OR E OFF		15:34 16:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Stabbing Sheet piles
E ON PRE/POST CON S M OR E OFF		15:35 15:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts vibbing template piles
E ON PRE/POST CON S M OR E OFF		15:48 16:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		16:06 16:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts vibbing sheet piles
E ON (VA) PRE/POST CON S M OR E OFF		16:18 16:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Saint Peter in bound harbor TR-S to Trident No mm activity associated
E ON PRE/POST CON S M OR E OFF		16:48 17:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane vibbing Sheet piles

VA = Vessel Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-27-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 4 of 5

Time	Visibility	Glass	Weather Condition	Wave Height	SSC	Wind	Swell
17:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
18:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if so- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:56 17:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts Stabbing Sheet piles
E ON (VA) PRE/POST CON S M OR E OFF		16:56 17:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Halfmoon Bay inbound harbor TR-N to Trident - no mm activity associated
E ON (VA) PRE/POST CON S M OR E OFF		16:57 17:12	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Northern Patriot inbound harbor TR-N to Trident - no mm activity
E ON (VA) PRE/POST CON S M OR E OFF		16:58 17:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Prowler inbound harbor TR-NW to UMC dock - No mm activity
E ON PRE/POST CON S M OR E OFF		17:37 18:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		18:00 18:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing Sheet piles
E ON PRE/POST CON S M OR E OFF		18:24 18:33	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		18:30 18:35	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON (VA) PRE/POST CON S M OR E OFF		19:10 19:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Prowler Enters Harbor To: UMC Dock, Touch & go Leaving Harbor. NO mm activity.

VA = Vessel Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: U/MC Dock Positions III and IV
Monitoring Location: Rocky pt.
Date: 8/27/17
Time Effort Initiated: 0700
Time Effort Completed: 1930
Page 5 of 5

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if ro- sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		The crew leaves for the dry. Start post construction obs.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End post const. obs 3300-m. All clear, no mammals observed. Observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC
Date: 08/28/2017
Time Effort Initiated: 07:00
Time Effort Completed: 1930
Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00 X	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort on @ UMC for level A & B zone.
E ON PRE/POST CON S M OR E OFF		07:00 08:02	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre observe for mammals
E ON PRE/POST CON S M OR E OFF		07:24 07:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Both shore and barge crane owc shore/stabbing
E ON PRE/POST CON S M OR E OFF		07:40 08:17	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore & barge crane both stabbing sheets.
E ON PRE/POST CON S M OR E OFF		08:15 08:16	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begin mitigation with soft start/vibe.
E ON PRE/POST CON S M OR E OFF		08:17 09:21	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane continues stabbing-
E ON PRE/POST CON S M OR E OFF		08:16 09:07	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibes sheet piling.
E ON PRE/POST CON S M OR E OFF		09:07 09:24	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane ends mitigation/stabbing
E ON PRE/POST CON S M OR E OFF		09:22 10:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing sheet piling.

MARINE MAMMAL OBSERVATION RECORD #70

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/28/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
12:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Obs	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:26 10:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibing sheet piles.
E ON PRE/POST CON S M OR E OFF		10:29 11:08	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging misc. gear.
E ON PRE/POST CON S M OR E OFF		10:46 10:47	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation. VRC RP on time.
E ON PRE/POST CON S M OR E OFF	#70	10:58 11:40	D-7 Grid N or S W or E	B	TB	BL BO BR DF SA OTHER	StsL	Min: ① Max: Best:	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed ① StsL Surface outside of the 2 construction barges approx: 50 meters from
E ON PRE/POST CON S M OR E OFF	" "	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Construction, mammal was traveling north to Tide Dock. Followed south Down Spit Dock, and around Spit, turned north and
E ON PRE/POST CON S M OR E OFF	" "	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		left the 3300 B Zone Observed by V.F.F. + B.
E ON PRE/POST CON S M OR E OFF		12:10 12:23	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		The BARGE CRANE IS slinging Template sections
E ON PRE/POST CON S M OR E OFF		12:15 12:16	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE Does a soft start on the vibbe.
E ON PRE/POST CON S M OR E OFF		12:16 12:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Ume

Date: 8/28/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
14:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
18:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST <u>CON</u> S M OR E OFF		12:25 13:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP <u>ST</u> OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane starts stabbing sheet piles.
E ON PRE/POST <u>CON</u> S M <u>OR</u> E OFF		12:47 :	Grid N or S W or E		TB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP <u>ST</u> OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST <u>CON</u> S M OR E OFF		12:56 13:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP <u>ST</u> OWC NOWC / NONE	SS/BC DE SD None		shore crane starts slinging misc beams, etc.
E ON PRE/POST <u>CON</u> S OR E C		13:44 15:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP <u>ST</u> OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins mitigation vibing sheet piles.
E ON PRE/POST <u>CON</u> S M <u>OR</u> E OFF		14:27 14:29	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI <u>V</u> DR I DP <u>ST</u> OWC NOWC / NONE	SS/BC DE SD None		observer rotation.
E ON PRE/POST <u>CON</u> S M OR E OFF		15:15 16:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP <u>ST</u> OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins slinging template sections
E ON PRE/POST <u>CON</u> S M OR E OFF		15:25 16:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP <u>ST</u> OWC NOWC / NONE	SS/BC DE SD None		BARGE crane is slinging materials
E ON PRE/POST <u>CON</u> S M OR E OFF		18:00 18:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP <u>ST</u> OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts slinging materials
E ON PRE/POST <u>CON</u> S M <u>OR</u> E OFF		18:30 18:35	Grid N or S W or E		TB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP <u>ST</u> OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B - C.R.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/28/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction activity
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off!
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: Rocky pt.

Date: 8/28/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misdiag Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on!
E ON PRE/POST CON S M OR E OFF		07:00 08:02	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. obs. The ST. f. owc. Before all clear.
E ON PRE/POST CON S M OR E OFF		07:24 07:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane is stabbing sheet piles started before all clear!
E ON PRE/POST CON S M OR E OFF		07:24 07:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane is slinging materials; stabbing - per CR Before all clear!
E ON PRE/POST CON S M OR E OFF		07:40 08:17	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane is stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		07:40 08:17	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane is stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		08:15 08:16	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane does a SSV on vibbe.
E ON PRE/POST CON S M OR E OFF		08:17 09:06	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		09:07 09:24	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts stabbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV
Monitoring Location: Rocky Pt.
Date: 8/28/17
Time Effort Initiated: 0700
Time Effort Completed: 1930
Page 2 of 4

Time	Visibility	Gleaze	Weather Condition	Wave Height	BSS	Wind	Swell
10:00	B-P-M-G-E	② %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	②	NSEW	NSEW
11:00	B-P-M-G-E	② %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	②	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Exposure? (Y/N)	Behavior Change / Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:22 10:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		09:26 10:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore CRANE vibbing sheet piles
E ON (VA) PRE/POST CON S M OR E OFF		09:30 09:42	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Ocean Hope enters Harbor flies UP @ City LCD. Docks. no mammal interaction
E ON (VA) PRE/POST CON S M OR E OFF		09:45 09:54	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Flu Vanguard ties UP @ Dw. Dock. no mammal interaction
E ON PRE/POST CON S M OR E OFF		10:30 11:08	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane is slinging materials
E ON PRE/POST CON S M OR E OFF		10:30 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. VF.
E ON (VA) PRE/POST CON S M OR E OFF		10:58 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity = VA F/V Early Down in beach No Assoc. MWA
E ON (VA) PRE/POST CON S M OR E OFF		11:20 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA F/V VesterAline inbound to Dw Dock No Assoc. MWA
E ON PRE/POST CON S M OR E OFF		12:10 12:23	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane is slinging tan Plume sectors

VA = Vessel Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8-28-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:12	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
13:10	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
14:05	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgut ion Type	Exposure? (Y/N)	Behavior Change / Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:15 12:16	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane does a soft start on vib
E ON PRE/POST CON S M OR E OFF		12:16 12:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibrating sheet piling
E ON PRE/POST CON S M OR E OFF		12:25 13:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		large crane starts st sheet piles
E ON PRE/POST CON S M OR E OFF		12:56 13:20	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts slinging beam etc.
E ON PRE/POST CON S M OR E OFF		13:26	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA F/V Hickory wind in board to Dutch harbor No Assoc. MML
E ON PRE/POST CON S M OR E OFF		13:44 15:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Large crane begins vibrating
E ON PRE/POST CON S M OR E OFF		14:35	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation VF/CR
Vessel activity		14:48 14:52	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Early Dawn" outbound from DW Fuel dock. ^{NO SEA} MAMMAL.
E ON PRE/POST CON S M OR E OFF		15:15 16:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging template materials.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 08/28/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	DSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OK E OFF		15:25 16:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane is slinging materials.
Vessel activity		15:42 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Pacific Viking" outbound No sea mammal act.
Vessel activity		15:50 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug outbound, No sea mammal activity associated.
Vessel activity		16:30 16:42	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Vesteraalen" leaving DW Fuel. Outbound.
Vessel activity		18:10 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Arila" out- bound. NO mammal activity associated.
E ON PRE/POST CON S M OK E OFF		18:00 18:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slings materials.
E ON PRE/POST CON S M OK E OFF		18:25 :	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OK E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time leaves site for day, start post const. obs.
E ON PRE/POST CON S M OK E OFF		19:30 :	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End Post const. obs. 3300 m. Zone all clear no mammals observed, observer effort off.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 08/29/2017

Time Effort Initiated: 06:55

Time Effort Completed: 19:30

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:05	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:05	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End thru if cont.)	WF/ Gold #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort on
E ON PRE/POST CON S M OR E OFF		06:55 08:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre-construction activity.
E ON PRE/POST CON S M OR E OFF		07:30 08:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging misc gear.
E ON PRE/POST CON S M OR E OFF		08:51 09:19	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No use of crane. Crew is welding, etc
E ON PRE/POST CON S M OR E OFF		09:25 09:26	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane uses vib hammer - soft start
E ON PRE/POST CON S M OR E OFF		09:26 10:20	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibes sheet piling.
E ON PRE/POST CON S M OR E OFF		10:33 10:45	Grid N or S W or E		CR MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		11:09 11:27	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibbing round pilings
E ON PRE/POST CON S M OR E OFF		11:45 12:10	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging materials

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8.29.2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:05	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
14:53	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LJ if re-sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change / Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:11 13:00	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		12:30 :	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation at UMC
E ON PRE/POST CON S M OR E OFF		13:07 13:08	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start vibrate w/ barge crane
E ON PRE/POST CON S M OR E OFF		13:08 13:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrates sheet piles.
E ON PRE/POST CON S M OR E OFF		14:34 :	Grid N or S W or E		CR VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation.
E ON PRE/POST CON S M OR E OFF		14:40 15:27	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins OWC
E ON PRE/POST CON S M OR E OFF		15:30 16:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts st sheet piles
E ON PRE/POST CON S M OR E OFF		16:56 16:57	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane performs a SSV
E ON PRE/POST CON S M OR E OFF		16:58 18:02	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibrating sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-29-17

Time Effort Initiated: 655

Time Effort Completed: 19:30

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:08	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	0-1	0-1	NSEW	NSEW
:	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos ure? (Y/N)	Behavior Change / Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:06 18:35	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins st sheet piles
E ON PRE/POST CON S M OR E OFF		18:30 18:35	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation VF → CR
E ON PRE/POST CON S M OR E OFF		18:40 18:54	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibes sheet piling.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction activity.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8.29.2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact PHE #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive on scene at level B (Rocky P.) unable to begin to clear due to lack of light
E ON PRE/POST CON S M OR E OFF		07:00 08:05	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called all clear for both levels A/B zones
E ON PRE/POST CON S M OR E OFF		07:30 08:50	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging misc. gear
E ON VA PRE/POST CON S M OR E OFF		08:33 08:43	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Patricia Lee inbound heading SW, the NW towards North Pacific Fuel D. no mammals
E ON VA PRE/POST CON S M OR E OFF		08:40 08:54	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Arctic Wind inbound heading SW towards DW Dock, no mammal related activity obs.
E ON PRE/POST CON S M OR E OFF		08:51 09:19	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No use of crane, crew is welding etc
E ON PRE/POST CON S M OR E OFF		09:25 09:26	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane uses vib hammer SS
E ON PRE/POST CON S M OR E OFF		09:26 10:20	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibes sheet Piling
E ON VA PRE/POST CON S M OR E OFF		09:39 09:46	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Patricia Lee heads S from NPF to Delta Western Dock no mammals sighted

* VA = Vessel Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8.29.2019

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSE	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		MM VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation at Rocky Point
E ON PRE/POST CON S M OR E OFF		11:09 11:27	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge crane begins Vibing Round Piles
E ON PRE/POST CON S M OR E OFF		11:45 12:10	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge crane begins owc
E ON PRE/POST CON S M OR E OFF		11:47	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity = VA F/V commander in bound to No Assoc MAM A observed
E ON PRE/POST CON S M OR E OFF		12:11 13:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins st sheet Piles
E ON PRE/POST CON S M OR E OFF		12:47	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA. F/V Northern Jager in bound No Assoc. MAM A
E ON PRE/POST CON S M OR E OFF		13:07 13:08	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Prefing SSV
E ON PRE/POST CON S M OR E OFF		13:08 13:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins Vibing sheet Pile
E ON PRE/POST CON S M OR E OFF		13:09	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Anthem into dock No Assoc. MAM A observed

VA = vessel activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 8-29-17

Time Effort Initiated: 07:00

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	(L)Mod/Hvy	0-1	(N)SE(W)	(N)SE(W)
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	(L)Mod/Hvy	1	(N)SE(W)	(N)SE(W)
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	(L)Mod/Hvy	1	(N)SE(W)	(N)SE(W)
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	(L)Mod/Hvy	1-2	(N)SE(W)	(N)SE(W)
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Inspection File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA ^{small} black knight two FIV inbound from Bobby Stier dock harbor into Duffin harbor. No Assoc MMA
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation VF - CR
E ON PRE/POST CON S M OR E OFF		14:40 15:27	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins OWC.
Vessel activity		15:10 15:25	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Ocean Explorer" inbound headed to Duffin dock. No mammal activity.
E ON PRE/POST CON S M OR E OFF		15:30 16:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts stabbing sheet piling.
Vessel activity		16:20 16:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		P/V "Kunitak" outbound from USCG dock. No mammal.
E ON PRE/POST CON S M OR E OFF		16:56 16:57	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane performs soft start-mitigation
E ON PRE/POST CON S M OR E OFF		16:58 18:02	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibrating sheet piles
Vessel activity		17:02 17:12	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		P/V "Golden Alaska" outbound. No mammal activity.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV
Monitoring Location: Rocky Point
Date: 08/29/2017
Time Effort Initiated: 0700
Time Effort Completed: 1930
Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
vessel activity		17:45 17:59	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Patricia L" outbound. NO mammal activity obs.
E ON PRE/POST CON S M OR E OFF		18:06 18:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing sheet piling.
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		CR VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		18:40 18:54	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibrating sheet piling
E ON (VA) PRE/POST CON S M OR E OFF		18:44 18:54	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pacific mariner inbound to DW dock NO MMA observed
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Return post const. observations
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UML

Date: 08/30/2017

Time Effort Initiated: 06:55

Time Effort Completed: 1900

Page 1 of 3

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure/ (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:55	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		effort on for Level A & B Q UMC site
E ON PRE/POST CON S M OR E OFF		06:55 08:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre-construction activity.
E ON PRE/POST CON S M OR E OFF		08:03 09:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		09:27 09:28	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibe hammer - soft start
E ON PRE/POST CON S M OR E OFF		09:28 10:29	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane is vibing sheet piling.
E ON PRE/POST CON S M OR E OFF		10:38	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
E ON PRE/POST CON S M OR E OFF		10:38 11:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC possibly on break - NOWC - upland gravel walk only
E ON PRE/POST CON S M OR E OFF		11:00 11:13	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC back-welding on Template slinging materials
E ON PRE/POST CON S M OR E OFF		11:15 11:43	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts vibbing sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: umc
Date: 8-30-17
Time Effort Initiated: 0655
Time Effort Completed: 1900
Page 2 of 3

Time	Visibility	Cloud	Weather Condition	Wave Height	ESS	Wind	Swell
13:15	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	6/Mod/Hvy	1	NSEW	NSEW
14:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy		NSEW	NSEW

Event Code	Height (1 or 1.1 if no data)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/ Comments/ Emission Activity/ Vessel ID# or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:45 12:08	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging & stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		12:10 12:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging materials
E ON PRE/POST CON S M OR E OFF		12:29 13:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slabbing Sheet piles
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:58 13:59	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane performing SSV
E ON PRE/POST CON S M OR E OFF		14:00 14:47	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:51 16:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		16:13 16:14	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by performing SSV on Vibro

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Umc

Date: 8-30-17

Time Effort Initiated: 0655

Time Effort Completed: 1900

Page: 3 of 3

Time	Visibility	Cloud	Weather Condition	Wave Height	DBS	Wind	Swell
16:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Light # (1 or 1.1 if no light)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Region/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Customization Type	Identif ica Type	Expo- sure? (Y/N)	Behavior Changes/ Response to Activity/Comments/ Human Activity/Vessel Effect # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:14 17:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is vibrating sheet piles on cell #13
E ON PRE/POST CON S M OR E OFF		17:30 17:54	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC took coffee break + tightened lines on Barge to Barge
E ON PRE/POST CON S M OR E OFF		18:00 --:--	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC slinging materials with Barge Crane
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		CB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:30 19:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post const observation No MM observed
E ON PRE/POST CON S M OR E OFF		19:00 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: RP

Date: 8-30-17

Time Effort Initiated: 0700

Time Effort Completed: 1900

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
07:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on Arrive Onsite RP @0653 (Level B zone)
E ON PRE/POST CON S M OR E OFF		07:00 08:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-can Obs. CR called all clear @0805 Text + Chris
E ON/VA PRE/POST CON S M OR E OFF		07:40 07:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Storm Petrel inbound harbor TR-W to D/dock No mm activity assoc.
E ON PRE/POST CON S M OR E OFF	71	07:42 08:22	E14 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: 1 Best:	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	HSEA sighted SA, hopping off RP Seen @ 0742 and one more time @ 0754 - monitored 20 more minutes and it did not surface - no noticeable behavioral changes to ST
E ON PRE/POST CON S M OR E OFF		08:03 09:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane begins Stabbing Sheet piles Before All Clear
E ON/VA PRE/POST CON S M OR E OFF		09:01 09:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Sovereignty inbound harbor TR-N to Trident dock. No mm activity associated
E ON/VA PRE/POST CON S M OR E OFF		09:05 09:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U AK Pearl outbound from D/dock TR-E around RP to Alyeska Channel - no mm activity
E ON/VA PRE/POST CON S M OR E OFF		09:09 09:27	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Sunset Bay inbound harbor TR-N to Trident dock - no mm activity assoc.
E ON PRE/POST CON S M OR E OFF		09:27 09:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane initiates mitigation by performing SS on Vibro

VA = vessel Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 08-30-17

Time Effort Initiated: 0700

Time Effort Completed: 1900

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misdi- agnat ion Type	Expo- sure/ (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:28 10:29	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration Sheet piles
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		CB AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		10:38 11:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC possibly on break
E ON PRE/POST CON S M OR E OFF		11:00 11:13	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slings materials; welding template
E ON PRE/POST CON S M OR E OFF		11:15 11:43	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		11:45 12:08	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		12:10 12:28	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slings gear materials
E ON PRE/POST CON S M OR E OFF		12:29 13:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing sheet piles
E ON (VA) PRE/POST CON S M OR E OFF		13:13	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tiny tug inbound (can't read name) to NPF dock Undaunted No assoc. mm activity.

VA = Vessel Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: Rocky Point
Date: 8-30-17
Time Effort Initiated: 0700
Time Effort Completed: 1900
Page 3 of 4

Time	Visibility	Glaze	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:58 13:59	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane soft start vibrate
E ON PRE/POST CON S M OR E OFF		14:00 14:47	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		AS VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		14:42	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity = VA F/V Pacific Flacker in bound Dutch Harbor No Assoc MAM
E ON PRE/POST CON S M OR E OFF		14:51 16:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge crane starts st sheet piles
E ON PRE/POST CON S M OR E OFF		15:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA: F/V Golden Dawn in bound to Dutch Harbor NO ASSOC MMA observed
E ON PRE/POST CON S M OR E OFF		16:02	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA: F/V American Eagle in bound to DW Dock No Assoc MMA
E ON PRE/POST CON S M OR E OFF		16:13 16:14	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Barge crane Pre-fallout SSV
E ON PRE/POST CON S M OR E OFF		16:14 17:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge crane starts vibrating sheet piles

VA = vessel activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky point

Date: 8-30-17

Time Effort Initiated: 07:00

Time Effort Completed: 1900

Page 1 of 4

Time	Visibility	Cloud	Weather Condition	Wave Height	SSS	Wind	Swell
17:05	B-P-M-G-E	0%	S-P-L-R-F-OC-SN-HR	L/Mod/Hvy	1	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if no sight)	Time/Dur (Start/End time if cont.)	Grid N or S W or E	Zone/ Bathymetry/ Inupiat File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Countdown Type	Mitigate Type	Response (V/N)	Behavior Change/ Response to Activity/Comments/Observer Activity/Vessel ID # or Name/ Visibility Notes
EON PRE/POST CON S M OR E OFF	17:05		Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA Fly Alaskan Trojan in bound to NPF dock No Assoc. MMA observed
EON PRE/POST CON S M OR E OFF	17:30 17:54		Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC took a break tighten lines on barge
EON PRE/POST CON S M OR E OFF	18:00		Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Slinging materials w/ barge crane
EON PRE/POST CON S M OR E OFF	18:30		Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OR - observer Rotation
EON PRE/POST CON S M OR E OFF	18:30 19:00		Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day - Start Post- Con observations
EON PRE/POST CON S M OR E OFF	19:00		Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off
EON PRE/POST CON S M OR E OFF	:		Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF	:		Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF	:		Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: UAC

Date: 8-31-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 2

Time	Visibility	Cloud	Weather Condition	Wave Height	DBS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
07:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if so- right)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Random/ Inquest File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure/ (Y/N)	Behavior Change/ Activity/Comments/Observer Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite UAC Level A zone @ 0653
E ON PRE/POST CON S M OR E OFF		07:00 08:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre-con Obs Call AUClear to marc @ 08:03
E ON PRE/POST CON S M OR E OFF		07:40 10:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging materials OWC - before AUClear
E ON PRE/POST CON S M OR E OFF	73	09:10 10:05	D-7 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL Sighted TR - N past const. barge - 75' off Barge Notified TMC to DE any Vibbing - agreed. Watched him.
E ON PRE/POST CON S M OR E OFF	" "	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		monitoring closely to head of t out again on spit side w/ mmo TB watching him go outside spit & out of B zone
E ON PRE/POST CON S M OR E OFF		10:41	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		10:50 10:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane prepares mitigation by preparing SS on Vibber
E ON PRE/POST CON S M OR E OFF		10:51 11:43	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane is now Vibbing sheet piles
E ON PRE/POST CON S M OR E OFF		12:00 12:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Slinging materials on BARGE & To shore.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 8-31-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	15%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	5%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	8%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DF ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B.-C.B.
E ON PRE/POST CON S M OR E OFF		12:55 16:18	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC moving barge and working onshore
E ON PRE/POST CON S M OR E OFF		14:30 14:35	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:50 18:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts slinging materials.
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day Begin Post-Con observations
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		- no mammals sighted Obs. done for day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 8/31/17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on! ARRIVE on site @ 7:55 am
E ON PRE/POST CON S M OR E OFF		07:00 08:03	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DR SD None		All clear with C.B. @ ume Dock, 3300m. All Clear. No mammals observed
E ON PRE/POST CON S M OR E OFF		07:40 10:40	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Doing over water const. Before All clear.
E ON PRE/POST CON S M OR E OFF	72	08:34 09:00	E-14 Grid N or S W or E	B	TB	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): TR.	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed 1 small STSL @ Tip of Rocky Pt. Heading to APL (Traveling) surfaced twice and went down. Did NOT Resurface No interaction.
E ON PRE/POST CON S M OR E OFF	VA	08:50 09:20	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		USCG Cutter Enters Harbor & ties up @ City USCG Dock. No mammal interaction, (Sherman)
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		TB AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.S. AS.
E ON PRE/POST CON S M OR E OFF		10:50 10:51	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane soft start on viber
E ON PRE/POST CON S M OR E OFF		10:51 11:43	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane Vibing sheet piles
E ON PRE/POST CON S M OR E OFF		12:00 12:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slings materials

VA = vessel activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 8/31/2017

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #?	Obs.	Sighting Obs	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON (VA) PRE/POST CON S M OR E OFF		12:25 12:40	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		F/V Kema Sue inbound to Spit Dock No assoc. mm activity.
E ON (VA) PRE/POST CON S M OR E OFF		12:55 16:18	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		TMC moving barge, working ashore
E ON (VA) PRE/POST CON S M OR E OFF		13:35 :	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Tug Gretchen Dunlap ^{to assist} inbound to Swiftwater No assoc. mm activity.
E ON (VA) PRE/POST CON S M OR E OFF		13:40 14:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Small sailing vessel Rose inbound to then out again to No assoc. mm activity. ^{outer harbor}
E ON (VA) PRE/POST CON S M OR E OFF		14:30 :	Grid N or S W or E		AS CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Observer rotation.
E ON (VA) PRE/POST CON S M OR E OFF		15:55 16:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Tramper AK Reefer assisted by Tug millium Falcon exits harbor TR-S the North out to Sea - no mm activity
E ON (VA) PRE/POST CON S M OR E OFF		16:35 16:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Cargo Ship Coastar Navigator inbound harbor from Unalaska TR-N to KPH dock No mm associated
E ON (VA) PRE/POST CON S M OR E OFF		16:45 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		FV Half moon Bay inbound harbor TR-N to Icicle dock No mm activity assoc.
E ON (VA) PRE/POST CON S M OR E OFF		17:50 18:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Barge crane starts slinging materials

VA = Vessel Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 8-31-17

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 3 of 3

Time	Visibility	Cloud	Weather Condition	Wave Height	DBS	Wind	Swell
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-S-E-W	N-S-E-W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if so- sight)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Signaling Obs	Reaction	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E		OB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc, Ends work DAY & leaves. Start post construction obs.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off NO mammals observed 3300 m. zone.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10/17/17

Time Effort Initiated: 08:30

Time Effort Completed: 1940

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	7	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	4	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
11:00	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	4-5	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort on @ Rocky Point - 3,300 M @ Level B.
E ON PRE/POST CON S M OR E OFF		08:30 09:51	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre construction activity i.e. Extreme wind gusts
E ON PRE/POST CON S M OR E OFF		09:00 09:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC stabs piles next to barge temporarily.
E ON PRE/POST CON S M OR E OFF		09:45 12:02	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TA Barge crane slinging over H2O. Building temp.
E ON (VA) PRE/POST CON S M OR E OFF		11:16	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V outbound, visibility poor, no uma associated.
E ON PRE/POST CON S M OR E OFF		11:24 11:25	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins mitigation w/ vibra compactor
E ON PRE/POST CON S M OR E OFF		11:25 19:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibra compaction in upland area.
			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation/RP
E ON PRE/POST CON S M OR E OFF		12:21 13:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24' pilings.

Rain
trail

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10/17/17

Time Effort Initiated: 08:30

Time Effort Completed: 1940

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:48	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	4	NSEW	NSEW
15:06	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3-4	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
16:50	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CR VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:14 16:06	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating in/out 24" piles in upland area
E ON PRE/POST CON S M OR E OFF		16:20 17:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging materials over water
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	170	16:50 17:05	E16 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Harbor Seal milling off Rocky Point during owc sunk below surface, sighted twice in 10-15 minutes
			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		moved slightly to the south to E17, did not see it after 17:05. Exhibiting normal behavior
E ON PRE/POST CON S M OR E OFF		17:16 19:06	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibrating in 24" round pillings in upland area - 10/35m
E ON PRE/POST CON S M OR E OFF		18:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Chukchi Sea assist Fuel Barge from DW dock TR-NE to Bay Buoy - No mm activity involved
E ON PRE/POST CON S M OR E OFF		18:14 18:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Aleutian Lady outboard DW dock TR-E out to Sea No mm Activity associated.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-17-17

Time Effort Initiated: 0830

Time Effort Completed: 1940

Page 3 of 3

Time	Visibility	Class	Weather Condition	Wave Height	DSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
19:40	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:10 19:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con Observation S No mammals sighted
E ON PRE/POST CON S M OR E OFF		19:40 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-18-17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page: 1 of 2

#171

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:40	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dor (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive OnSite @ UMC - 0826 - Level A zone
E ON PRE/POST CON S M OR E OFF		08:30 09:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con obs - No sightings - Call All Clear @ 0925
E ON PRE/POST CON S M OR E OFF		08:30 15:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane doing Vibra Compaction in uplands - 10m/35m B zone
E ON PRE/POST CON S M OR E OFF		08:30 13:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging over water - 10m A zone
E ON PRE/POST CON S M OR E OFF	171	10:40 10:46	B-11 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): SW	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted STSL by head SW-N past a flock of (B-11) ducks, swimming playfully on back, sighted 3 times
			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TR-N along Shore + past Gyr Falcon, lost sight here Swam N toward construction
			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		behavior seems normal, no noticeable behavior changes to construction - vibra/owc
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-18-17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
18:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:53 16:32	Grid N or S W or E		OB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging materials over water
E ON PRE/POST CON S M OR E OFF		16:05 18:40	Grid N or S W or E		OB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts Vibra Compaction in uplands
E ON PRE/POST S M OR E OFF		16:30	Grid N or S W or E		OB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:38 16:55	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge CRANE starts slabbing a 24" pile in uplands.
E ON PRE/POST CON S M OR E OFF		17:00 17:01	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane does an SSV on the vibbe.
E ON PRE/POST CON S M OR E OFF		17:01 17:45	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts vibbing down 24" pile in upland.
E ON PRE/POST CON S M OR E OFF		18:00 18:45	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane begins slinging template sections owc.
E ON PRE/POST CON S M OR E OFF		18:45 19:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew stops work & leaves site. Start post const. obs.
E ON PRE/POST CON S M OR E OFF		19:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10m E 3300 m. Zones All clear, no mammals observed! Observer effort off!

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10/18/17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Sevill
08:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	2	NSEW	NSEW
09:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	2	NSEW	NSEW
11:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0-1	NSEW	NSEW
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	2	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	2	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	2	NSEW	NSEW

Event Code	Sight# (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mislead ion Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Effort on vibber compaction ongoing upon arrival on site, on site @ 0825
E ON PRE/POST CON S M OR E OFF		08:30 09:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Start Precon. Obs. Chris @ time notified by C.B. @ UMC. All clear,
E ON PRE/POST CON S M OR E OFF		08:30 15:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Shore crane doing vibra compaction, 10m, 35m zones in use, For stslf Harbor seals.
E ON PRE/POST CON S M OR E OFF		08:30 13:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		BARGE Crane Slings OWC. (man BASKETT) 10m f 3300m zones.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Rotation, TB & VF.
E ON PRE/POST CON S M OR E OFF		14:23 14:27	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Millennium falcon in Boreal escort USCG Healy out of Alaska
E ON PRE/POST CON S M OR E OFF		14:53 16:32	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Barge crane Slings materials over water
E ON PRE/POST CON S M OR E OFF		16:11 16:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		VA USCG 777 TUG Assist inbound to CG Dock NO Marine mammal Activity
E ON PRE/POST CON S M OR E OFF		16:05 18:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Shore crane start vibra compaction in uplands

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point #172

Date: 10-18-17

Time Effort Initiated: 08:30

Time Effort Completed: 1915

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:38 16:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing 24" round piling
E ON PRE/POST CON S M OR E OFF		17:00 17:01	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a SS on Vibe
E ON PRE/POST CON S M OR E OFF		17:01 17:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing 24" round piling
E ON PRE/POST CON S M OR E OFF	VA	17:20 17:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FV Paulof inbound hauler TR-W to PW dock, no marine mammal activity associated.
E ON PRE/POST CON S M OR E OFF		18:00 18:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging Templet sections - over water
E ON PRE/POST CON S M OR E OFF	172	18:00 19:15	E16 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	2 RE	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted 2 Harbor Seals in same general area doing the same behavior - resting or floating on surface
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		not moving in any one direction, just milling about here, they were vibbing 15 minutes ago but not
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		now, when not resting they are in upright position sometimes looking up at me

Time: 1915 update: 2 HSEA still
in same area, doing the same
activities - resting, looking

→ on hill, one has light coloring
on body, one has a very dark
head, behavior seems uninterrupted
by construction

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-18-17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	18:20 18:32	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity - small skiff inbound harbor TR-N to Magare/Resolve marine. No mm activity associated
E ON PRE/POST CON S M OR E OFF	POST	18:45 19:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con. Obs Only 2 HSEA team Sighting # 172 observed
E ON PRE/POST CON S M OR E OFF	VA	18:50 19:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Makushin Bay inbound harbor TR-NW to Resolve marine. No mammals
E ON PRE/POST CON S M OR E OFF		19:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC
Date: 10-19-17
Time Effort Initiated: 0830
Time Effort Completed: 2100
Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W
09:00	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W
09:30	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W
10:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W
12:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W
14:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on Arrive onsite umc @ 0824
E ON PRE/POST CON S M OR E OFF		08:30 09:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Can Obs No mammals sighted Called All Clear to Chris 0930
E ON PRE/POST CON S M OR E OFF		08:30 11:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging OWC - Before All Clear
E ON PRE/POST CON S M OR E OFF		08:30 09:44	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane doing Vibra Compaction in uplands - Before All Clear
E ON PRE/POST CON S M OR E OFF		10:40 13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane doing Vibra Compaction in upland area
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation (Vibra-Compaction)
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Con't. →
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-19-17

Time Effort Initiated: 0830

Time Effort Completed: 2100

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
20:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:15 15:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing in round pillings
E ON PRE/POST CON S M OR E OFF		15:51 15:52	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a SS on Vibe
E ON PRE/POST CON S M OR E OFF		15:52 17:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration 24" & 30" round pillings in water
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:24 17:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Begins stabbing 24" Piles
E ON PRE/POST CON S M OR E OFF		18:02 20:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Starts vibrating 24" Piles Down.
E ON PRE/POST CON S M OR E OFF		20:30 21:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-con. obs.
E ON PRE/POST CON S M OR E OFF		21:00	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO mammals observed, 10m & 3300 m. zone all clear, observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/19/17

Time Effort Initiated: 0830

Time Effort Completed: 200

Page 1 of 3

Time	Visibility	Glare	Weather Condition 76	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	2 %	S-PC-L-R-F-OC-SN-HR	1 1/2 Mod/Hvy	2	NSEW	NSEW
11:00	B-P-M-G-E	2 %	S-PC-L-R-F-OC-SN-HR	1 1/2 Mod/Hvy	2	NSEW	NSEW
13:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	1 1/2 Mod/Hvy	2	NSEW	NSEW
14:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	1 1/2 Mod/Hvy	2	NSEW	NSEW
15:00	B-P-M-G-E	2 %	S-PC-L-R-F-OC-SN-HR	1 1/2 Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1 1/2 Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mistake ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on! on site @ 0820
E ON PRE/POST CON S M OR E OFF		08:30 09:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. obs. 3300 m. zone! All clear, NO mammals observed. All clear to Chris/CB@ume.
E ON PRE/POST CON S M OR E OFF		08:30 11:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging owl. Before All clear,
E ON PRE/POST CON S M OR E OFF		08:30 09:44	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Doing or Vibration in upland Before All clear,
E ON PRE/POST CON S M OR E OFF		10:40 13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Restarts Vibration
E ON PRE/POST CON S M OR E OFF	# 173	10:54 11:00	F-14 Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER	StSL	Min: Max: Best:	Beh code(s): FO.	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed ① StSL FO. He was thrashing an octopus into smaller pieces & Eating it. Behavior was Normal. No Behavioral Changes.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	VA	13:30 13:42	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Alaskan Leader inbound to ice/cicle No MM Activity observed
E ON PRE/POST CON S M OR E OFF		15:15 15:48	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		barge crane 1st Round filling

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point #174

Date: 10-19-17

Time Effort Initiated: 08:30

Time Effort Completed: 2100

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:50	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
16:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
16:58	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
17:01	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW

Vessel Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:51 15:52	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Perform a SSV mitigation
E ON PRE/POST CON S M OR E OFF		15:52 17:10	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibrating Round Pile both 24" + 30"
E ON PRE/POST CON S M OR E OFF		16:30 :	Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	VA	16:36 14:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FA towing a zodiac skiff inbound harbor TR-NW to resolve maine. No mm activity associated
E ON PRE/POST CON S M OR E OFF	174	16:58 17:02	E14 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	HSEA off RP spyhopping & looking at me - dark headed one, seen many times in this area, seen head only twice this time and could not locate him. No noticeable behavior changes to vibrating
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	175	17:01 19:20	E14 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Second HSEA in same area as #174 - this is the really light colored one w/ lots of spots, spyhopping and looked at me, swam W around point, looked at me again, swam under water for a long time to C-15, turned around and started TR-E back to RP - all while under water. At 1800 still there, very intrigued by my presence
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

19:20 Update: checked
and did not see HSEAhigh up on the hill, milling back +
forth in same area, easily seen
underwater due to light color

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-19-17

Time Effort Initiated: 0830

Time Effort Completed: 2100

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N 03 W	N-SE W
20:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N 03 W	N-SE W
21:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N 03 W	N-SE W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N SE W	N SE W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N SE W	N SE W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N SE W	N SE W

Event Code	Sight # (1 or L1 if no- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:24 17:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts stabbing 24" round piles
E ON PRE/POST CON S M OR E OFF		18:02 20:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing 24" round pillings in the dry 10/35 m radii
E ON PRE/POST CON S M OR E OFF		20:30 21:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con No mammals obs
E ON PRE/POST CON S M OR E OFF		21:00 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: umc
Date: 10-20-17
Time Effort Initiated: 0830
Time Effort Completed: 1715
Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive onSite @ 0823 Level A zone
E ON PRE/POST CON S M OR E OFF		08:30 09:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Ops Nothing Sighted Call Ail Clean to Marc
E ON PRE/POST CON S M OR E OFF		08:30 09:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slings Over water
E ON PRE/POST CON S M OR E OFF		09:05 09:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts Vibra Compaction in upland area
E ON PRE/POST CON S M OR E OFF		09:29 09:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a softstart on Vibe
E ON PRE/POST CON S M OR E OFF		09:30 13:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibrating 24" round pillings in dry area 10/35 m
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:36 16:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slings overwater

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-20-17

Time Effort Initiated: 0830

Time Effort Completed: 1715

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:45	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Secures the Crane For the DAY, start post const obs.
E ON PRE/POST CON S M OR E OFF		17:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10m & 3300 m. zones All clear, no mammals observed, observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10-20-17

Time Effort Initiated: 0830

Time Effort Completed: 1715

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
10:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
12:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
13:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
14:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
:	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misdiag Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on. 3300m. On site @ 0820
E ON PRE/POST CON S M OR E OFF		08:30 09:28	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start pre-con obs. 3300m. Zone All clear! notified mark @ time. All clear 0928
E ON PRE/POST CON S M OR E OFF		08:30 09:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane slinging OWC. Before all clear.
E ON PRE/POST CON S M OR E OFF		09:05 09:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane doing vibra compaction in upland Area
E ON PRE/POST CON S M OR E OFF		09:29 09:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Does A. SSV on vibber.
E ON PRE/POST CON S M OR E OFF		09:30 13:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane vibbing 24" Piles in Dry upland.
E ON PRE/POST CON S M OR E OFF		11:35 11:52	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/t Ariëa Enters Harbor Ties up @ KD H. Dock.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:23 15:10	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VB MIV Samson container Barge dock Tag Assist No MMA observed

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10-20-17

Time Effort Initiated: 08:30

Time Effort Completed: 1915

Page 2 of 2

Time	Visibility	Glaze	Weather Conditions	Wave Height	SSS	Wind	Swell
15:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
17:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Right # (1 or L1 if no- side)	Time/Date (Start/End time if cont.)	WT/ Old #/ Dir of travel	Zone/ Region/ Impact Pile #	Obs.	Sighting Obs	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure (Y/N)	Behavior Change/ Response to Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:36 16:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging over H2O - template pieces
E ON PRE/POST CON S M OR E OFF	176	15:15 15:25	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): LO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL head above H2O for a min the down: swimming along shore then gone
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Weather Bad - TMC done early. Start Post Can TMC dirt work only
E ON PRE/POST CON S M OR E OFF		17:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effect off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-21-17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
09:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
09:22	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
10:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
11:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
12:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on Arrive Onsite 0824 Level A zone-
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs One mammals sighted Called All Clear @ 0924
E ON PRE/POST CON S M OR E OFF	177	09:22 15:13	Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): HO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL hauled out on Bay Buoy sleeping, no noticeable changes to behavior as Trmc started to Vibe in dry at 11:17. mmo TB@ umc sighted STSL as it left buoy diving East towards Spit beach - jumped off when
E ON PRE/POST CON S M OR E OFF		09:25 10:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging materials over water Building Template
E ON PRE/POST CON S M OR E OFF		10:12 10:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slabbing in 24" round pillings in water
E ON PRE/POST CON S M OR E OFF		11:16 11:17	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a soft start on the Vibe
E ON PRE/POST CON S M OR E OFF		11:17 14:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration in 24" round pilling in the dry - 10/35 m
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation 10/35 m.

Seagull landed
on buoy. Slept mostly while on buoy

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10/21/17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	<input checked="" type="checkbox"/>	NSEW	NSEW
16:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	<input checked="" type="checkbox"/>	NSEW	NSEW
18:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	<input checked="" type="checkbox"/>	NSEW	NSEW
19:15	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	<input checked="" type="checkbox"/>	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Insect Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misdiag- nion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:02	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Begins Slings ing, OWC.
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:45 19:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con Obs No issues to report TMC done for day
E ON PRE/POST CON S M OR E OFF		19:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/21/17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	2	NSEW	NSEW
09:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	2	NSEW	NSEW
10:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	2	NSEW	NSEW
12:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	2	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Migrant ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on 3300 m zone, on site @ 0830
E ON PRE/POST CON S M OR E OFF		08:30 09:24	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre const. obs, 3300 m. zone. 1 stsl sited 134 CB - WMC. on Boat. called all clear to marc - CB.
E ON PRE/POST CON S M OR E OFF		09:25 10:10	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane stinging, OWC. Building template.
E ON PRE/POST CON S M OR E OFF		10:12 10:45	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane stabbing - standing up 24" piles in the water.
E ON PRE/POST CON S M OR E OFF		11:16 11:17	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Dose A. SSV on vib, 24" piles (crane rail piles) in the dry
E ON PRE/POST CON S M OR E OFF		11:17 14:55	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts vibrating down 24" crane rail piles. in the dry
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON VA PRE/POST CON S M OR E OFF		15:12 15:23	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Viekoda Bay inbound harbor TR-W to Delta Western dock - no mm activity assoc.
E ON PRE/POST CON S M OR E OFF		15:02 18:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stinging OWC

VA = vessel activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-21-17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
19:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:45 19:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TAC. Secures the crane for the night. Start post const. obs. 3300m. Zone
E ON PRE/POST CON S M OR E OFF		19:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear no mammals observed. Observer Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC
Date: 10-22-17
Time Effort Initiated: 0830
Time Effort Completed: 1930
Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	(B) P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W
09:00	(B) P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W
09:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W
10:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W
12:00	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W
14:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	N-SE-W	N-SE-W

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
(E) ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. effort ON arrive onsite umc 0824 Level A zone.
(E) ON PRE/POST CON S M OR E OFF		08:30 09:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Ops No mammals sighted TMC vibrating before A/C clear
(E) ON PRE/POST CON S M OR E OFF		08:25 09:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing 24" round pillings in water as I arrived
(E) ON PRE/POST CON S M OR E OFF		09:15 09:16	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a SS on vibe.
(E) ON PRE/POST CON S M OR E OFF		09:16 10:57	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibrating 24" pillings in dry before A/C clear 10/35m
(E) ON PRE/POST CON S M OR E OFF		11:40 12:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane plugging over water - pillings 10/3300m
(E) ON PRE/POST CON S M OR E OFF		12:00 12:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing in 24" round pillings in water 10/3300m
(E) ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
(E) ON PRE/POST CON S M OR E OFF		14:08 14:09	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Does a SSV on vibe. 24" crane pile

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: unc

Date: 10/22/17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
19:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:09 16:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins vibrating
E ON PRE/POST CON S M OR E OFF		14:20 18:45	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Begins vibration in Dry! uplands.
E ON PRE/POST CON S M OR E OFF		16:30 :	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for today Starting Post-Can No mammals sighted
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort OFF
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky pt.

Date: 10/22/17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
13:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

*Snow/visibility issues but both A+B zones are clear

Event Code	Sight # (1 or L1 if co- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midget ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on 3300 m. zone. Time. Stabbing Before All clear. On site 0830.
E ON PRE/POST CON S M OR E OFF		08:30 09:28	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-con. OBS. 3300 m. NO mammals observed. Time. Vibbing Before All clear.
E ON PRE/POST CON S M OR E OFF		08:25 09:10	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing 24" Piles, on arrival!
E ON PRE/POST CON S M OR E OFF		09:15 09:16	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Does A. SSV on viber, 24" piles (crane rail)
E ON PRE/POST CON S M OR E OFF		09:16 10:57	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins Vibbing 24" piles Down. @ crane Rail, In Dry Before All clear.
E ON PRE/POST CON S M OR E OFF		11:40 12:03	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Slings 24" Rail Piles.
E ON PRE/POST CON S M OR E OFF		12:06 12:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Stabbing 24" crane Rail Piles.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:00 13:09	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Wizard inbound harbor TR-W to Delta Western dock No mm activity assoc.

MARINE MAMMAL

OBSERVATION RECORD*

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-22-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 2 of 2 178

Time	Visibility	Gate	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
14:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW

*SNOW/Visibility Issues But A+B zones both clear

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:08	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a Soft Start on Vibe
E ON PRE/POST CON S M OR E OFF		14:09	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing 24" round crane rail piles in dry 10/35m
E ON PRE/POST CON S M OR E OFF		14:20	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane begins Vibra Compaction in dry upland area 10/35m
E ON VA PRE/POST CON S M OR E OFF		16:15	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Vlekoda Bay outbound harbor from DW dock, TR-E, no mm activity assoc.
E ON PRE/POST CON S M OR E OFF		16:30	Grid		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00	Grid		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time ties up the crane for the day, start Post Const. Obs.
E ON PRE/POST CON S M OR E OFF		19:30	Grid		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		3300 M. Zone All clear No mammals obs. Observer Effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 12/23/17

Time Effort Initiated: 08:30

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Effort on UMC
E ON PRE/POST CON S M OR E OFF		08:30 09:42	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Preconstruction activity.
E ON PRE/POST CON S M OR E OFF		08:40 08:41	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		soft start impact of barge crane/dry.
E ON PRE/POST CON S M OR E OFF		08:41 10:05	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Impacting w/ barge crane in the dry.
E ON PRE/POST CON S M OR E OFF		09:19 10:19	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Shore crane is vibra compacting in the dry.
E ON PRE/POST CON S M OR E OFF		10:50 11:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Barge crane slinging templates.
E ON PRE/POST CON S M OR E OFF		11:11 11:27	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Barge crane stabbing round pilings.
E ON PRE/POST CON S M OR E OFF		11:18 12:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Shore crane vibra-compacting
E ON PRE/POST CON S M OR E OFF		11:36 13:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Barge crane vibra-compact

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: LMC

Date: 10/23/17

Time Effort Initiated: 08:30

Time Effort Completed: 19:30

Page 2 of 3

Time	Visibility	Cloud	Weather Conditions	Wave Height	SSS	Wind	Swell
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
15:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if multiple)	Time/Date (Start/End time if cont.)	WW/ Grid #/ Dist of transit	Zone/ Section/ Inquest File #	Obs.	Sighting Class	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitig- ation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Observer Activity/Vessel Event # or Name/ Visibility Notes
EON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
EON PRE/POST CON S M OR E OFF		13:50 13:51	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Does A SSV on Vibco.
EON PRE/POST CON S M OR E OFF		13:51 14:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Starts vibbing 24" crane RAIL Piles-In the Dry
EON PRE/POST CON S M OR E OFF		13:55 16:25	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Begins Vibra Compaction on Shore, In the Dry
EON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		TB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
EON PRE/POST CON S M OR E OFF		14:35 15:42	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Begins slinging Owe.
EON PRE/POST CON S M OR E OFF		15:45 16:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane is stabbing 24" round piling.
EON PRE/POST CON S M OR E OFF		16:02 16:35	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane is vibbing - in the dry.
EON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation LMC site.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Ume

Date: 10/23/17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page: 3 of 3

Time	Visibility	Glare	Weather Condition, 93	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	10%	5-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
19:00	B-P-M-G-E	10%	5-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:42 16:49	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts slings OWC.
E ON PRE/POST CON S M OR E OFF		17:00 18:33	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibbing 24" crane rail piles in uplands - dry.
E ON PRE/POST CON S M OR E OFF		17:05 18:33	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibration compaction in uplands (dry).
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Truc secures both cranes for coming weather & leaves for the day. start post const. obs.
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10m & 3300m zone all clear. No mammals observed observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky pt.

Date: 10/23/17

Time Effort Initiated: 0830

Time Effort Completed: 19:30

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on, on site 0825
E ON PRE/POST CON S M OR E OFF		08:30 09:42	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre con, Obs. All clear! Time Impacting piles Before All clear. Time notified chris@tmc.
E ON PRE/POST CON S M OR E OFF		08:40 08:41	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does a SSV on Barge impactor
E ON PRE/POST CON S M OR E OFF		08:41 10:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Begins Impacting IN the Dry.
E ON PRE/POST CON S M OR E OFF		09:19 10:19	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Begins vibro compaction IN the Dry
E ON PRE/POST CON S M OR E OFF		10:50 11:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Doing Owc. Slings template,
E ON PRE/POST CON S M OR E OFF		11:11 11:27	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Begins stabbing 24" Rail piles.
E ON PRE/POST CON S M OR E OFF		11:18 12:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Doing vibrocompaction in the Dry.
E ON PRE/POST CON S M OR E OFF		11:36 13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane vibbing 24" Crane Rail Piles, In The Dry

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/23/17

Time Effort Initiated: 0830

Time Effort Completed: 14:30

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
1200	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	<input checked="" type="checkbox"/>	NSEW	NSEW
1400	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	<input checked="" type="checkbox"/>	NSEW	NSEW
1600	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	<input checked="" type="checkbox"/>	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if no- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:50 13:51	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge does a SSV on the vibe
E ON PRE/POST CON S M OR E OFF		13:51 14:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibrating 24" crane rail Piles in dry
E ON PRE/POST CON S M OR E OFF		13:55 14:25	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Share crane begins vibration on square
E ON PRE/POST CON S M OR E OFF		14:35 15:42	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins slings
E ON PRE/POST CON S M OR E OFF	178	14:42 16:00	F15 Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s): H10	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	HSEA - normal behavior on haul out rack F15 did not see leave rack but was gone at 1600
E ON PRE/POST CON S M OR E OFF		15:45 16:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane staging 24" Round pile - dry
E ON PRE/POST CON S M OR E OFF		16:02 16:35	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrates in the uplands
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10/23/17

Time Effort Initiated: 08:30

Time Effort Completed: 19:30

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	5%	(S-PC)-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	5%	(S-PC)-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	(S-PC)-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos ure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:42 16:49	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts slinging -OWC.
E ON PRE/POST CON S M OR E OFF		17:00 18:33	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing 24" crane rail piling.
E ON PRE/POST CON S M OR E OFF		17:05 18:33	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibration uplands
E ON PRE/POST CON S M OR E OFF		18:25 18:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Carravalle" in bound to DW dock No MM activity.
E ON PRE/POST CON S M OR E OFF		18:44	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Brenna A" outbound, No MM associated activity.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction activity.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off. Rocky Point
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-24-17

Time Effort Initiated: X

Time Effort Completed: X

Page of

Time	Visibility	Glare	Weather Condition 97	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10-24-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Weather
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		wind
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		storm
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-25-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	2	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	2	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	1-2	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	3	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	2	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Arrive Onsite Level A zone @ 0824 Observer Effort on
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30 09:53	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Start Pre-Can Obs No mammals sighted Called All clear to Marc
<u>E ON</u> PRE/POST CON S M OR E OFF		08:24 13:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Shore Crane is doing Vibra Compaction in uplands - 10/35 m
<u>E ON</u> PRE/POST CON S M OR E OFF		08:24 13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Barge Crane slinging over water before All clear 10 m
<u>E ON</u> PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Observer Rotation
<u>E ON</u> PRE/POST CON S M OR E OFF		13:40 14:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Barge crane Begins slinging (over)
<u>E ON</u> PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Observer Rotation
<u>E ON</u> PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		
<u>E ON</u> PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Con't. →

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: WMC

Date: 10-25-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3-4	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:31 14:57	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing 24" pillings in water 10 m
E ON PRE/POST CON S M OR E OFF		15:17 15:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a soft start on Vibe
E ON PRE/POST CON S M OR E OFF		15:18 17:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing in 24" round pillings in dry uplands 10/35
E ON PRE/POST CON S M OR E OFF		15:01 18:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Starts up Vibra Compaction in upland area
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:10 18:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Starts Slinging over water, OWC.
E ON PRE/POST CON S M OR E OFF		18:29 18:52	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins Vibbing 24" crane Rail Piles In The Dry,
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Secures The Crane for the DAY, Start Post Const. obs.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10 m & 3300 m - Zone all clear, no mammals observed, Observer Effort off.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt. (179)

Date: 10/25/17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on.
E ON PRE/POST CON S M OR E OFF		08:30 09:53	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre con. Obs no mammals observed CB@ume. called All clear to move @ time.
E ON PRE/POST CON S M OR E OFF		08:24 13:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane doing vibra compaction in upland
E ON PRE/POST CON S M OR E OFF		08:24 13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane slinging owe. Before All clear.
E ON PRE/POST CON S M OR E OFF	# 179	11:06 11:30	B13 Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER	stsl	Min: Max: Best:	Beh code(s): FO.	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed 2 stsl @ DW. Dock jumping up on The backs of the boats looking for fish. Traveled west down
	X	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		The Dock Boat By Boat Before Surfacing with an OCTOPUS Both stsl Feeding on pieces of it. Observed Feeding
	X	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Behavior until 1127, 1 stsl Surfed & traveled East past Rocky Pt. & out of B-Zone. The other did not Resurface.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Behavior was normal. NO Behavioral changes. Observer Rotation.
E ON PRE/POST CON S M OR E OFF	VA	13:24 13:33	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA F/V Farah sec in board to LCD No MMA observed

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point 180

Date: 10-25-17

Time Effort Initiated: 08:30

Time Effort Completed: 1930

Page: 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
14:40	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ Dir of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:40 14:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins slinging owc
E ON PRE/POST CON S M OR E OFF		13:55 13:41	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NA FV/Nordic Marine in bound to DW Dock No MMA observed
E ON PRE/POST CON S M OR E OFF		14:15 14:35	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA FV Bering Harbor in bound to FENPF No MMA observed
E ON PRE/POST CON S M OR E OFF		14:31 14:57	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane ST 24" Pile in the water
E ON PRE/POST CON S M OR E OFF	180	14:40 15:00	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): PL	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL PL at DW Dock in general being a post jumping up onto the shore crane start
E ON PRE/POST CON S M OR E OFF		15:01 18:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane start vibration compaction in upland area
E ON PRE/POST CON S M OR E OFF		15:17 15:18	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane mitigation performs a SSV on vibes
E ON PRE/POST CON S M OR E OFF		15:18 17:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibing 24" Pile in dry
E ON PRE/POST CON S M OR E OFF		16:20	Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-25-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	16:55 17:08	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FV Kodiak outbound harbor TR-SE No mm activity assoc.
E ON PRE/POST CON S M OR E OFF		17:10 18:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Singing over water
E ON PRE/POST CON S M OR E OFF		18:29 18:52	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibrating 24" round pilings in the dry
E ON PRE/POST CON S M OR E OFF	VA	18:44 19:06	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge tied up in Bay all week outbound w/assist from Tug Gyrfalcon TR-N No mammals observed
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con Obs. No mammals sighted or issues to report
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-26-17

Time Effort Initiated: 0830

Time Effort Completed: 2000

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
0830	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
0900	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
0930	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
1000	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
1130	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		0830	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite 0826 @ umc - Level A zone Obs. Effort ON
E ON PRE/POST CON S M OR E OFF		0830 0945	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted TB called All Clear to Mmc
E ON PRE/POST CON S M OR E OFF		0826 13:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane is doing Vibra Compaction in uplands on arrival
E ON PRE/POST CON S M OR E OFF		0830 11:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging Over Water Before All Clear
E ON PRE/POST CON S M OR E OFF		11:06 11:32	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Skidding in 24" round piling's in water
E ON PRE/POST CON S M OR E OFF		11:45 11:46	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a soft start on Vibe
E ON PRE/POST CON S M OR E OFF		11:46 13:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibbing in 24" round piles in dry (Crane rail piling) 10/35
E ON PRE/POST CON S M OR E OFF	181	11:30 13:10	Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): H0	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Small STSL hauled out on Bay Buoy. Did not move with vessel traffic nearby
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Currently stabbing - 10/3300 m radii, then switched to vibbing in dry w/ 10/35 m radii for airborne noise

* slightly out of sequence but times are correct!
• type of construction at time of initial sighting was ST- Stabbing

** Did not see leave buoy
so do not know direction
of travel.

Did not see STSL leave buoy
but within 3 minutes of looking
it was gone, no behavior changes

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umcDate: 10-26-17Time Effort Initiated: 0830Time Effort Completed: 2000Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
14:00	B-P-M-G-E	2 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
15:57	B-P-M-G-E	2 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation Vibbing - dry 10/35m Nowc - Vibra Comp. Zone-B
E ON PRE/POST CON S M OR E OFF		14:09 14:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Begins Vibbing 24" crane Rail Piles In The Dry
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation Vibe in dry - 10/35m radii
E ON PRE/POST CON S M OR E OFF		14:51 19:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Starts up Vibra Compaction again in uplands w/ Shore Crane
E ON PRE/POST CON S M OR E OFF		15:05 15:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane working over water
E ON PRE/POST CON S M OR E OFF		15:16 15:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing Sheet piles
E ON PRE/POST CON S M OR E OFF		15:32 15:57	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing Sheet piles
E ON PRE/POST CON S M OR E OFF	182	15:57 16:03	E8 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	2 STSL in E8 foraging / thrashing around, watch for 4 minutes and lost sight, no direction of travel, normal behavior
E ON PRE/POST CON S M OR E OFF		15:58 17:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging OWC

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-26-17

Time Effort Initiated: 0830

Time Effort Completed: 2000

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:10	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
20:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	182.1	16:10 16:13	C9 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted one of two STSL's thrashing around eating otopus 2nd STSL not present, went down and did not resurface
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:05 17:06	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Does A, SSI on Impactor, In The Dry
E ON PRE/POST CON S M OR E OFF		17:06 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Impacting 24" Crane Rail Piles in the Dry.
E ON PRE/POST CON S M OR E OFF		19:30 20:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew Stops work for The DAY! Start Post Const. Obs.
E ON PRE/POST CON S M OR E OFF		20:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10m E 3300 m. Zone All Clear, no mammals observed, Observer Effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/26/17

Time Effort Initiated: 0830

Time Effort Completed: 2000

Page: 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
10:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
12:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on, on site @ 0830
E ON PRE/POST CON S M OR E OFF		08:30 09:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre const, Obs. 3300 m. zone! All clear to move - Time No mammals observed.
E ON PRE/POST CON S M OR E OFF		08:26 13:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Doing Vibration Compaction in UP LANDS Before All clear.
E ON PRE/POST CON S M OR E OFF		08:30 11:04	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Slings (OWC) Before All clear.
E ON PRE/POST CON S M OR E OFF		11:06 11:32	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Slings 24" crane rail piles in water.
E ON PRE/POST CON S M OR E OFF		11:45 11:46	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane completes A. SSV on the vibbe, in the dry!
E ON PRE/POST CON S M OR E OFF		11:46 13:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Begins vibbing 24" crane rail piles in the dry.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B. V.F.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Cont. →

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10-26-17

Time Effort Initiated: 0830

Time Effort Completed: 2000

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	N(6)E(W)	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	N(6)E(W)	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	N(6)E(W)	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	12:53	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA = vessel Activity F/V Pacific Venture in bound to NP5 NO MMA observed
E ON PRE/POST CON S M OR E OFF		14:09 14:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibrating 24" crane rail piles in the dry
E ON PRE/POST CON S M OR E OFF	VA	14:39 14:55	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA MV/ Barge with tug assist in bound to NO MMA observed
E ON PRE/POST CON S M OR E OFF		14:51 19:20	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibration compaction in 4P lands
E ON PRE/POST CON S M OR E OFF		15:05 15:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane working over water
E ON PRE/POST CON S M OR E OFF		15:16 15:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane st sheet piles
E ON PRE/POST CON S M OR E OFF		15:32 15:57	Grid N or S W or E		VP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		15:58 17:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane singing over water
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF OB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation VF + CB

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-26-17

Time Effort Initiated: 0830

Time Effort Completed: 2000

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
20:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ Dir of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting One	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	16:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Range w/ crane as it moves off time dock by crane was it from Tug Gyrfalcon to Bay Buoy - No mma
E ON PRE/POST CON S M OR E OFF		17:05 17:06	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Range Crane does mitigation by doing a soft start on impactor in dry
E ON PRE/POST CON S M OR E OFF		17:06 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Range Crane impacting 24" crane rail piles in the dry 50/150m radii
E ON PRE/POST CON S M OR E OFF	VA	18:38 18:47	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Small skiff inbound harbor TR - NW to Resolve marine. No mma
E ON PRE/POST CON S M OR E OFF		19:30 20:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc done - Start Post-Con Obs No mammals sighted
E ON PRE/POST CON S M OR E OFF		20:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-27-17

Time Effort Initiated: 0830

Time Effort Completed: 1910

Page: 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite @ umc Level A zone at 0824 observer Effort ON
E ON PRE/POST CON S M OR E OFF		08:30 09:44	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Called All Clear to move
E ON PRE/POST CON S M OR E OFF		08:30 10:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Impacting 24" (50/150) round pillings in dry Before All Clear
E ON PRE/POST CON S M OR E OFF		08:30 10:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC doing Vibra (10/35m) Compaction w/ shore Crane in uplands
E ON PRE/POST CON S M OR E OFF		10:10 10:23	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging overwater - templet
E ON PRE/POST CON S M OR E OFF		10:58 13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts Vibra Compaction in uplands
E ON PRE/POST CON S M OR E OFF		11:23 13:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging materials overwater
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB T.O.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:50 18:30	Grid N or S W or E		TR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibra compaction in the uplands.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-27-17

Time Effort Initiated: 0830

Time Effort Completed: 1910

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	9	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	7	NSEW	NSEW
18:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:43 14:44	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a soft start on Vibe
E ON PRE/POST CON S M OR E OFF		14:44 15:08	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC vibbing
E ON PRE/POST CON S M OR E OFF		15:10 16:06	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging OWC
E ON PRE/POST CON S M OR E OFF		16:10 16:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC stabbing 36" pile next to barge in water (Barge crane)
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation 10m/3300m
E ON PRE/POST CON S M OR E OFF		16:46 16:47	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE DOES A SSV ON THE VIBES
E ON PRE/POST CON S M OR E OFF		16:47 18:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE BEGINS VIBBING 36" PILES IN THE DRY.
E ON PRE/POST CON S M OR E OFF		18:40 19:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SECURES START POSTCONST. OBS. ALL CLEAR, NO MAMMALS OBSERVED.

* E-OFF

1910

T.B.

(None)

Observer Effort Off

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/27/17

Time Effort Initiated: 0830

Time Effort Completed: 1910

Page: 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on, on site.
E ON PRE/POST CON S M OR E OFF		08:30 09:44	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. Obs. 3300 m. All clear, NO mammals observed. TMC Impacting on arrival. All clear to marc.
E ON PRE/POST CON S M OR E OFF		08:30 10:03	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Impacting in the Dry Before All clear 24" crane rail piles,
E ON PRE/POST CON S M OR E OFF		08:30 10:48	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Time doing vibro compaction in upland Before All clear.
E ON PRE/POST CON S M OR E OFF		10:10 10:23	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging Template pieces. OWC.
E ON PRE/POST CON S M OR E OFF		10:58 13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibro compaction in uplands
E ON PRE/POST CON S M OR E OFF		11:07 11:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Unimak Enters Harbor & ties up @ KDH Dock. No mammal interaction.
E ON PRE/POST CON S M OR E OFF		11:27 11:47	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Tramper - Alaska Refers Enters Harbor & ties up @ KDH Dock. No mammal interaction!
E ON PRE/POST CON S M OR E OFF		11:31 11:52	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Aleutian Lady Enters Harbor & ties up @ LCD Dock. No mammal interaction.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/27/17

Time Effort Initiated: 0830

Time Effort Completed: 1910

Page: 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	0/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	/	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:23 13:20	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging piles owc.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	VA	13:03 13:25	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA F/V Northern Glacier in bound to KDH NO MMA observed
E ON PRE/POST CON S M OR E OFF	VA	13:10 13:29	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA MV Island Voyager in bound NPF NO MMA observed
E ON PRE/POST CON S M OR E OFF	VA	13:42 13:57	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA F/V Black Knight in bound to NPF NO MMA observed
E ON PRE/POST CON S M OR E OFF		13:50 18:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts viba compactors in uplands
E ON PRE/POST CON S M OR E OFF		14:43 14:44	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Prefabs SSV on the vlb w/ Barge crane
E ON PRE/POST CON S M OR E OFF		14:44 15:08	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibing w/ Barge crane
E ON PRE/POST CON S M OR E OFF		15:10 16:06	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging over water

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10-27-17

Time Effort Initiated: 0830

Time Effort Completed: 1910

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	5%	S-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N 6 E W	N S E W
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N 6 E W	N S E W
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	N 6 E W	N S E W
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	N 6 E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	15:39 15:45	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA F/V Alert #2 in bound TO DW DOCK NO MAMMA observed
E ON PRE/POST CON S M OR E OFF		16:10 16:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMCast 36" Pile Next to Base -
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:46 16:47	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a soft start on Vibe
E ON PRE/POST CON S M OR E OFF		16:47 18:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibrating 36" tie down pillings in dry
E ON PRE/POST CON S M OR E OFF	VA	18:30 18:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V American #1 outbound harbor TR-E out of harbor No MAMMA associated
E ON PRE/POST CON S M OR E OFF		18:40 19:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Eon Obs No mammals sighted
E ON PRE/POST CON S M OR E OFF		19:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-28-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page: 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite @ umc 0820 Obs. Effort on
E ON PRE/POST CON S M OR E OFF		08:30 10:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Can Obs No mammals sighted Called All clear to man
E ON PRE/POST CON S M OR E OFF		08:20 09:29	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacting in dry - Before All clear
E ON PRE/POST CON S M OR E OFF		08:20 13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC doing Vibra Compaction in dry- Before All clear
E ON PRE/POST CON S M OR E OFF		10:19 12:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging over water
E ON PRE/POST CON S M OR E OFF		12:19 13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing 36" round piles in water
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:35 13:36	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Does A. SSV On the Vibb In the Dry 36" pile (Tie Down)
E ON PRE/POST CON S M OR E OFF		13:36 15:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane starts Vibbing 36" Tie Down Piles In The Dry.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-28-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page: 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:55	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:25 18:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane starts vibra compaction in the dry.
E ON PRE/POST CON S M OR E OFF		15:23 16:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane begins impacting 36" tie down piles in the dry.
E ON PRE/POST CON S M OR E OFF		16:55 17:12	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane begins slinging Trench sections over.
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation.
E ON PRE/POST CON S M OR E OFF		17:15 17:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing piling S-36" in water 10/3300 m B zone.
E ON PRE/POST CON S M OR E OFF		17:42 18:49	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating in 2ea 36" crane rail piling S-dry.
E ON PRE/POST CON S M OR E OFF	183	16:55	G-9 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): HO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	2 STSL hauled out on 2nd Bay Buoy. First noticed one there at 1635 but B zone was smaller due to airborne noise radii of 50 m for B zone. AT 1725 saw 2nd STSL jump up there.
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		while TMC was stabbing which increased B zone radii to 3300 m so documented
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		as NMFS sighting. Behavior is normal - mammals still there at 1930 when I left.

* Out of SEQUENCE but times are correct!

as NMFS sighting. Behavior
is normal - mammals still there
at 1930 when I left.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-28-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page: 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:55 19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging over water
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for the day Start Post-Con Obs No mammals sighted
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/28/17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page: 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	Q%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
09:30	B-P-M-G-E	Q%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
12:00	B-P-M-G-E	Q%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
13:30	B-P-M-G-E	Q%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		0830	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on on site RP.
E ON PRE/POST CON S M OR E OFF		08:30 10:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre con. obs 3300 m zone. NO mammals observed. CB. called All clear to maxc - Tmc
E ON PRE/POST CON S M OR E OFF		08:20 09:29	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane impacting Before All clear
E ON PRE/POST CON S M OR E OFF		08:20 13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane doing vibra compaction Before All clear.
E ON PRE/POST CON S M OR E OFF		10:19 12:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane slinging over water - OWC.
E ON PRE/POST CON S M OR E OFF		12:19 13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane stalks 36" Tie down Piles! standing up IN The water!
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:35 13:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane does a soft start on vibrate
E ON PRE/POST CON S M OR E OFF		13:36 15:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibrating 36" Tie down pillings in dry 10/35 m radii

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-28-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page: 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	14:00	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Arica inbound harbor TR-N to KDH dock. No maine mammal activity associated
E ON PRE/POST CON S M OR E OFF	VA	14:02 14:13	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Saratoga outbound harbor TR-S to Unalaska
E ON PRE/POST CON S M OR E OFF	VA	14:20 14:30	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V ERLA N outbound harbor from Resolve maine TR-SE - No mm activity
E ON PRE/POST CON S M OR E OFF		14:25 18:45	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane starts up Vibra Compaction again
E ON PRE/POST CON S M OR E OFF		15:23 16:45	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane begins 36" Tie down piles in dry 10/35 m B zone
E ON PRE/POST CON S M OR E OFF		16:30	Grid		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:55 17:12	Grid		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Begins slings template sections OWC.
E ON PRE/POST CON S M OR E OFF		17:15 17:30	Grid		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Begins stabbing 36" Tie Down Piles in the Dry.
E ON PRE/POST CON S M OR E OFF		17:42 18:49	Grid		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Begins Vibbing in the Dry. 36" Tie Down Piles in The Dry.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/28/17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page: 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	RSS	Wind	Swell
19:30	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:55 19:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Slinging over water out.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Secures The Crane for the Day & stops work. Start post con. obs. 3300m.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		End Post. obs. 3300m. Zone All clear, NO mammals observed. In water, observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-29-17

Time Effort Initiated: 0830

Time Effort Completed: 1920

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
10:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite @ umc at 8:22 Obs. Effort On
E ON PRE/POST CON S M OR E OFF		08:30 10:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con obs No mammals sighted Called All Clear to Marine
E ON PRE/POST CON S M OR E OFF		08:22 09:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Impacting 36" piling in dry & Airborne Rods 50/150m
E ON PRE/POST CON S M OR E OFF		08:22 13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		(Before All Clear) Shore Crane doing Vibra Compaction in dry
E ON PRE/POST CON S M OR E OFF		09:32 09:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging over water - Templet
E ON PRE/POST CON S M OR E OFF		09:52 10:19	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Impacting in dry.
E ON PRE/POST CON S M OR E OFF		11:20 13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging materials over water
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:10 17:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins slinging materials, OWC.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: WMC

Date: 10-29-17

Time Effort Initiated: 0830

Time Effort Completed: 1920

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3-4	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
19:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:15	Grid		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Shore crane begins vibra compaction in the dry.
E ON PRE/POST CON S M OR E OFF		16:30	Grid		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:30	Grid		C.B. T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:50	Grid		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew secures the crane for the night, start post con. obs.
E ON PRE/POST CON S M OR E OFF		19:20	Grid		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10m Zone All Clear, no mammals observed, observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/29/17

Time Effort Initiated: 0830

Time Effort Completed: 1920

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on. Time Impacting on Arrival
E ON PRE/POST CON S M OR E OFF		08:30 10:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre-con obs. 3300 m. cleared from LAUD Fill & Front Beach/Rocky Pt. Due to mist & poor visibility.
		X	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear, no mammals observed, Time Impacting 36" pile in dry. CB@ UMC called more.
E ON PRE/POST CON S M OR E OFF		08:22 09:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Impacting 36" pile in the dry. Before All clear.
E ON PRE/POST CON S M OR E OFF		08:22 13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane doing vibra compaction IN the UPLANDS Before All clear.
E ON PRE/POST CON S M OR E OFF		09:32 09:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Slings over water. (Templat) OWC.
E ON PRE/POST CON S M OR E OFF		09:52 10:19	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Impacting 36" tie down piles in The Dry.
E ON PRE/POST CON S M OR E OFF		11:20 13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Slings over water, OWC.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B. m.m.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10/29/17

Time Effort Initiated: 0830

Time Effort Completed: 1920

Page: 2 of 3

VA = vessel activity, F = fog

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:50	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
17:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ *Visibility Notes*
VA E ON PRE/POST CON S M OR E OFF		13:54 14:01	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No construction, F/V Trailblazer headed inbound, w
E ON PRE/POST CON S M OR E OFF		14:10 17:30	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins slinging materials, over water construction
E ON PRE/POST CON S M OR E OFF		14:15 16:30	Grid N or S W or E		MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane begins vibra- compaction in the dry
E ON PRE/POST CON S M OR E OFF	#184	14:20 14:23	E15 Grid N or S W or E	B	MM	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s): SP, SW, TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted Harbor seal, spy hopping travelling E, didn't sight again no behavioral changes observed
E ON PRE/POST CON S M OR E OFF	F	15:45 16:15	Grid N or S W or E	B	MM	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FOG - 25% of B zone not visible at water's surface A zone still clear
E ON PRE/POST CON S M OR E OFF		16:30 /	Grid N or S W or E		MM AST	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation at Rocky Point
E ON PRE/POST CON S M OR E OFF	185	17:15 17:31	D14 Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	One large STSL surfaced, eating on octopus, throwing it around, shaking it
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		kittiwakes and gulls trying to get at it. Finally swallowed it, slowly moved east toward point, lost sight of. Poor vis.
VA E ON PRE/POST CON S M OR E OFF		17:35 17:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Small Resolve skiff inbound to Resolve. No assoc. mm activity

VA = vessel activity (F) = Fog

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10/29/2017

Time Effort Initiated: 0830

Time Effort Completed: 1920

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:55 18:10	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Makushin Bay inbound to Resolve. No assoc. mm activity.
E ON PRE/POST CON S M OR E OFF		18:50 19:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction
E ON PRE/POST CON S M OR E OFF		19:20 :	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-30-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW

Event Code	Sight # (1 or 1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive onsite @ umc 0824 - level A zone Obs. Effort ON
E ON PRE/POST CON S M OR E OFF		08:30 09:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Called All Clear to Max
E ON PRE/POST CON S M OR E OFF		11:58 12:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging over water
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		T.B. A.S.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		A.S. T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		18:30 18:36	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Begins Slinging (skiff) into water - OWC.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew Secures The crane's start post east. Obs.
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		weather cont. → on next pg

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-30-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	W %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
19:30	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/30/17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page: 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
16:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		0830	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on. on site @ RP.
E ON PRE/POST CON S M OR E OFF		0830 09:45	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre con. obs. No mammals observed 3300 m. All clear to mark.
E ON PRE/POST CON S M OR E OFF		10:00 10:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Flt Katie ANN. Enters Harbor & ties up @
E ON PRE/POST CON S M OR E OFF		11:58 12:10	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging over water OWC.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:27 14:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA MV 11 de Batz in Bound to USCG Dock No MMA observed
E ON PRE/POST CON S M OR E OFF		16:10 16:27	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Eight wind in bound HPF No MMA observed
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:30 18:36	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging skiff into water

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 10/30/2017

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-31-17

Time Effort Initiated: 0830

Time Effort Completed: 1900

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	(B) P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	(B) P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Arrive onsite @ 0830 UMC - obs Effort ON
E ON PRE/POST CON S M OR E OFF		08:30 09:43	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Start Pre Con Obs No mammals sighted Called All Clear to mark
E ON PRE/POST CON S M OR E OFF		08:35 12:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Shoreline slingshot/ walking overland
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		cont. →
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-31-17

Time Effort Initiated: 0830

Time Effort Completed: 1900

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Done For the Day No post constr obs. Due to no vibbing/Impacting, on OWC To Day.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: Rocky Pt.
Date: 10/31/17
Time Effort Initiated: 0830
Time Effort Completed: 1900
Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
13:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
15:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW

19:00 0 5 S-PC-L-R-F-OC-SN-IR Lt 0 0 0

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on. on site @ Rocky Pt.
E ON PRE/POST CON S M OR E OFF		08:30 09:43	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-con. Obs. All clear to Tmc-mare, 3300 M. Zone.
E ON PRE/POST CON S M OR E OFF		08:35 12:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging & working in uplands.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		TB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		12:55 13:02	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA FIV Patricia Lee in bound to DW Dock No MMA observed.
E ON PRE/POST CON S M OR E OFF		15:45 15:49	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA MY Dunlap tag in bound to UMC No MMA observed
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:35 16:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FV Trail Blazee atbound harbor from Trident dock TR-S-No MMA
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc done for day. No Post-Con observation Required due to no vibbing/impacting or owc constr. today

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-01-17

Time Effort Initiated: 0800

Time Effort Completed: 1715

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
08:30	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
09:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
09:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
10:27	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Signaling Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort on arrive on site umc 0753
E ON PRE/POST CON S M OR E OFF		08:00 08:57	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con obs. All Clear - no mammals to Chris. N @ 0857
E ON PRE/POST CON S M OR E OFF		07:55 08:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging over water - pipe before All Clear called
E ON PRE/POST CON S M OR E OFF		09:02 11:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing Sheet piles
E ON PRE/POST CON S M OR E OFF	130	10:27 10:38	Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): SW	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	2 STSL popped up just N of vessel/tanker Torm Vita @ umc dock in area D-8 Swimming Sighted
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Several more times every 4 min come up & stayed near runway (A10) for approx 5 min - did not resurface
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC stabbing sheet piles, no behavior changes to construction activity
E ON PRE/POST CON S M OR E OFF		11:29 11:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a Soft Start on Vibe
E ON PRE/POST CON S M OR E OFF		11:30 12:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibrating Sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC
Date: 10-01-17
Time Effort Initiated: 0800
Time Effort Completed: 1715
Page: 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if so- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		12:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts OWC-slinging
E ON PRE/POST CON S M OR E OFF		12:50	Grid N or S W or E										Tmc-Lunch-1250-1330
E ON PRE/POST CON S M OR E OFF		13:34	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		15:08	Grid N or S W or E										
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB @ UMC TB off
E ON PRE/POST CON S M OR E OFF		15:09	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing SS on UMC
E ON PRE/POST CON S M OR E OFF		15:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration in sheet piles
E ON PRE/POST CON S M OR E OFF		15:44	Grid N or S W or E										
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		CB AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction
E ON PRE/POST CON S M OR E OFF		17:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/11/17

Time Effort Initiated: 0800

Time Effort Completed: 1715

Page 1 of 2

Time	Visibility	Cloud	Weather Condition	Wave Height	ESS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy		NSEW	NSEW

Event Code	Site # (1 or 12 if no digit)	Time/Date (Start/End time if cont.)	WT/ Grid #/ Dir of travel	Zone/ Region/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure (Y/N)	Behavior Change/ Response to Activity/Comments/Threats/ Activity/Vessel Haul # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on on site @ 7:45 AM.
E ON PRE/POST CON S M OR E OFF		08:00 08:57	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre con obs. no mammals observed zones all clear! The Chris notified
E ON PRE/POST CON S M OR E OFF		07:55 08:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane slinging over water before all clear!
E ON PRE/POST CON S M OR E OFF		09:02 11:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		11:29 11:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts the vibbe with SSV, on the BARGE crane.
E ON PRE/POST CON S M OR E OFF		11:30 12:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Begins vibbing sheet piles down. with BARGE crane.
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		T.B. AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON VA PRE/POST CON S M OR E OFF		12:00 12:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Small barge inbound with tug (can't see name) to LCD. No assoc. mm activity.
E ON VA PRE/POST CON S M OR E OFF		12:20 12:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Second small barge inbound with tug (can't see name) to LCD. No assoc. mm activity.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: Rocky Pt
Date: 10/1/2017
Time Effort Initiated: 0800
Time Effort Completed: 1715
Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
17:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N-SE-W	N-SE-W

Event Code	Sight # (1 or LI if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:35 12:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slings materials
E ON PRE/POST CON S M OR E OFF		13:34 15:08	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		15:09 15:10	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane performs soft start
E ON PRE/POST CON S M OR E OFF		15:10 15:44	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibing sheet piles
E ON PRE/POST CON S M OR E OFF		16:00 :	Grid N or S W or E		AS CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON VA PRE/POST CON S M OR E OFF		16:20 16:32	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V miss Alyssa inboard harbor TR-N inside spit dock area No mm activity associated
E ON PRE/POST CON S M OR E OFF		16:45 17:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC taking on fuel and we are done for the day. Start Post-Con Obs.
E ON PRE/POST CON S M OR E OFF		17:15 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mammals sighted in Post-Con. Obs effort off
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

VA = Vessel Activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10/2/17

Time Effort Initiated: 0800

Time Effort Completed: 1930

Page: 1 of 2

Time	Visibility	Gloze	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	Dark	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:44	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane already slings gear - Effort on 0800
E ON PRE/POST CON S M OR E OFF		08:00 08:54	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction No mm sighted All clear - 0854
E ON PRE/POST CON S M OR E OFF		08:00 08:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slings gear
E ON PRE/POST CON S M OR E OFF		09:17 11:00	Grid N or S W or E		AB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:08 11:09	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane soft start on vibrate
E ON PRE/POST CON S M OR E OFF		11:10 12:35	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		AS TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		12:40 13:40	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane is slings template pieces
E ON PRE/POST CON S M OR E OFF	131	12:44 14:10	D-10 Grid N or S W or E	B	TB	BL BO BR DF SA OTHER	stsl	Min: Max: Best:	Beh code(s): FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed 1st feeding on salmon. Traveled North to Trident and Hanging @ the Back Dock vessel Columbia stayed here a long time, last sighted at 1410 by mmo area I-1 by Icicle

MARINE MAMMAL OBSERVATION RECORD

Project Name: LAMC Deck Positions III and IV

Monitoring Location: UWC

Date: 10/2/17

Time Effort Initiated: 0800

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glaze	Weather Condition	Wave Height	ESS	Wind	Swell
14:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-H	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-H	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Right # (# or L/R if no date)	Time/Date (Start/End time if cont.)	Grid N or S W or E	Zone/ Region/ Intersect File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/Threats/ Activity/Vessel Hold # or Name/ Weather Notes
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. off
E ON PRE/POST CON S M OR E OFF		14:39	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging over water - templet pieces
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:13 16:14	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing soft start w/ Vibe
E ON PRE/POST CON S M OR E OFF		16:14 16:38	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration templet piles
E ON PRE/POST CON S M OR E OFF		18:15 18:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane begins OWC slinging equipment
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction observation No marine mammal observed
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/2/17

Time Effort Initiated: 0800

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Glaze	Weather Condition	Wave Height	SSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW

Event Code	Light # (1 or 1.1 if no light)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Bottom/ Intragrid File #?	Obs.	Sighting Cat	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgas in Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Threats/ Activity/Vocal Hail # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on, Time (slinging on Arrival) Before All clear.
E ON PRE/POST CON S M OR E OFF		08:00 08:54	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		start pre const. obs. Time Doing owc Before All clear.
E ON PRE/POST CON S M OR E OFF		08:00 08:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane slinging gear, owc
E ON PRE/POST CON S M OR E OFF		09:17 11:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:08 11:09	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane does a SSV on vibbe.
E ON PRE/POST CON S M OR E OFF		11:10 12:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		12:32 12:38	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity = VA F/V Advanced in bound to DW Dock NO MMA
E ON PRE/POST CON S M OR E OFF		12:40 13:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins slinging template piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: USMC Dock Operations III and IV

Monitoring Location: Rocky Point

Date: 10-2-17

Time Effort Initiated: 08:00

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glac	Weather Condition	Wave Height	SSS	Wind	Swath
13:43	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy	0	NSEW	NSEW
15:58	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy	0	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy		NSEW	NSEW

Event Code	Site # (1 or 2 if multiple)	Time/Date (Start/End time if event)	VP/ Grid #/ DMR of event	Zone/ Redline/ Impact File #	Obs.	Lighting Obs	Remarks	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Expected (Y/N)	Behavior Change/ Response to Activity/ Comments/ Human Activity/ Visual Effort or Name/ Visibility Notes
EON PRE/POST CON S M OR E OFF		14:39	Grid Nor S W or E		VF	HL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Slinging over water
EON PRE/POST CON S M OR E OFF	VA	15:00	Grid Nor S W or E		VF	HL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA Millennial Falcon in Docked to city Dock NO MMA observed
EON PRE/POST CON S M OR E OFF	VA	15:07	Grid Nor S W or E		VF	HL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA Sampson Barge w/ Tug Assist NO MMA observed
EON PRE/POST CON S M OR E OFF	VA	15:31	Grid Nor S W or E		VF	HL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA Dunlap tug inbound to port Harbor NO MMA observed
EON PRE/POST CON S M OR E OFF	132	15:58	Grid Nor S W or E	B	VF	HL BO BR DF SA OTHER	Min: Max: Best:	1	SW	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Saw STSL Surface activity Then did not see it again
EON PRE/POST CON S M OR E OFF		16:00	Grid Nor S W or E		VF	HL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
EON PRE/POST CON S M OR E OFF		16:13	Grid Nor S W or E		CB	HL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Perform SSV
EON PRE/POST CON S M OR E OFF		16:14	Grid Nor S W or E		CB	HL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Vibration template Ab
EON PRE/POST CON S M OR E OFF	VA	17:07	Grid Nor S W or E			HL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Sampson Barge outbound w/ Tug assist from CG dock TR-SE out to sea -

NO MMA activity assoc.

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-02-17

Time Effort Initiated: 0800

Time Effort Completed: 1930

Page: 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:17	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:15 18:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging over water
E ON PRE/POST CON S M OR E OFF	133	18:17 18:47	E16 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	SW	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	HSEA-sighted body, then head, swimming N, went under, lost him for a few minutes, resurfaced in
E ON PRE CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		area of E15, then TR-S over by the haul out rock. Lost him there, no changes to behavior.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day. Start Post-Con. Obs. No mammals sighted
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. done for day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10/3/2017

Time Effort Initiated: 0800

Time Effort Completed: 1930

Page 1 of 3

Time	Validity	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW

Event Code	Sight # (1 or LI if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Observer effort on Level A
E ON PRE/POST CON S M OR E OFF		08:00 08:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Preconstruction - OWC already in progress * 0850 - AH clear *
E ON PRE/POST CON S M OR E OFF		08:00 08:39	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		TMC barge crane slinging gear, materials
E ON PRE/POST CON S M OR E OFF		08:42 10:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		10:32 10:33	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		TMC barge crane soft start on vibe
E ON PRE/POST CON S M OR E OFF		10:34 11:11	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		TMC barge crane vibing sheet piles
E ON PRE/POST CON S M OR E OFF		11:16 13:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		AS TP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		Observer rotation.
E ON PRE/POST CON S M OR E OFF		13:35 14:40	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST <u>OWC</u> NOWC / NONE	SS/BC DE SD None		TMC BARGE CRANE STABBING SHEET PILES.

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC DOCK

Date: 10-3-17

Time Effort Initiated: 0800

Time Effort Completed: 1930

Page: 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		LP/ TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION
E ON PRE/POST CON S M OR E OFF		14:48 14:49	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane does a SSV on vibber
E ON PRE/POST CON S M OR E OFF		14:49 15:40	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane begins to vibrate sheet piles down.
E ON PRE/POST CON S M OR E OFF		15:50 16:29	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane begins stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB@RP. VF@ume!
E ON PRE/POST CON S M OR E OFF		16:32 16:41	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane doing OWC
E ON PRE/POST CON S M OR E OFF		16:42 17:44	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane begins st sheet piles
E ON PRE/POST CON S M OR E OFF		17:54 17:55	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane performs SSV
E ON PRE/POST CON S M OR E OFF		17:55 18:46	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane begins vibrating sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC dock

Date: 10-3-17

Time Effort Initiated: 08:00

Time Effort Completed: 19:30

Page 3 of 3

Time	Visibility	Cloud	Weather Condition	Wave Height	SSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW

Event Code	Right # (1 or L1 if visible)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Reef/ Impact File #	Obs.	Sighting Obs	Species	Group Size	Behavior Code (see code sheet)	Contamination Type	Mitigat ion Type	Expos- ure/ (Y/N)	Behavior Change/ Response to Activity/Comments/Threats/ Activity/Vessel Field # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post-construction observations No marine mammal observed
E ON PRE/POST CON S M OR E OFF		19:30	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off - Left UMC dock
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: ROCKY POINT
Date: 10-3-17
Time Effort Initiated: 0800
Time Effort Completed: 1930
Page 1 of 3

Time	Visibility	Glare	Weather Condition	13	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		ONSITE ROCKY POINT LEVEL B ZONE, EFFORT ON.
E ON PRE/POST CON S M OR E OFF		08:00 08:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE-OBSERVATION. NO MAMMALS SITED. ALL CLEAR.
E ON PRE/POST CON S M OR E OFF		08:00 8:39	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLOWING GEAR. (Before All Clear)
E ON PRE/POST CON S M OR E OFF		08:42 10:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANS STABBING SHEET PILES. (Before All Clear)
E ON PRE/POST CON S M OR E OFF		10:32 10:33	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		SOFT START VIBE BARGE CRANE
E ON PRE/POST CON S M OR E OFF		10:34 11:11	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING SHEET PILES.
E ON PRE/POST CON S M OR E OFF		11:06 11:20	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL F/V GOLDEN DAWN INBOUND TR-SW DOCKS @ NORTH PACIFIC FUEL.
E ON PRE/POST CON S M OR E OFF		11:16 13:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING SHEET PILES.
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		LP VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observed Retake

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt. Mar

Date: 10-3-17

Time Effort Initiated: 0800

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	14	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	14	Lt/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	14	Lt/Mod/Hvy	0	NSEW	NSEW
15:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	14	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	14	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	14	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	14	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midnight Type	Response? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	12:38 12:49	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity = VA N/V Golden dawn inbound to Dutch Harbor NO MMA Activity observed
E ON PRE/POST CON S M OR E OFF	VA	13:09 13:22	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA small sail boat Rose into DUT - no MMA observed
E ON PRE/POST CON S M OR E OFF	VA	13:38 13:47	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA Flt Eastern wind inbound to DUT dock NO MMA observed
E ON PRE/POST CON S M OR E OFF		13:35 14:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane st sheet piles
E ON PRE/POST CON S M OR E OFF	VA	13:41 13:47	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA Flt Eastern wind inbound to DUT dock NO MMA observed
E ON PRE/POST CON S M OR E OFF		14:48 14:49	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane does SSV on VIB
E ON PRE/POST CON S M OR E OFF		14:49 15:40	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins to VIB sheet piles down
E ON PRE/POST CON S M OR E OFF		15:50 16:29	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins st. sheet piles
E ON PRE/POST CON S M OR E OFF		16:00 :	Grid N or S W or E		VF T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky PointDate: 10-3-17Time Effort Initiated: 0800Time Effort Completed: 1930Page 3 of 3

Time	Visibility	Glare	Weather Condition	15	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:32 16:41	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging OWC.
E ON PRE/POST CON S M OR E OFF		16:42 17:44	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins stabbing sheet piles.
E ON PRE/POST CON S M OR E OFF	VA	17:30 17:39	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		R/V woldstad enters harbor & ties up @ Resolve marine no rma activity
E ON PRE/POST CON S M OR E OFF		17:54 17:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane performs SSV.
E ON PRE/POST CON S M OR E OFF		17:55 18:46	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		The crew leaves site start post const. obs.
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10/4/2017

Time Effort Initiated: 0800

Time Effort Completed: 1500

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	1	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	2	NSEW	NSEW
1500	(M)	0	(R) (OC)	(Mod)	3-4	(SE)	(SE)

Event Code	Sight # (1 or L1 if multiple)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on Level A
E ON PRE/POST CON S M OR E OFF		08:00 09:09	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction - TMC barge crane already slings gear. 0909 All clear
E ON PRE/POST CON S M OR E OFF		08:00 08:31	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slings gear, materials
E ON PRE/POST CON S M OR E OFF		09:15 09:16	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane soft start on vibrate
E ON PRE/POST CON S M OR E OFF		09:17 10:10	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibrating T-beams, sheet piles
E ON PRE/POST CON S M OR E OFF		11:09 14:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slings gear
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		AS CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		14:30 15:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done early today high winds - umc crane blowing.
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort OFF

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: RP
Date: 10-4-17
Time Effort Initiated: 0800
Time Effort Completed: 1500
Page 1 of 2

Time	Visibility	Glare	Weather Condition	17	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hazy	0	NSEW	NSEW	
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hazy	0	NSEW	NSEW	
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hazy	0	NSEW	NSEW	
09:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hazy	0	NSEW	NSEW	
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hazy	0	NSEW	NSEW	
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hazy	0	NSEW	NSEW	

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite @ RP Level B zone 0755 Obs. Effort ON
E ON PRE/POST CON S M OR E OFF		08:00 09:09	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs - No mammals obs. AS calls All clear @ 0909
E ON PRE/POST CON S M OR E OFF		08:00 08:31	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging over water
E ON PRE/POST CON S M OR E OFF		09:02 09:17	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Island Pack inbound nabber TR-N to Trident dock - No mm activity assoc.
E ON PRE/POST CON S M OR E OFF		09:15 09:16	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts mitigation by doing a SS on Vibe
E ON PRE/POST CON S M OR E OFF		09:17 10:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration I-beams
E ON PRE/POST CON S M OR E OFF		11:09 14:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging materials & EQUIP
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:16 14:25	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA F/V Ocean Star in bound to Trident dock No observed mm A

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-4-17

Time Effort Initiated: 0800

Time Effort Completed: 1500

Page 2 of 2

Time	Visibility	Glare	Weather Condition	18	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Li/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Li/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Li/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Li/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	14:30 15:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start post construction early bec. wx-wind factor NO MMA observed
E ON PRE/POST CON S M OR E OFF	VA	14:38 14:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA F/V Katie Ann is bound to KDH NO ASOC. MMA
E ON PRE/POST CON S M OR E OFF		15:00 :	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-05-17

Time Effort Initiated: X

Time Effort Completed: X

Page of

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10-5-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Weather
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Day - No
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		work
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Wind storm
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-06-17

Time Effort Initiated: 0800

Time Effort Completed: 1930

Page 1 of 3

#135

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Ltry	0	N-SE-W	N-SE-W
08:30	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Ltry	0	N-SE-W	N-SE-W
09:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Ltry	0	N-SE-W	N-SE-W
09:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Ltry	0	N-SE-W	N-SE-W
10:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Ltry	0	N-SE-W	N-SE-W
10:41	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Ltry	0	N-SE-W	N-SE-W

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Baseline/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive On site UMC Level A zone - 0750 Obs effort ON
E ON PRE/POST CON S M OR E OFF		08:00 08:58	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted All clear @ Chris 0858
E ON PRE/POST CON S M OR E OFF		07:50 09:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging overwater Before All Clear
E ON PRE/POST CON S M OR E OFF		09:04 09:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a SS on Vibe
E ON PRE/POST CON S M OR E OFF		09:05 09:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration template piles
E ON PRE/POST CON S M OR E OFF		09:31 11:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing Sheet piles into last cell
E ON PRE/POST CON S M OR E OFF	135	10:41 11:47	F10 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	HPBK	Min: Max: Best:	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Sighted HPBK by Spit TR-N Saw blow, then tail, TR-N came up at 1050 at G5, TR-N to Icicle dock,
			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		surfaced again at 1100 at I-1, Sealion nearby it 1124 sighted HPBK at H 5
			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		near Spit dock, sighted 4 more times going from spit to Icicle, last seen at 1147 at G8 TR-W but did not resurface

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMCDate: 9-06-17Time Effort Initiated: 0800Time Effort Completed: 1930Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:58	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
11:20	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	136	10:58 11:20	H2 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	While watching for HPSK near Icidle sighted STSL TR-N past NPF dock area H2, sighted again by
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Icidle dock and then behind F/U Sag 9 at 1117 in area I-4.
* E ON PRE/POST CON S M OR E OFF	137	11:20 11:23	H4 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 3	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	3 STSL TR-S joined up w/ 1st STSL (#136) so there were four behind
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Saga, last sight after a couple minutes here.
* E ON PRE/POST CON S M OR E OFF		11:03 11:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing SS on Vibe
E ON PRE/POST CON S M OR E OFF		11:04 11:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibrating sheet piles
E ON PRE/POST CON S M OR E OFF		11:20 11:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		11:53 11:54	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane does SS on Vibe
E ON PRE/POST CON S M OR E OFF		11:54 12:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibrating sheet piles

*Slightly out of SEQUENCE due to Level of sighting activity & documentation efforts but times are accurate

MARINE MAMMAL OBSERVATION RECORD

Project Name: U/MC Dock Positions III and IV

Monitoring Location: WMC

Date: 10-6-17

Time Effort Initiated: 0800

Time Effort Completed: 1930

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	2	NSEW	NSEW
16:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	2	NSEW	NSEW
17:32	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	2	NSEW	NSEW
18:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #2	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mixigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		12:35 12:55	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts slinging OWC.
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		TB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB LP.
E ON PRE/POST CON S M OR E OFF		14:49 18:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING MATERIALS
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		LP TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION
E ON PRE/POST CON S M OR E OFF	# 142	17:32 17:53	Grid N or S W or E	B	TB	BL BO BR DF SA OTHER	StSL	Min: Max: Best:	Beh code(s): LO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	observed 1 StSL surface Look Around no direction wait down and did not resurface (Big) normal behavior.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time continues to sling from BARGE to BARGE, NO EXPOSURE Time Leaves site, start post-con. obs.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10 m & 3300 meter zones all clear, no mammals observed, observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt. #134

Date: 10/6/17

Time Effort Initiated: 0800

Time Effort Completed: 1830

Page 1 of 4

Time	Visibility	Clouds	Weather Condition	Wave Height	BSS	Wind	Swell
08:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	2	NSEW	NSEW
08:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	2	NSEW	NSEW
09:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	2	NSEW	NSEW
09:40	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy		NSEW	NSEW

Event Code	Flight # (1 or 1.1 if sp- clike)	Time/Date (Start/End time if cont.)	Off/ Grid #/ DIR of travel	Zone/ Region/ Range/ File #	Obs.	Lighting Obs.	Species	Group Size	Behavior Code (see code sheet)	Contextual Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Changes/ Activity/Vocal Effort or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer effort on on site @ 0745
E ON PRE/POST CON S M OR E OFF		08:00 08:58	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start. Pre const. Obs. 3300 m. All clear. Tnd. Notified Chris. Zores All clear!
E ON PRE/POST CON S M OR E OFF		07:50 09:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Slings; owc. Before All clear!
E ON PRE/POST CON S M OR E OFF		09:04 09:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Performs SSV on Vibe.
E ON PRE/POST CON S M OR E OFF		09:05 09:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Begins Vibbing Sheet Piles Down.
E ON PRE/POST CON S M OR E OFF		09:31 11:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Begins Stabbing Sheet Piles in Place.
E ON PRE/POST CON S M OR E OFF	# 134	09:40 10:05	D-14 Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER	stsl	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed (3) stsl Traveling - 014 NW to DW Dock. Then Turned B-10 North & Fed on a Octopus before Heading North to UMC - Cig and Last Sighted @ 07
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		By CB. @ UMC, 10:05 went Down & Did NOT Resurface mammal Behavior was Normal. No Exposure. Due to Stabbing Sheets.
E ON PRE/POST CON S M OR E OFF	VA	09:49 09:57	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Predator enters Harbor Ties up at DW Dock. No mammal Interaction.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: Rocky Pt.
Date: 10/6/17
Time Effort Initiated: 0800
Time Effort Completed: 1830
Page 2 of 4

Time	Visibility	Glaze	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1.5 Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5 Mod/Hvy		NSEW	NSEW

Event Code	Right # (1 or 1.1 if no sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DHR of animal	Zone/ Redline/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/ Comments/ Human Activity/ Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	(VA)	09:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U B.likin enters Harbor & ties up @
E ON PRE/POST CON S M OR E OFF	(VA)	10:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Ocean Peace enters Harbor & Drops People off @ same dock & leaves.
E ON PRE/POST CON S M OR E OFF	(VA)	10:54	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		R/U Ocean Starr enters Harbor & ties up @
E ON PRE/POST CON S M OR E OFF		11:03	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Does a SSV on vibb.
E ON PRE/POST CON S M OR E OFF		11:04	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins vibbing Sheet Piles Down.
E ON PRE/POST CON S M OR E OFF		11:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins Shaking Sheet Piles.
E ON PRE/POST CON S M OR E OFF		11:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Does a SSV on vibb.
E ON PRE/POST CON S M OR E OFF		11:53	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Starts vibbing Sheet Piles
E ON PRE/POST CON S M OR E OFF		11:54	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10-6-13

Time Effort Initiated: 0800

Time Effort Completed: 1830

Page 3 of 4

Time	Visibility	Glaze	Weather Condition	Wave Height	SSS	Wind	Swell
13:00	B-P-M-G-E	10%	PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
13:45	B-P-M-G-E	10%	PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
13:55	B-P-M-G-E	10%	PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	10%	PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
16:12	B-P-M-G-E	10%	PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0-1	NSEW	NSEW
16:43	B-P-M-G-E	10%	PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0-1	NSEW	NSEW

Event Code	Light # (1 or L1 if no light)	Time/Date (Start/End time if cont.)	WF/ Grid #/ Dist of towed	Zone/ Radius/ Innards Pile #	Obs.	Sighting Cn	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Identify Type	Response (Y/N)	Behavior Change/ Response to Activity/Comment/Remarks Activity/Vessel Field # or Name/ Visibility Notes
EON PRE/POST CON S M OR E OFF		12:15 13:19	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA Vessel Activity F/V Ocean Peace NO MMA observed
EON PRE/POST CON S M OR E OFF		12:35 12:55	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins slinging out
EON PRE/POST CON S M OR E OFF		13:11 13:31	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA M/V matson kotak tag assit. in bound to umc NO MMA observed
EON PRE/POST CON S M OR E OFF	#138	13:45 14:00	F14 Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	HSEA	Min: 1 Max: 1 Best: 2	Beh code(s): SW	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	2 HSEA off Rocky Point swim south out of B zone towards
EON PRE/POST CON S M OR E OFF	#139	13:55 14:30	F14 Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STL	Min: 2 Max: 2 Best: 2	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	2 STL off Rocky Point headed towards Resolute Marine / KDH towards
EON PRE/POST CON S M OR E OFF		14:49 18:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging materials
EON PRE/POST CON S M OR E OFF		14:58 15:32	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA F/V Fierce Allegiance in bound to Dutch Harbor NO MMA observed
EON PRE/POST CON S M OR E OFF		15:00 15:34	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA F/V SEA MARE in bound out of harbor NO MMA observed
EON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		VF LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: ROCKY POINT
Date: 10-6-17
Time Effort Initiated: 0800
Time Effort Completed: 1830
Page: 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	140	16:12 17:41	C15 Grid N or S W or E	B	LP	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): SW	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL SIGHTED ROCKY POINT INNER COVE TR-W OUTSIDE OF CHANNEL. LAST SIGHTED AT GREEN CAN BUOY TR-W.
E ON PRE/POST CON S M OR E OFF	141	16:43 17:07	D15 Grid N or S W or E	B	LP	BL BO BR DF SA OTHER	HSEA	Min: Max: Best: 2	Beh code(s): SL	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	2 HSEA SIGHTED INSIDE COVE RP TR-W TOWARDS SPIT END. LAST SIGHTED INSIDE COVE BY DELTA WEST FUEL.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC DONE FOR THE DAY START POST-CONS. OBSERV.
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER EFFORT OFF FOR TODAY NO MARINE MAMMALS OBS.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-07-17

Time Effort Initiated: X

Time Effort Completed: X

Page of 1

Time	Visibility	Glare	Weather Condition 27	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10-07-17
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Weather
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Day
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No work
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		wind storm
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC
Date: 9-8-17
Time Effort Initiated: 0830
Time Effort Completed: 1900
Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
09:00	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
10:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
10:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
12:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Arrive onsite at 0815 - Level A zone Obs. Effort ON
E ON PRE/POST CON S M OR E OFF		08:30 09:08	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted All clear to Chris @ 0908
E ON PRE/POST CON S M OR E OFF		08:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing Sheet piles (Before All clear)
E ON PRE/POST CON S M OR E OFF		10:41 10:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a SS on Vibe
E ON PRE/POST CON S M OR E OFF		10:42 11:14	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration Sheet piles
E ON PRE/POST CON S M OR E OFF		11:16 12:19	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing Sheet piles
E ON PRE/POST CON S M OR E OFF		12:21 13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration Sheet piles down
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:40 14:32	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts stabbing sheet piles.

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umcDate: 9-8-17Time Effort Initiated: 0830Time Effort Completed: 1900Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:13	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:03	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure ² (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		TR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB to Lunch - CB@ umc
E ON PRE/POST CON S M OR E OFF		14:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane performs mitigation by doing a SS on Vibe
E ON PRE/POST CON S M OR E OFF		14:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing Sheet piles
E ON PRE/POST CON S M OR E OFF	147	15:13 15:14	D7 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): SW	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	STSL popped up in D7 TR-N past CG dock, did not resight, no change
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		in behavior to note, sighting too brief. Did not see him again, Tmc vibbing
E ON PRE/POST CON S M OR E OFF		15:55 16:13	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing Sheet piles
E ON PRE/POST CON S M OR E OFF	148	16:03 16:20	D7 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): SW	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL popped up SW-S past Tmc barge, sighted by DW dock C13 by mmo
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		at RP. seemed to be headed E out around RP, no behavior changes
E ON PRE/POST CON S M OR E OFF		16:15 16:25	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane working over water

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: umc
Date: 9-8-17
Time Effort Initiated: 0800
Time Effort Completed: 1900
Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
19:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human/ Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:16	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:30 17:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE begins stopping sheet piles.
E ON PRE/POST CON S M OR E OFF		17:35 17:36	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Does a SSV on vibbe.
E ON PRE/POST CON S M OR E OFF		17:36 18:25	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Begins vibbing sheet piles down.
E ON PRE/POST CON S M OR E OFF		18:30 19:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew secures the crane for the DAY. start post const. obs.
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10m. Zone All clear, no mammals observed Observer Effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/8/17

Time Effort Initiated: 0830

Time Effort Completed: 1900

Page 1 of 3

Time	Visibility	Glare	Weather Condition	31	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy	0	NSEW	NSEW
12:35	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radine/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer effort on.
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		on site @ 0800.
E ON PRE/POST CON S M OR E OFF		09:08	Grid N or S W or E										Pre con obs. 3300 M
E ON PRE/POST CON S M OR E OFF		08:55	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear, called to Chris @ Tmc. By CB - umc stopping before all clear!
E ON PRE/POST CON S M OR E OFF		10:41	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time, stopping sheet piles before all clear.
E ON PRE/POST CON S M OR E OFF		10:42	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Dose A. SSV on vibbe.
E ON PRE/POST CON S M OR E OFF		11:14	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts vibbing sheet piles down.
E ON PRE/POST CON S M OR E OFF		11:16	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts stopping sheet piles in place.
E ON PRE/POST CON S M OR E OFF		12:19	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		12:21	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts vibbing sheet piles.
E ON PRE/POST CON S M OR E OFF	143	12:35	Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	One HSEA sticking head out of water, looking, then submerging for 5+ mins, then at 12:48 slowing swimming around Rocky Pt. to NW, then submerged and lost sight of.

NW

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 10/8/17

Time Effort Initiated: 0830

Time Effort Completed: 1900

Page: 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:06	B-P-M-G-E	4%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
13:15	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
14:35	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	143.1	13:06 13:08	D14 Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	HSEA	Min: Max: Best: 1	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Moved to different viewing location, saw some HSEA swim around pt, look around, turn back East
E ON PRE/POST CON S M OR E OFF	144	13:15 13:30	E16 Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	HSEA	Min: Max: Best: 2	Beh code(s): LO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	2 HSEA in E16 just looking, not traveling. Lost sight of when had to change position
E ON PRE/POST CON S M OR E OFF	145	13:16 13:25	E15 Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	HSEA	Min: Max: Best: 1	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	1 HSEA milling about in E15, no obvious direction of travel. Lost sight of - went around pt to look few
E ON PRE/POST CON S M OR E OFF	145A	13:30 13:40	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Makushin Bay inbound to Resolve. No assoc mm activity
E ON PRE/POST CON S M OR E OFF		13:40 14:32	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF	146	14:35 16:10	E16 Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	HSEA	Min: Max: Best: 3	Beh code(s): LO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	3 HSEA looking, not traveling (prob same as 144+145), milling in E15. Lost sight of when TMC barge crane soft start on vibing sheet piles
E ON PRE/POST CON S M OR E OFF		14:35 14:36	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibing sheet piles
E ON PRE/POST CON S M OR E OFF		14:36 15:51	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibing sheet piles
E ON PRE/POST CON S M OR E OFF		15:28 15:40	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Eastern Wind inbound to PW fuel dock No assoc mm activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10/8/2017

Time Effort Initiated: 0830

Time Effort Completed: 1900

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Baseline/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:55 16:13	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		AS CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		0 server rotation.
E ON PRE/POST CON S M OR E OFF		16:15 16:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging overwater
E ON PRE/POST CON S M OR E OFF		16:30 17:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane stabbing sheet piles
E ON PRE/POST CON S M OR E OFF		17:35 17:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a soft start on Vibe
E ON PRE/POST CON S M OR E OFF		17:36 18:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibration sheet piles
E ON PRE/POST CON S M OR E OFF		18:10 18:24	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge w/ Tug Gyrfalcon TR-E assist outbound from umc dock - no mm activity associated
E ON PRE/POST CON S M OR E OFF		18:30 19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc done for day Start Post-Con Obs No mammals sighted
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10/09/17

Time Effort Initiated: 08:30

Time Effort Completed: 1930

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2	2	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2	1-2	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2	1-2	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2	1-2	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1	1	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1	1	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Effort on, UMC / zone A & B.
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30 09:13	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		preconstruction activity. cleared @ 09:13 / Chris.
<u>E ON</u> PRE/POST CON S M OR E OFF		09:20 14:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		OWC. welding beams.
<u>E ON</u> PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		observer rotation @ UMC
<u>E ON</u> PRE/POST CON S M OR E OFF		14:20 14:21	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		BARGE CRANE DOES A SSV. on vibbe,
<u>E ON</u> PRE/POST CON S M OR E OFF		14:21 16:19	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		BARGE CRANE STARTS LIFTING SHEET PILES DOWN TEMPLET PILES.
<u>E ON</u> PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		TB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Rotation, TB to Lunch CR. UMC.
<u>E ON</u> PRE/POST CON S M OR E OFF		16:15	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		observer rotation @ UMC.
<u>E ON</u> PRE/POST CON S M OR E OFF		16:30 17:10	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		BARGE CRANE STARTS OWC - SLINGING.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10/9/17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	1	N(S)E W	N(S)E W
19:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	1	N(S)E W	N(S)E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:15 18:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane starts vibrating Template piles out!
E ON PRE/POST CON S M OR E OFF		18:20 19:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins Dead pulling template piles & stacking on shore!
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC crew ties down crane & leaves site, start post con obs.
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		10 m E 3300 m zone All clear, NO mammals observed. observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/9/17

Time Effort Initiated: 0830

Time Effort Completed: 19:30

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:10	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on.
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		on site @ 0820
E ON PRE/POST CON S M OR E OFF		09:13	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		3300 m zone all clear C.R. contacted Chris @ TMC
E ON PRE/POST CON S M OR E OFF		09:20	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC doing OWC.
E ON PRE/POST CON S M OR E OFF		14:15	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		welding & slinging.
E ON PRE/POST CON S M OR E OFF		09:38	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FLV winter Bay Enters Harbor & ties up @ D.W. Dock.
E ON PRE/POST CON S M OR E OFF		09:50	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:20	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane does a 90 on the vib
E ON PRE/POST CON S M OR E OFF		14:21	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vib sheet pile + template files.
E ON PRE/POST CON S M OR E OFF		16:19	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA FLV Patricia Lee moved to D.W. dock No mma observed
E ON PRE/POST CON S M OR E OFF		14:52	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA FLV Patricia Lee moved to D.W. dock No mma observed
E ON PRE/POST CON S M OR E OFF	#149	15:10 18:34	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STL	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL spotted on bony @ Grid G7 H0 - hauled out @ 18:34

Did not witness STL
going into H2O.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10-9-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	15:50 15:57	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA M/V millium flean in bound to umc dock NO ASSOC. WMA observed
E ON PRE/POST CON S M OR E OFF	VA	16:20 16:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA - F/V american #1 in bound to MRF dock NO ASSOC. WMA observed
E ON PRE/POST CON S M OR E OFF		16:30 17:10	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins OOC Singing
E ON PRE/POST CON S M OR E OFF		16:50 :	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER Rotation Rocky point WMA VF → CR
E ON PRE/POST CON S M OR E OFF	VA	17:50 18:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Patricia Lee outbound from Delta Western F.P.
E ON PRE/POST CON S M OR E OFF		17:15 18:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibing / barge crane template piles out.
E ON PRE/POST CON S M OR E OFF		18:20 19:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane dead pull template piles onto shore.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post-construction activity
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off @ Rocky Point site.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-10-17

Time Effort Initiated: 0830

Time Effort Completed: 19:30

Page 1 of 3

Time	Visibility	Glare	Weather Condition	38	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	2 %	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW	
09:00	B-P-M-G-E	2 %	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW	
09:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW	
10:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW	
12:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW	
13:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW	

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive on site umc @ 0830 Observer Effort ON
E ON PRE/POST CON S M OR E OFF		08:30 09:19	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs at Level A Zone-10m All clear to Chris 0919
E ON PRE/POST CON S M OR E OFF		08:30 12:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging material man basket over water (before All clear)
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:00 18:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Misc. welding. on barge crane, etc.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		See Next Page
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-10-17

Time Effort Initiated: 0830

Time Effort Completed: 19:30

Page 2 of 3

Time	Visibility	Glare	Weather Condition 39	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
#153 17:17	B-P-M-G-E	20%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
#154 17:36	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
18:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
19:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	#153	17:17 17:19	H-2 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): SW(N) & TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Observed 1 STSL swimming north. Location: H-2 at southern edge of Trident Dock. Lost sight of STSL.
			Grid N or S W or E		4	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	#154	17:36 17:54	G-4 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): CH & MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	2 STSL's weaving (MI) back & forth north/south 15' off Kloosterboer dock. MMD left area to protect Level A @ UMC.
			Grid N or S W or E		4	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		18:13 18:14	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start vibe w/ barge crane mitigation
E ON PRE/POST CON S M OR E OFF		18:14 18:41	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibes sheet piles on "C" cell by USCG.
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction observation.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10/16/17

Time Effort Initiated: 08:30

Time Effort Completed: 19:30

Page 3 of 3

#155

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
19:15	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	#155	19:15 19:16	G-4 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): CH & SW (S)	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	1 STSL 15' again off of Klooksterboer dock, heading south. First sight cue was chuffing noise & then noticed STSL - half body out of H2O for less than a minute. watched area until 19:30 (post-const. act). Did not observe again.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10/10/17

Time Effort Initiated: 08:30

Time Effort Completed: 19:30

Page: 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:28	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort on for Rocky Point site
E ON PRE/POST CON S M OR E OFF		08:30 09:19	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre-construction observing. Level B.
E ON PRE/POST CON S M OR E OFF		08:30 12:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging materials before all clear.
E ON PRE/POST CON S M OR E OFF	#150	09:28 09:36	C14 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): SW (E) & DI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL seen just south of Delta West. Fuel Dock. Head out of H20, swimming slowly & heading east. Monitored Level B for a good hour. Did not observe again.
	11	:	Grid N or S W or E		11	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
	11	:	Grid N or S W or E		11	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	VA	10:03 10:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		M/V USCG "Mellon" headed outbound from USCG dock
E ON PRE/POST CON S M OR E OFF	VA	10:35 10:45	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Wizard" inbound toward DW dock. No MM activity
E ON PRE/POST CON S M OR E OFF	VA	10:43 10:56	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V "Alaska M13" inbound → DW Fuel dock. No MM activity

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10/10/17

Time Effort Initiated: 08:30

Time Effort Completed: 19:30

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
11:10	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
11:42	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
12:45	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigait ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	151	11:10 11:14	G-13 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 4	Beh code(s): SW(W) & DI	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None	N	A group of 4 STSLs swimming west entering mouth of harbor - G13 to F14 for ~ 4 min. until group dove.
E ON PRE/POST CON S M OR E OFF	"	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	151.1	11:18 11:23	D-14 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 4	Beh code(s): SW(S) & (E) MI	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Same 4 STSLs seen again grid G-14 headed towards RP cliff line.
	"	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Suddenly circle & head east towards mouth of harbor, swimming. Dove under ~ G-13.
	"	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	151.2	11:29 11:42	H-15 Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 4	Beh code(s): SW(S) & DI	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Same 4 STSLs sighted again - H-15 swimming south towards Front Beach. Dive under ~ G-17.
	"	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CR VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation MMD CR → MMD VF
E ON PRE/POST CON S M OR E OFF	152	12:45 17:01	E14 Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	HSEA	Min: Max: Best: 1	Beh code(s): LO	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Hsea Grid E14 POP UP then down for the entire time

Last sighted here at 1701 by mmo CB, no behavior changes to OWC, not traveling in any direction

No behavioral Δ

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10-10-17

Time Effort Initiated: 08:30

Time Effort Completed: 1930

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON VA PRE/POST CON S M OR E OFF		13:04	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA = vessel Activity F/V Arctic Ranger in board to D.V. Dock
E ON PRE/POST CON S M OR E OFF		14:00 18:00	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane welding + owc w/ barge Crane
E ON VA PRE/POST CON S M OR E OFF		15:27 15:35	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA MV Danlap tug No observed mma. inboard to Out
E ON VA PRE/POST CON S M OR E OFF		16:13 16:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA MV's Barge tug assist Danlap tug + Ocean Eagle tug. No mma
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation MM VF → CB
E ON VA PRE/POST CON S M OR E OFF		17:13 17:22	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Saratoga TR-SE out of harbor to Unalaska side. No mm activity assoc.
E ON VA PRE/POST CON S M OR E OFF		17:20 17:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Kiekoda Bay inbound harbor TR-W to Delta western dock. No mm activity assoc.
E ON VA PRE/POST CON S M OR E OFF		17:31 17:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Zodiac inbound harbor to Resolve Maine. No mm activity assoc.
E ON VA PRE/POST CON S M OR E OFF		17:46 18:02	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Gretchen Dunkip outbound harbor TR-S to Unalaska side. No mm activity associated.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-10-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:13 18:14	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing SS on Vibe
E ON PRE/POST CON S M OR E OFF		18:14 18:41	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing sheet piles
E ON PRE/POST CON S M OR E OFF	VA	18:15 18:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Arctic Lady at hand from harbor TR-SE & then North out of B zone. No mm activity associated
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con. Observations. No mammals sighted
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-11-17

Time Effort Initiated: 0

Time Effort Completed: 0

Page of 1

Time	Visibility	Glare	Weather Condition 45	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10-11-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Weather Day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Wind Storm
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No WORK
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-12-17

Time Effort Initiated: 0830

Time Effort Completed: _____

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:53	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	15%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	15%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort ON Arrive Onsite UMC @ 0816 Level A zone
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs Sighted STSL below Called All Clear @ 0913
E ON PRE/POST CON S M OR E OFF	156	08:53 08:59	CB Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): CH	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted STSL chuff at surface near UMC dock Set const. zone SW-S Sighted again @ end of
			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		UMC dock by Gryfalcon and lastly come up + diving down by DW dock near B-12
			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		lost sight after that, no construction happening yet so no behavior changes to it.
E ON PRE/POST CON S M OR E OFF		10:48 11:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane swinging over water
E ON PRE/POST CON S M OR E OFF		11:17 11:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a soft start on Vibe
E ON PRE/POST CON S M OR E OFF		11:18 11:21	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane vibrating in 34" plug pile at N end of dock area
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-12-17

Time Effort Initiated: 0830

Time Effort Completed: 1900

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	1	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	2	NSEW	NSEW
14:36	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:50 18:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Large crane is slinging OWC.
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. to Lunch @ umc
E ON PRE/POST CON S M OR E OFF	158	14:36 14:50	Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): SW FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL SW-S past umc dock, sighted again at B-11, went down and sighted off dock in B-12
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		foraging food, possibly w/ an octopus thrashing it around, did this for a few minutes and then
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		both mmo's lost him at about the same time. No behavior changes to note
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:30 19:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew leaves site for the day, start post-con obs.
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observed 1 STSL Ho. on Bouy. Logged By RP.C.B. observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/12/17

Time Effort Initiated: 0830

Time Effort Completed: 1900

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
09:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
09:10	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
10:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		Observer Effort on.
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		On site @ 0815
E ON PRE/POST CON S M OR E OFF	# 157	09:10 09:44	G-8 Grid N or S W or E	B	T.B.	BL BO BR DF SA (HO) OTHER	stsl	Min: Max: Best: ①	Beh code(s): HO	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None	N	Observed ① stsl HO. on Bouy. Did not see Direction of Travel or when it entered water. No Exposure Due
			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		To const. type none! Normal mammal Behavior.
E ON (VA) PRE/POST CON S M OR E OFF		10:38 11:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC (NONE)	SS/BC DE SD None		F/u Summer Bay Enters Harbor & ties up @ LCD Dock. No mammal Interaction
E ON (VA) PRE/POST CON S M OR E OFF		11:03 11:27	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/u unimak Enters Harbor & ties up @ KDH Dock. No mammal Interaction
E ON PRE/POST CON S M OR E OFF		10:48 11:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Slings, owe.
E ON PRE/POST CON S M OR E OFF		11:17 11:18	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Does a SSV. on vibbe.
E ON PRE/POST CON S M OR E OFF		11:18 11:21	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane begins vibbing, 24" plus pile @ North End!

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky pt.

Date: 10/12/17

Time Effort Initiated: 0830

Time Effort Completed: 1900

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ Dir of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minut ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	11:32	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Ft Arica enters Harbor ties up @ KD H Dock.
E ON PRE/POST CON S M OR E OFF	VA	11:47	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Brenna A enters Harbor & ties up @
E ON PRE/POST CON S M OR E OFF	VA	12:30	Grid N or S W or E		T.B. V.F.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation VF @ RP. T.B. to UMC.
E ON PRE/POST CON S M OR E OFF	VA	13:50	Grid N or S W or E		V.F.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Boat crane is slugging out
E ON PRE/POST CON S M OR E OFF	VA	16:24	Grid N or S W or E		V.F.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel activity = F/V Karyann inbound to NOMMA observed
E ON PRE/POST CON S M OR E OFF	VA	16:39	Grid N or S W or E		V.F.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA military falcon inbound to UMC dock No mm observed
E ON PRE/POST CON S M OR E OFF	VA	16:30	Grid N or S W or E		V.F. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	VA	16:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pacific mainline transiting from APL dock to Delta west dock. No mm activity associated
E ON PRE/POST CON S M OR E OFF	VA	17:31	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Beauty Bay outbound harbor TR-S from NPF dock to around Spit + TR-N
		17:48	Grid N or S W or E										No mm activity associated

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-12-17

Time Effort Initiated: 0830

Time Effort Completed: 1900

Page 3 of 3

#159

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
1834	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	18:06 18:19	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V miss Alyssa inbound harbor TR-N to spit dock - no mm activity assoc.
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done - Start Post Can. Obs - Sighted STSL #159
E ON PRE/POST CON S M OR E OFF	159	18:34 19:00	Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): HO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL jumped up on buoy in bay, smaller in size, seen this happen yesterday too. No Const.
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		is going on - in Post Can Obs. Behavior seems normal. Still there at end of Post-can obs.
E ON PRE/POST CON S M OR E OFF	VA	18:36 18:46	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel makushin Bay TR-S around spit to inside harbor to Resolve marine. No mm activity associated.
E ON PRE/POST CON S M OR E OFF	VA	18:50 19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Irene H inbound harbor TR-S to Trident dock. No mm activity.
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-13-17

Time Effort Initiated: 0830

Time Effort Completed: 1200

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:15	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:35	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:23	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on Arrive on site 0820 Level A zone
E ON PRE/POST CON S M OR E OFF		08:30 09:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs - #160-2 STSL on buoy
E ON PRE/POST CON S M OR E OFF	160	09:08 12:00	Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): HO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	2 STSL hauled out on buoy don't mind vessel traffic, stayed there until we left for day @ 1200 *
E ON PRE/POST CON S M OR E OFF		09:15 12:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts slinging over water + over work barge
E ON PRE/POST CON S M OR E OFF	161	09:35 09:58	Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL TR-N past umc dock, tracked it to Trident dock, no food there so it moved on to area by spit, lost it there H-5, moving slap looking around, no behavior changes to note.
E ON PRE/POST CON S M OR E OFF	163	10:23 10:25	Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): TR	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL TR-S past umc dock, saw its head only twice, probably same as
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		161 but no way to be sure, put it nose up, seems like the color and size are the same, no behavior changes
E ON PRE/POST CON S M OR E OFF	HA	08:30 09:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Helicopter Buzzing All around inner harbor filming vessels

*

* HA = Human Activity = out of sequence but worth noting a "Deadliest Catch" helicopter was buzzing the harbor for an hour this morning from 8:30-9:30 am filming - Very Loud!

(* No Direction of Travel)

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-13-17

Time Effort Initiated: 0830

Time Effort Completed: 1200

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	0-1	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Chns said they won't be doing any over water work today
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		only working on the barge. No post-can needed - no vibbing
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		today only owc. Observer Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10/13/17

Time Effort Initiated: 0830

Time Effort Completed: 1200

Page: 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #P	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minut ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer effort on.
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		on site @ 0820
E ON PRE/POST CON S M OR E OFF		09:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		start pre con. obs.
E ON PRE/POST CON S M OR E OFF		10:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		sighting # 160-CB @ StSL on Bow.
E ON PRE/POST CON S M OR E OFF		10:16	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Cornelia Marie Enters Harbor & ties up @ Trident Dock.
E ON PRE/POST CON S M OR E OFF		10:28	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO mammal interaction
E ON PRE/POST CON S M OR E OFF	162	10:03	Grid N or S W or E	B-13	T.B.	BL BO BR DF SA OTHER	StSL	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	F/V SAGA Enters Harbor & ties up @ LCD Dock
E ON PRE/POST CON S M OR E OFF		10:04	Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO mammal interaction
E ON PRE/POST CON S M OR E OFF		09:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observed 1 StSL Surface & Look @ The BACK of vessel. Went Down & did NOT Resurface.
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		normal Behavior!
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins Slinging OWC.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time NOT Doing Any OWC today observer's NOT needed, NO VIBING OR IMPACTING, NO POST.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-14-17

Time Effort Initiated: 0830

Time Effort Completed: 1845

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Mod/Hvy	0	NSEW	NSEW
10:32	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Mod/Hvy	0	NSEW	NSEW
10:36	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Mod/Hvy	0	NSEW	NSEW
11:25	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Mod/Hvy	0-1	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DTR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive OnSite UMC @ 0820 - Level A zone
E ON PRE/POST CON S M OR E OFF		08:30 09:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted All Clear to Chris 0920
E ON PRE/POST CON S M OR E OFF		09:25 15:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging materials -OWC
E ON PRE/POST CON S M OR E OFF	#164	10:32 10:34	DB Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 2	Beh code(s): SW	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted a STSL's swimming North off umc dock between const. zone & stern of APL
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Container ship, sort of milling around, not in a hurry to go anywhere
E ON PRE/POST CON S M OR E OFF	#164.1	10:36 10:42	DB Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL back, surface activity, showing side flipper just milling back + forth in
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Same general area but now there is only one, lost sight of 2nd STSL, no changes to behavior
E ON PRE/POST CON S M OR E OFF	#165	11:25 14:50	GB Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): HO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL hauled out on Bay Buoy in the sun, doesn't mind vessel traffic, normal behavior
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Stayed there all morning, into after noon until noticed it gone @ 1450,

did not see direction of travel
as it left buoy. owc so no
exposure as it left.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-14-17

Time Effort Initiated: 0830

Time Effort Completed: 1845

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
17:50	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:00 18:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slings pile over water
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF	# 168	17:50 18:08	I-3 Grid N or S W or E	B	T.B.	BL BO BR DF SA OTHER	Hbpk	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted 1 Humpback @ I-3 Dock after being notified by AS I-3 observer. Traveled South down Spit dock, then around tip of spit, & end
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observed Breaching Just (K9) outside of B-Zone, by C.B. @ Rocky Pt. normal Behavior!
E ON PRE/POST CON S M OR E OFF		18:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time called off observers no impacting or vibbing so no post. Observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/14/17

Time Effort Initiated: 0830

Time Effort Completed: 1845

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW
09:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW
15:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2 Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on on site @ 0820
E ON PRE/POST CON S M OR E OFF		08:30 09:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre const. Obs. 3300 m Zone, No mammals observed called All clear 0920 (Chris)
E ON PRE/POST CON S M OR E OFF		09:25 15:25	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins slinging materials,
E ON PRE/POST CON S M OR E OFF		10:53 12:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/T ARAHO Enters Harbor & Ties up @ LCD, had to wait 1.0 HR.
E ON PRE/POST CON S M OR E OFF		11:30 11:37	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Alertian Sable Enters Harbor & ties up @ NPF Dock. No mammal interaction.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B. VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:49 13:57	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Activity F/V Northwest in bound to LCD No mammal interaction
E ON PRE/POST CON S M OR E OFF		14:24 14:43	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA F/V Ama Tuli in bound into DUT Harbor North NO MM interaction
E ON PRE/POST CON S M OR E OFF	166	15:15 15:30	Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): DI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	#166 STSL Saw the STSL for about a min. then a few farward dives

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky PointDate: 10-14-17Time Effort Initiated: 08:30Time Effort Completed: 1845Page 2 of 3

Time	Visibility	Glare	Weather Condition 57	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
17:12	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Date (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigant Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	166.1	15:31 15:54	B11 Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	166.1 STSL FO in Grid B11 Then surfaced E side of T Dock and
						BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Swam to Rocky Point and lost site of 166.1 at Grid 14D SE Quad
E ON PRE/POST CON S M OR E OFF		16:00 18:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging pile over H2O
E ON PRE/POST CON S M OR E OFF	166.2	16:07 16:10	14D Grid N or S W or E	B	VF	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): PO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Splashing then lost site - no known direction
E ON PRE/POST CON S M OR E OFF	166.3	16:15 16:25	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VA A/U Alaska Beauty in Band to put NPF No mm A observed
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observed rotation
E ON PRE/POST CON S M OR E OFF	166.4	16:32 16:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Matson Container Ship outboard harbor w/ two tug assists. TR-E / TR-N - No mm activity associated
E ON PRE/POST CON S M OR E OFF	167	17:12 17:26	B-12 Grid N or S W or E	B 3300	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best:	Beh code(s): FO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL sighted TR-SE towards Delta western dock, sighted again right at the dock, sighted
						BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		2 more times by dock then TR-E lost him as I tried to follow him out Rocky Point. Acting like same behavior as STSL from sighting #166 earlier today. Normal behavior

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 10-14-17

Time Effort Initiated: 0830

Time Effort Completed: 1845

Page 3 of 3

Time	Visibility	Glare	Weather Condition 58	Wave Height	BSS	Wind	Swell
18:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	(VA)	18:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Kona Kai inbound harbor to LCO dock No mm activity assoc.
E ON PRE/POST CON S M OR E OFF		18:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day, called us off 15 min. early. No Post-Can Obs
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		needed due to no vibbing or impacting today. only slinging over water.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 10-15-17

Time Effort Initiated: X

Time Effort Completed: X

Page of

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10-15-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No work
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		mmo's
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		not needed
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		per TMC
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10/16/17

Time Effort Initiated: 08:30

Time Effort Completed: 1845

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW
09:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW
09:40	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW
10:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW
11:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort on @ UMC - level A & B
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30 09:17	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Preconstruction observing, texted TACHRIS 09:17.
<u>E ON</u> PRE/POST CON S M OR E OFF		09:00 11:50	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OWC - use of barge crane - platform, demp work.
<u>E ON</u> PRE/POST CON S M OR E OFF	# 169	09:40 09:42	<u>D-B</u> Grid N or S W or E	B	CR	BL BO BR DF SA OTHER	STSL	Min: 1 Max: Best:	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL ≈ 200' feet off city dock crane. level B - milling.
<u>E ON</u> PRE/POST CON S M OR E OFF		10:28 10:29	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Soft start on shore crane - land pilings
<u>E ON</u> PRE/POST CON S M OR E OFF		10:29 18:10	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane vibra compaction of upland pilings.
<u>E ON</u> PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation
<u>E ON</u> PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		T.B. CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
<u>E ON</u> PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Cont. next page

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: umc

Date: 10/16/17

Time Effort Initiated: 0830

Time Effort Completed: 1845

Page 2 of 2

Time	Visibility	Glaze	Weather Condition	Wave Height	BSS	Wind	Swell
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
15:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Light # (1 or 1.1 if no light)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of cont.	Zone/ Radius/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midget ion Type	Expe- ment/ RT/N	Behavior Change/ Response to Activity/Comments/Duration Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:08 17:30	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabilizing corner pile. No vibing.
E ON PRE/POST CON S M OR E OFF		16:30 :	Grid N or S W or E		CR TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer - misc rotation. other work
E ON PRE/POST CON S M OR E OFF		17:45 18:00	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Begins slinging Owc.
E ON PRE/POST CON S M OR E OFF		18:15 18:45	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time crew leaves site for the day. Start post. con. obs.
E ON PRE/POST CON S M OR E OFF		18:45 :	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10m E 3300 m. Zone All clear, no mammals observed observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 10/16/17

Time Effort Initiated: 0830

Time Effort Completed: 1845

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	2	NSEW	NSEW
09:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	2	NSEW	NSEW
11:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	2	NSEW	NSEW
12:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	2	NSEW	NSEW
14:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	2	NSEW	NSEW
15:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	2	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Inspect File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Effort on 3300 m zone, on site @ 0825
E ON PRE/POST CON S M OR E OFF		08:30 09:17	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Pre-cons, obs, All clear with Chris @ TMC,
E ON PRE/POST CON S M OR E OFF		09:00 11:50	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging man BASKETT, OWC, Demo W.R.
E ON PRE/POST CON S M OR E OFF		10:28 10:29	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Does a SSV on vibbe
E ON PRE/POST CON S M OR E OFF		10:29 18:10	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Shore crane Starts vibration on shore
E ON PRE/POST CON S M OR E OFF		11:55 11:13	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		FLV Pacific Sun Enters Harborflies up @ LED. No mammal Interaction,
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		T.B VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:08 17:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane - work on corner piling DP & other misc. work
E ON PRE/POST CON S M OR E OFF		16:44	Grid N or S W or E		VF CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 10/16/17

Time Effort Initiated: 08:30

Time Effort Completed: 1845

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug inbound @ mouth of harbor. No mm activity assoc.
E ON PRE/POST CON S M OR E OFF		17:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug outbound @ mouth of harbor. No mm activity assoc.
E ON PRE/POST CON S M OR E OFF		17:45 18:00	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins slinging over water.
E ON PRE/POST CON S M OR E OFF		18:15	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction activity.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10-17-17

Time Effort Initiated: 0830

Time Effort Completed:

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-1HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-1HR	Lt/Mod/Hvy	2	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-1HR	Lt/Mod/Hvy	2	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-1HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-1HR	Lt/Mod/Hvy	3	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-1HR	Lt/Mod/Hvy	3-4	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive on site UMC @0814 Obs Effort on - Level A zone
E ON PRE/POST CON S M OR E OFF		08:30 09:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs All Clear - No mammals sighted. TMC starting
E ON PRE/POST CON S M OR E OFF		09:00 09:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC started piles next to barge temporarily w/ barge cane
E ON PRE/POST CON S M OR E OFF		09:45 12:02	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slinging over water - Building Template
E ON PRE/POST CON S M OR E OFF		11:24 11:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane performs mitigation by doing a Soft start w/ Vibra Compaction
E ON PRE/POST CON S M OR E OFF		11:25 11:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane is doing Vibra Compaction in upland area
E ON PRE/POST CON S M OR E OFF		12:21 13:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Vibbing in 24" piles - upland 10-35m radii
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Cont.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 10/17/17

Time Effort Initiated: 08:30

Time Effort Completed: 19:40

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	4	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:14 16:06	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing out in 24' piles - upland area.
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		CR CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer rotation.
E ON PRE/POST CON S M OR E OFF		16:20 17:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging materials over water
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:16 19:06	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane begins vibing round piling in upland area.
E ON PRE/POST CON S M OR E OFF		19:10 19:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		post construction activity
E ON PRE/POST CON S M OR E OFF		19:40	Grid N or S W or E		CR	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off ume.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11-1-17

Time Effort Initiated: 0830

Time Effort Completed: 1400

Page 1 of 1

Time	Visibility	Glaze	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite @ Level A zone @ 0827 Obs. Effort ON
E ON PRE/POST CON S M OR E OFF		08:30 09:47	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Called All Clear to mar
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort off, called off by mar. @ time NO Post Required; NO ribbing Impacting or OWC.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 11/1/19

Time Effort Initiated: 0830

Time Effort Completed: 1400

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
11:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
12:30	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
14:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Observer Effort on on site @ Rocky Pt.
E ON PRE/POST CON S M OR E OFF		08:30 09:47	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Start Pre con. obs. CB called All clear to move @ TMC 3300 m. zone all clear.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		TB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Observer Rotation
E ON PRE/POST CON S M OR E OFF		14:03	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Effort + OAP - No need for mmo's Today per TMC
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location:

Date: 11-02-17 thru 11-09-17

Time Effort Initiated:

Time Effort Completed:

Page of

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Nov 2nd
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		thru Nov 9th
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO WORK
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		REQUIRING
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		MMO'S
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 11/10/2017

Time Effort Initiated: 1730

Time Effort Completed: 1930

Page 1 of 1

Sunset 1814

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer effort on (Vibra Hammer-Vibbing)
E ON PRE/POST CON S M OR E OFF		17:30 18:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Pre construction TMC already vibing 24" pilings in the dry
E ON PRE/POST CON S M OR E OFF		17:30 19:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC NONE	SS/BC DE SD None		TMC barge crane vibing 24" pilings in the dry (extracting and relocating some with crane)
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort off No mm activity
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC DOCK

Date: 11-10-17

Time Effort Initiated: 1730

Time Effort Completed: 1900

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW

* Page 1 of 1 17:30 (EON) (V) OBSERVER EFFORT ON - UMC

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:30	Grid		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE VIBRA HAMMER IN MOTION - 24" ROUND PILING, DRY UPLAND - NO MAMMALS SEEN
E ON PRE/POST CON S M OR E OFF		18:00	Grid		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE MOVING 24" ROUND PILING IN DRY UPLAND BEFORE ALL CLEAR
E ON PRE/POST CON S M OR E OFF		17:30	Grid		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBRA HAMMER 24" ROUND PILING DRY UPLAND
E ON PRE/POST CON S M OR E OFF		19:00	Grid		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		POST CONSTRUCTION
E ON PRE/POST CON S M OR E OFF		19:30	Grid		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO MM OBSERVED
E ON PRE/POST CON S M OR E OFF		:	Grid		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER EFFORT OFF
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

* Duplicate Line

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/11/2017

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Hvemt Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Baseline/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Observer effort on.
E ON PRE/POST CON S M OR E OFF		08:30 09:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Preconstruction -TMC already vibing 24" pilings in the dry (All clear)
E ON PRE/POST CON S M OR E OFF		08:30 08:55	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC barge crane vibing 24" round pilings in the dry
E ON PRE/POST CON S M OR E OFF		08:56 09:10	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC barge crane stabbing 24" round pile
E ON PRE/POST CON S M OR E OFF		09:11 09:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		09:20 10:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC shore crane slings materials in upland
E ON PRE/POST CON S M OR E OFF		09:35 09:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC barge crane stabbing 24" round pilings in the dry
E ON PRE/POST CON S M OR E OFF		10:05 10:25	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC barge crane vibing 24" round pilings
E ON PRE/POST CON S M OR E OFF		10:32 10:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC barge crane stabbing 24" pilings

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/11/2017

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
13:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibing 24" round piling in the dry
E ON PRE/POST CON S M OR E OFF		10:50 13:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane slinging materials on land
E ON PRE/POST CON S M OR E OFF		11:30 12:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slinging materials on the upland
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		12:31 13:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING MATERIALS OVER WATER.
E ON PRE/POST CON S M OR E OFF		13:40 13:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABB 24" ROUND PILING IN WATER
E ON PRE/POST CON S M OR E OFF		13:40 17:16	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC SHORE CRANE SLINGING MATERIALS IN UPLAND DRY AREA.
E ON PRE/POST CON S M OR E OFF		13:50 14:18	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILING IN UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		14:20 14:24	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC BARGE CRANE STABBING 24" ROUND PILING.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC DOCK

Date: 11/11/17

Time Effort Initiated: 0930

Time Effort Completed: 1915

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:25 14:35	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILING IN UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		14:41 14:48	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 24" ROUND PILING
E ON PRE/POST CON S M OR E OFF		14:49 15:13	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILING UPLAND DRY
E ON PRE/POST CON S M OR E OFF		15:17 15:24	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STAB 24" ROUND PILING
E ON PRE/POST CON S M OR E OFF		15:26 15:45	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILING IN UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		15:46 16:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 24" PILING IN WATER cleaning them up
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		LP AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer ROTATION outside of sheet pile
E ON PRE/POST CON S M OR E OFF		16:31 16:38	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing 24" piling - lifting from then stabbing in water
E ON PRE/POST CON S M OR E OFF		16:39 17:07	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" piling in the dry

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/11/2017

Time Effort Initiated: 0930

Time Effort Completed: 1915

Page: 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:08 17:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing 24" round pile
E ON PRE/POST CON S M OR E OFF		17:20 17:37	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibrating 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		17:40 17:47	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing 24" round pile in water
E ON PRE/POST CON S M OR E OFF		17:48 18:05	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibrating 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		18:08 18:10	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing 24" round pile in the water
E ON PRE/POST CON S M OR E OFF		18:19 18:37	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibrating 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		18:45 19:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction No mm activity.
E ON PRE/POST CON S M OR E OFF		19:15 :	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer off effort off
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: ROCKY POINT

Date: 11-11-17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page: 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:30	B-P-M-G-E	15%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ON SITE TO CLEAR AREA
E ON PRE/POST CON S M OR E OFF		08:30 9:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE CONST TMC ALREADY VIBING 24" PILING
E ON PRE/POST CON S M OR E OFF		08:30 08:55	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC BARGE CRANE VIBING 24" 0850 ALL CLEAR
E ON PRE/POST CON S M OR E OFF		08:56 09:10	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC BARGE CRANE STABBING 24" PILING
E ON PRE/POST CON S M OR E OFF		09:11 09:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC BARGE CRANE VIBING 24" PILING
E ON PRE/POST CON S M OR E OFF		09:20 10:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SWING materials in Upland
E ON PRE/POST CON S M OR E OFF		09:35 09:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 24" PILING
E ON PRE/POST CON S M OR E OFF		10:05 10:15	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBE 24" ROUND PILING IN UPLAND DRY
E ON PRE/POST CON S M OR E OFF		10:32 10:45	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STAB 24" ROUND PILING IN WATER

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: ROCKY POINT

Date: 11-11-17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page: 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:30	B-P-M-G-E	15 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Date (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:50 11:09	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILING
E ON PRE/POST CON S M OR E OFF		10:50 13:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SLINGING MATERIALS ON LAND
E ON PRE/POST CON S M OR E OFF		11:30 12:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING MATERIALS IN UPLAND DRY
E ON PRE/POST CON S M OR E OFF		12:30 :	Grid N or S W or E		LP AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION
E ON PRE/POST CON S M OR E OFF		12:31 13:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging materials over water
E ON PRE/POST CON S M OR E OFF		13:40 13:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing 24" pilings in the water
E ON PRE/POST CON S M OR E OFF		13:50 14:18	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" pilings in the dry
E ON PRE/POST CON S M OR E OFF		14:20 14:24	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing 24" pilings in the dry
E ON PRE/POST CON S M OR E OFF		13:40 17:16	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging materials upland

* OUT OF SEQUENCE BUT TIMES ARE ACCURATE

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 11-11-2017

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
15:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
16:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1+ if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:25 14:35	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibing 24" piling in the dry
E ON PRE/POST CON S M OR E OFF		14:41 14:48	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing 24" piling in the water
E ON PRE/POST CON S M OR E OFF		14:49 15:13	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibing 24" piling
E ON PRE/POST CON S M OR E OFF		15:17 15:24	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing 24" piling in the dry
E ON PRE/POST CON S M OR E OFF		15:26 15:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibing 24" piling in the dry
E ON PRE/POST CON S M OR E OFF		15:46 16:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane clinging 24" piles to stabbing against outside of sheet piling
E ON PRE/POST CON S M OR E OFF		16:30 :	Grid N or S W or E		AS LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		16:31 16:38	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 24" ROUND PILING IN THE WATER
E ON PRE/POST CON S M OR E OFF		16:39 17:07	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" PILING ROUNDS IN UPLAND DRY

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: ROCKY POINT

Date: 11/11/17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 4 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minut ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:08 17:15	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 24" PILING
E ON PRE/POST CON S M OR E OFF		17:20 17:37	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" PILING IN UPLAND DRY
E ON PRE/POST CON S M OR E OFF		17:40 17:47	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 24" PILING IN WATER
E ON PRE/POST CON S M OR E OFF		17:48 18:05	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" PILING UPLAND.
E ON PRE/POST CON S M OR E OFF		18:08 18:18	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 24" PILING IN WATER
E ON PRE/POST CON S M OR E OFF		18:19 18:37	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" PILING IN UPLAND
E ON PRE/POST CON S M OR E OFF		18:45 19:15	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		POST CONSTRUCTION NO MM SIGHTED
E ON PRE/POST CON S M OR E OFF		19:15 :	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER EFFORT OFF
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/12/2017

Time Effort Initiated: 08:30

Time Effort Completed: 12:30

Page 1 of 3

(Official - Sunrise 0948)

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
10:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
11:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Redline/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on TMC barge crane stabbing 36" round pile in the dry
E ON PRE/POST CON S M OR E OFF		08:30 09:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction → Torted to Chris * All clear 0900 - flat calm *
E ON PRE/POST CON S M OR E OFF		08:30 08:35	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane already stabbing 36" round pile in the water
E ON PRE/POST CON S M OR E OFF		08:30 13:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane slinging gear upland
E ON PRE/POST CON S M OR E OFF		08:36 09:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane 10/35 vibing 36" round pile in the dry - before all clear.
E ON PRE/POST CON S M OR E OFF		09:50 10:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slinging gear upland - assembling impact hammer
E ON PRE/POST CON S M OR E OFF		10:29 11:07	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane impacting 36" round pile in the dry 50/150 zone
E ON PRE/POST CON S M OR E OFF		11:16 11:25	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing 36" round pile in the dry
E ON PRE/POST CON S M OR E OFF		11:27 11:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane vibing 36" round pile in the dry

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/12/2017

Time Effort Initiated: 0830

Time Effort Completed: 1830

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
13:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
14:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
16:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
17:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W
18:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Realms/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:17 13:03	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane impacting 36" round pile in the dry
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		AS NP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		14:00 14:31	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging materials
E ON PRE/POST CON S M OR E OFF		14:32 17:01	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane 24' impacting upland
E ON PRE/POST CON S M OR E OFF		14:35 14:39	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Shore crane slinging materials in upland
E ON PRE/POST CON S M OR E OFF		14:40 15:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Shore crane setting railing on sheet pile (FACE BEAMS)
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		LP/ AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:00 17:40	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane slinging gear over water holding platform with workers outside sheet pile face
E ON PRE/POST CON S M OR E OFF		18:00 18:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction

No mm activity

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/12/2017

Time Effort Initiated: 0830

Time Effort Completed: 1830

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: ROCKY POINT - TMC

Date: 11-12-17

Time Effort Initiated: 0830

Time Effort Completed: 1830

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ON SITE TO CLEAR AREA
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30 09:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE CONS/ TMC ALREADY STABING NO MM ACTIVITY
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30 08:35	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		STABING BARGE CRANE 24" IN WATER
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30 13:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SLINGING MATERIALS IN UPLANDS
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30 09:45	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 36" BEFORE ALL CLEAR
<u>E ON</u> PRE/POST CON S M OR E OFF		09:50 10:20	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE - SLINGING MATERIALS UPLANDS
<u>E ON</u> PRE/POST CON S M OR E OFF		10:29 11:07	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		IMPACTING BARGE CRANE 36" Piling
<u>E ON</u> PRE/POST CON S M OR E OFF		11:16 11:25	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		36" BARGE CRANE STABING PILING
<u>E ON</u> PRE/POST CON S M OR E OFF		11:25 11:45	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VIBE 36" ROUND BARGE CRANE

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 11-12-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:17 13:03	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane impacting 30" Upland
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		LP/ AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER Rotation
E ON PRE/POST CON S M OR E OFF		14:00 14:31	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slinging gear in upland
E ON PRE/POST CON S M OR E OFF		14:32 17:01	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane impacting 24" round piles in the dry
E ON PRE/POST CON S M OR E OFF		14:35 14:39	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane slinging materials
E ON PRE/POST CON S M OR E OFF		14:40 15:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane slinging over water face beams
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		AS LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		16:00 17:40	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging materials
E ON PRE/POST CON S M OR E OFF		18:00 18:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		POST CON OBS NO MAMMALS SIGHTED

(E OFF)

18:30

LP

(NONE)

OBS EFFORT OFF

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/13/2017

Time Effort Initiated: 0830

Time Effort Completed:

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
10:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
10:47	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
11:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
1:	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Coc	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on (OWC already in progress.)
E ON PRE/POST CON S M OR E OFF		08:30 09:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction *All clear B zone 0903* texted to Chris
E ON PRE/POST CON S M OR E OFF		08:30 10:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane slinging gear + workers in platform in front of sheet pile
E ON PRE/POST CON S M OR E OFF		09:10 09:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slinging 24" + 36" round piles from deck to barge
E ON PRE/POST CON S M OR E OFF		10:25 10:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane slinging gear
E ON PRE/POST CON S M OR E OFF		10:25 12:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Worker's on hanging platform in front of sheet pile doing OWC on and off scaffolding
E ON PRE/POST CON S M OR E OFF	186	10:47 10:49	Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): SW(s)	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	STSL swimming north to south, head surfacing frequently after small boat passed by, submerged and not seen again.
E ON PRE/POST CON S M OR E OFF		10:50 11:40	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC shore crane slinging face beam onto sheet pile
E ON PRE/POST CON S M OR E OFF		12:00 12:35	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC barge crane stabbing round piles to lean against sheet piles in water

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/13/2017

Time Effort Initiated: 0830

Time Effort Completed:

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
13:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
15:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cat	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		AS LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		13:35 18:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		WORKERS ON FACE BEAM/ON SHEET PILE OVER WATER ON PLATFORM WELDING. SHORE CRANE
E ON PRE/POST CON S M OR E OFF		13:47 14:05	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILE IN UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		14:15 14:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILE IN UPLAND DRY
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		LP AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		15:20 15:27	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		15:40 16:25	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging face beam onto top of sheet pile face
E ON PRE/POST CON S M OR E OFF		15:44 16:10	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing 24" round pilings in water along sheet pile face
E ON PRE/POST CON S M OR E OFF		16:20 16:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/13/2017

Time Effort Initiated: 0830

Time Effort Completed:

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Behavior Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		AS LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation.
E ON PRE/POST CON S M OR E OFF		16:44 17:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILE IN UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		17:10 17:28	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILE IN UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		17:40 17:59	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILE IN UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		18:13 18:17	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 24" ROUND IN WATER NEXT SHEET PILE.
E ON PRE/POST CON S M OR E OFF		18:28 18:48	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILE IN UPLAND DRY
E ON PRE/POST CON S M OR E OFF		18:50 19:20	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		POST COMS NO MMA OBS ALL CLEAR
E ON PRE/POST CON S M OR E OFF		19:20	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: ROCKY POINT

Date: 11-13-2017

Time Effort Initiated: 0830

Time Effort Completed: 1920

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	15%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD		OBSERVER ON SITE LEVEL B ZONE TO CLEAR AREA
E ON PRE/POST CON S M OR E OFF		08:30 09:03	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE CONS - SHORE CRANE ALREADY IN MOTION ALL CLEAR 0903
E ON PRE/POST CON S M OR E OFF		08:30 10:15	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SLINGING MATERIALS OVERWATER
E ON PRE/POST CON S M OR E OFF		09:15 09:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL "KONA KAI" INBOUND TR-N TOWARDS NP FUEL DOCK-DOCKED AT LCD. NO MMA OBS.
E ON PRE/POST CON S M OR E OFF		9:10 09:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SWING 24" PILE FROM DOCK TO BARGE
E ON PRE/POST CON S M OR E OFF		10:25 10:45	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING GEAR OWC.
E ON PRE/POST CON S M OR E OFF		10:25 12:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		WORKERS HANGING OVER SHEET PILE WORKING ON FACE BEAMS. SHORE CRANE
E ON PRE/POST CON S M OR E OFF		10:39 10:45	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL ACT - F/U "ATLANTICO" TO INBOUND TR-N TO NP FUEL DOCK NO MMA OBS
E ON PRE/POST CON S M OR E OFF		11:00 11:23	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL ACT - TUG SHANSON BARGE IN BOUND CHANNEL TR-W, N, ENDING AT LCD.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 11-13-17

Time Effort Initiated: 0830

Time Effort Completed: 1920

Page 2 of 3

Time	Visibility	Glare	Weather Condition 23	Wave Height	BSS	Wind	Swell
12:00	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	(N)SEW	NSEW
14:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigut ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:50 11:40	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SLINGING FACE BEAM ONTO SHEET PILING.
E ON VA PRE/POST CON S M OR E OFF		11:00 11:19	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL USCG INBOUND TR-W TO USCG DOCK. NO MMA OBS
E ON VA PRE/POST CON S M OR E OFF		10:40 10:49	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL INBOUND TUG SARATOGA TO LCD DOCK. NO MMA OBS
E ON VA PRE/POST CON S M OR E OFF		11:45 12:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL IN BOUND CHANNEL FN SEABROOKE TR-N TO NPF NO MMA OBS
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		LP VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION
E ON PRE/POST CON S M OR E OFF		12:00 12:35	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE PILE IN WATER AGAINST SHEET PILE (STABBING)
			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		...
E ON PRE/POST CON S M OR E OFF		13:35 18:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Worker on the face beam on the sheet pile weld shore crane
E ON PRE/POST CON S M OR E OFF		13:47 14:05	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibing 24" Round in the 4 plants Barge crane

* OUT OF SEQUENCE BUT TIMES ARE ACCURATE

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 11-13-17

Time Effort Initiated: 08:30

Time Effort Completed: 1920

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:15	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" pile in the upland
E ON PRE/POST CON S M OR E OFF		14:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		contained Barge w/ TAG assist inbound to UMC dock No MUA
E ON PRE/POST CON S M OR E OFF		15:19	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vibing 24" Round Pile in the Dry
E ON PRE/POST CON S M OR E OFF		15:20	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane Slugging face beams out to sheet pile face
E ON PRE/POST CON S M OR E OFF		15:24	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane St 24" pile into water along sheet pile face
E ON PRE/POST CON S M OR E OFF		15:44	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in dry.
E ON PRE/POST CON S M OR E OFF		16:10	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:20	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF/AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		16:44	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		17:10	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		17:28	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry

MARINE MAMMAL OBSERVATION RECORD

Project Name: LSC Dock Positions III and IV

Monitoring Location: Racey Pt

Date: 11-13-2017

Time Effort Initiated: 0830

Time Effort Completed: 1920

Page 4 of 4

Time	Visibility	Cloud	Weather Condition	Wave Height	DBS	Wind	Swell
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N-SE-W	N-SE-W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N-SE-W	N-SE-W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N-SE-W	N-SE-W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N-SE-W	N-SE-W

Event Code	Site # (1 or 1.1 if so- aligned)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DNR of animal	Zone/ Radius/ Impact File #	Obs.	Sighting Code	Sex/Age	Group Size	Behavior Code (see code sheet)	Construction Type	Minut Type	Expo- sure/ G/N	Behavior Change/ Activity/Comments/Remarks/ Activity/Vessel ID # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:40 17:59	Grid N or S W or E		AS	BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		18:13 18:17	Grid N or S W or E		AS	BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing 24" round piles in water along sheet pile face
E ON PRE/POST CON S M OR E OFF		18:16 18:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Parlot inbound to DW dock - NO MMA Activity Obs
E ON PRE/POST CON S M OR E OFF		18:28 18:48	Grid N or S W or E		AS	BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		18:50 19:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction No observed mm - dark.
E ON PRE/POST CON S M OR E OFF		19:20 :	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort off.
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/14/2017

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1'	N(S)E W	N(S)E W
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1'	N(S)E W	N(S)E W
10:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1'	N(S)E W	N(S)E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSE W	NSE W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSE W	NSE W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSE W	NSE W

Event Code	Sight # (1 or L if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misguid ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on + All clear 0911 B Zone +
E ON PRE/POST CON S M OR E OFF		08:30 09:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction - TMC already stabbing doing OWC - All clear
E ON PRE/POST CON S M OR E OFF		08:30 08:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing 24" round piles in water outside of sheet pile face
E ON PRE/POST CON S M OR E OFF		08:30 09:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Workers hanging over water on platform outside of sheet pile face doing OWC
E ON PRE/POST CON S M OR E OFF		08:55 09:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		09:29 09:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		10:07 10:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		10:28 10:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		10:41 10:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging face beam onto sheet pile face

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/14/2017

Time Effort Initiated: 0930

Time Effort Completed: 1915

Page 2 of 4

Time	Visibility	Glace	Weather Condition	Wave Height	BSS	Wind	Swell
11:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N(S)E W	N(S)E W
12:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N(S)E W	N(S)E W
13:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N(S)E W	N(S)E W
14:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		N(S)E W	N(S)E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSE W	NSE W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSE W	NSE W

Event Code	Flight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:45 13:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Workers on platform over water in front of sheet pile face doing owc B ZONE ON
E ON PRE/POST CON S M OR E OFF		11:15 11:33	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing 24" round piles in water outside of sheet pile face
E ON PRE/POST CON S M OR E OFF		11:41 12:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		12:13 12:42	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		12:30 :	Grid N or S W or E		AS LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		12:51 13:26	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILE IN DRY UPLAND.
E ON PRE/POST CON S M OR E OFF		13:35 18:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		WORKERS ON PLATFORM OVER WATER IN FRONT OF SHEET PILE FACE DOING OWC B ZONE ON
E ON PRE/POST CON S M OR E OFF		14:12 14:31	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING MATERIALS IN UPLAND
E ON PRE/POST CON S M OR E OFF		14:30 :	Grid N or S W or E		LP AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC
Date: 11/14/2017
Time Effort Initiated: 0830
Time Effort Completed: 1915
Page 3 of 4

Time	Visibility	Gloze	Weather Condition	Wave Height	BSS	Wind	Swell
15:10	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0-1	NSEW	NSEW
15:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0-1	NSEW	NSEW
16:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:33 14:58	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing 36" round piles, 12, into water outside sheet pile face
E ON PRE/POST CON S M OR E OFF	107	15:18 15:20	Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): SW(s)	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	One STSL surfaced, looking and swimming south outside of TMC barge, not in A zone submerged and lost sight of.
E ON PRE/POST CON S M OR E OFF		15:25 15:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 36" pile in the dry.
E ON PRE/POST CON S M OR E OFF		16:12 16:41	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane impacting 36" round pile in the dry
E ON PRE/POST CON S M OR E OFF		16:30 :	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION
E ON PRE/POST CON S M OR E OFF		16:30 17:03	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SETTING FACE BEAM ON SHEET PILE OWC. B-ZONE ON.
E ON PRE/POST CON S M OR E OFF		17:00 17:19	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 36" ROUND PILE IN THE DRY.
E ON PRE/POST CON S M OR E OFF		17:30 18:03	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 36" ROUND PILING IN DRY UPLAND
E ON PRE/POST CON S M OR E OFF		18:18 18:35	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 24" ROUND PILE IN UPLAND DRY.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC DOCK - TMC

Date: 11-14-17

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 4 of 4

Time	Visibility	Glaze	Weather Condition	Wave Height	SSS	Wind	Swell
19:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	SEW	NEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NEW	NEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NEW	NEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NEW	NEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NEW	NEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NEW	NEW

Event Code	Right # (1 or 1.1 if no sight)	Time/Dur (Start/End time if cont.)	VP/ Grid #/ Dir of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Code	Location	Group Size	Behavior Code (see code sheet)	Construction Type	Midnight Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:45	Grid		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC DONE FOR THE DAY. START POST CONVS. OBS. NO MAMMALS SIGHTED
E ON PRE/POST CON S M OR E OFF		19:15	Grid		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBS. EFFORT FOR TODAY
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 11-14-2017

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page: 1 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
10:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		ONSITE ROCKY POINT @0830 LEVEL B ZONE EFFECT ON
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30 09:11	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE-CONS OBSERV BARGE CRANE BEFORE DAYLIGHT ALL CLEAR - NO KM OBSERVED
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30 08:45	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STAB 24" ROUND PILE OUTSIDE OF SHEET PILE FACE
<u>E ON</u> PRE/POST CON S M OR E OFF		08:30 09:15	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		WORKERS HANGING OVER SHEET PILE FACE DOING OVER WATER CONS.
<u>E ON</u> PRE/POST CON S M OR E OFF		08:55 09:15	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILE IN DRY.
<u>E ON</u> PRE/POST CON S M OR E OFF		09:29 09:45	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILE IN DRY.
<u>E ON</u> PRE/POST CON S M OR E OFF		10:01 10:20	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILE IN DRY.
<u>E ON</u> PRE/POST CON S M OR E OFF		10:28 10:45	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILE IN DRY.
<u>E ON</u> PRE/POST CON S M OR E OFF		10:41 10:45	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SLINGING FACE PLATE OVER SHEET PILE.

MARINE MAMMAL OBSERVATION RECORD

Project Name: U/MC Dock Positions III and IV

Monitoring Location: ROCKY POINT

Date: 11-14-2017

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 2 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
12:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:45 13:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		WORKERS ON PLATFORM OVERWATER IN FRONT OF SHEET PILE FACE PLATE WORK LEVEL B ZONE ON
E ON PRE/POST CON S M OR E OFF		11:15 11:33	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 24" ROUND IN WATER NEXT TO SHEET PILE.
E ON PRE/POST CON S M OR E OFF		11:41 12:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND IN DRY.
E ON PRE/POST CON S M OR E OFF		12:13 12:42	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND IN DRY.
E ON PRE/POST CON S M OR E OFF		12:36 :	Grid N or S W or E		LP VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION
E ON PRE/POST CON S M OR E OFF		12:51 13:26	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane VIBING 24" Round Pile in dry
E ON PRE/POST CON S M OR E OFF		13:35 18:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		WORKERS ON PLATFORM OVER water in front of sheet pile Plate work
E ON PRE/POST CON S M OR E OFF		14:12 14:31	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane Slinging materials in upland
E ON PRE/POST CON S M OR E OFF		14:33 14:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane St 36" round Pile

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 11-14-17

Time Effort Initiated: 08:30

Time Effort Completed: 1915

Page 3 of 4

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:51	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if te- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:25 15:50	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		36" Round Pile are being vibed in The Dry Barge crane
E ON PRE/POST CON S M OR E OFF		16:12 16:41	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane impacting 36" Round Pile in The Dry
E ON PRE/POST CON S M OR E OFF		16:30 17:03	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane settings Face down on sheet pile
E ON PRE/POST CON S M OR E OFF		16:30 :	Grid N or S W or E		VF AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:00 17:19	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 36" round pile in the dry
E ON PRE/POST CON S M OR E OFF		17:30 18:03	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane impacting 36" round pile in the dry
E ON PRE/POST CON S M OR E OFF	188	17:51 17:55	D14 Grid N or S W or E	B	AS	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): SW(E)	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	One STSL swimming slowly east from D14 on around Rocky Pt.; submerged and lost sight of. Ran to other side of point - no further sightings
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		18:18 18:35	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane impacting 24" round piles in the dry

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 11-14-2017

Time Effort Initiated: 0830

Time Effort Completed: 1915

Page 4 of 4

Time	Visibility	Glare	Weather Condition 33	Wave Height	BSS	Wind	Swell
18:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-S-E-W	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ Dir of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:45 19:15	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Post construction
E ON PRE/POST CON S M OR E OFF		19:15 :	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC <u>NONE</u>	SS/BC DE SD None		Observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/15/2017

Time Effort Initiated: 0830

Time Effort Completed: 2020

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
10:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
11:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
12:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #2	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on. (TMC begins at 0700 daily)
E ON PRE/POST CON S M OR E OFF		08:30 09:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre construction *B Zone All clear 0920 Texted to Chris
E ON PRE/POST CON S M OR E OFF		08:30 19:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Workers on platform in front of sheet pile face welding over water
E ON PRE/POST CON S M OR E OFF		08:30 09:20	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging template in upland
E ON PRE/POST CON S M OR E OFF		10:15 10:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane impacting 24" round piles in the dry (vibed previously)
E ON PRE/POST CON S M OR E OFF		11:05 11:45	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane impacting 26" round pile in the dry (vibed previously)
E ON PRE/POST CON S M OR E OFF		11:48 12:05	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane impacting 24" round piles in the dry (vibed previously)
E ON PRE/POST CON S M OR E OFF		12:00 12:06	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging materials over water to workers on platform
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		AS LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC
Date: 11/15/2017
Time Effort Initiated: 0830
Time Effort Completed: 2020
Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
15:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
16:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if ec- sight)	Time/Date (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:35 12:45	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING MATERIALS FROM BARGE TO UPLAND. OVER WATER
E ON PRE/POST CON S M OR E OFF		13:20 13:56	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SLINGING FACE BEAM ONTO SHEET PILE IN WATER.
E ON PRE/POST CON S M OR E OFF		13:30 14:03	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING 24" PILING FROM CG DOCK TO BARGE DECK.
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		LP AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		14:31 14:55	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing 24" round piles in water in front of sheet pile face
E ON PRE/POST CON S M OR E OFF		15:15 15:35	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		15:45 16:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		16:14 16:35	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		AS LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC Dock - TMC

Date: 11-15-2017

Time Effort Initiated: 0830

Time Effort Completed: 2020

Page 3 of 3

Time	Visibility	Glac	Weather Condition	Wave Height	BSS	Wind	Swell
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
19:30	B-P-M-G-E	DARK	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
20:30	B-P-M-G-E	DARK	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if sighted)	Time/Date (Start/End time if cont.)	WT/ Grid #/ Dir of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/ Visual Effort or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:43 17:03	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILING IN UPLAND
E ON PRE/POST CON S M OR E OFF		17:09 17:40	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 24" PILING ROUNDS IN WATER IN FRONT OF SHEET PILE FACE.
E ON PRE/POST CON S M OR E OFF		17:50 18:11	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILING IN UPLAND.
E ON PRE/POST CON S M OR E OFF		18:21 18:51	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILING IN UPLAND.
E ON PRE/POST CON S M OR E OFF		19:01 19:20	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILING IN UPLAND. (IN DARK)
E ON PRE/POST CON S M OR E OFF		19:28 19:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 24" ROUND PILING IN UPLAND. DRY (DARK)
E ON PRE/POST CON S M OR E OFF		19:50 20:20	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC DONE FOR THE DAY. (IN THE DARK) START POST CONS. OBS SIGHTED NO MAMMALS
E ON PRE/POST CON S M OR E OFF		20:20 :	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		EFFORT OFF FOR TODAY (DARK)
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RPOINT

Date: 11-15-17

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page: 1 of 3

Time	Visibility	Gloss	Weather Condition	Wave Height	DSC	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-DARK-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
11:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Site # (1 or 1.1 if no right)	Time/Dir (Start/End time if cont.)	WP/ Grid #/ DHE of arrival	Zone/ Radius/ Impact Pile #	Obs.	Sighting Obs	Records	Group Size	Behavior Code (see code sheet)	Construction Type	Midnight In Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks/ Activity/Vessel End # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		ON SITE ROCKY POINT LEVEL B ZONE (WORKERS ON SITE @ 0700) EFFORT ON-ZONE ON
E ON PRE/POST CON S M OR E OFF		08:30 09:20	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE-CONS. OBS. - NO MAMMALS SIGHTED. ALL CLEAR. WORKERS ALREADY WELD
E ON PRE/POST CON S M OR E OFF		08:30 19:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		WORKERS ON PLATFORM WELDING FACE PLATE OVER SHEET PILE.
E ON PRE/POST CON S M OR E OFF		08:30 09:20	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING TEMPLATE UPLAND DRY.
E ON (VA) PRE/POST CON S M OR E OFF		09:15 09:40	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL INBOUND CHANNEL 2-TUGS. TR-N TO ANCHOR BUOY. AND TO PICKUP BARGE ANCHORED TO BUIU. NOMMA
E ON PRE/POST CON S M OR E OFF		10:15 10:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 24" ROUND PILING UPLAND DRY
E ON PRE/POST CON S M OR E OFF		11:05 11:45	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 36" ROUND PILE UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		11:48 12:05	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 24" ROUND PILING UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		12:00 12:06	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SLINGING MATERIALS OVER WATER

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 11-15-17

Time Effort Initiated: 0830

Time Effort ended: 1930

Page 2 of 3

Time	Visibility	Glaze	Weather Condition	Wave Height	BSS	Wind	Swell
12:35	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0-1	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Date (Start/End time if cont.)	VP/ Grid #/ Dir of travel	Zone/ Baseline/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Might in Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Column Activity/Vessel Field # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:30	Grid Nor S W or E		LP/ VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION B-ZONE ON
E ON PRE/POST CON S M OR E OFF		12:35	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging material to upland
E ON PRE/POST CON S M OR E OFF		12:45	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging face beam into sheet pile in H ₂ O
E ON PRE/POST CON S M OR E OFF		13:20	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging 24" Pile from east end dock to barge deck
E ON PRE/POST CON S M OR E OFF		13:56	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		The Barge crane st 24" Round Piles into H ₂ O
E ON PRE/POST CON S M OR E OFF		14:31	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" Round Piles in The Dry
E ON PRE/POST CON S M OR E OFF		14:55	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" Round Pile in The Dry
E ON PRE/POST CON S M OR E OFF		15:15	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" Round Pile in The Dry
E ON PRE/POST CON S M OR E OFF		15:35	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" Round Pile in The Dry
E ON PRE/POST CON S M OR E OFF		15:45	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" Round Pile in The Dry
E ON PRE/POST CON S M OR E OFF		16:00	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" Round Pile in The Dry
E ON PRE/POST CON S M OR E OFF		16:14	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" Round Pile in The Dry
E ON PRE/POST CON S M OR E OFF		16:35	Grid Nor S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibrating 24" Round Pile in The Dry
E ON PRE/POST CON S M OR E OFF		16:30	Grid Nor S W or E		VF/ AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Black Pt

Date: 11-15-17

Time Effort Initiated: 1830

Time Effort Completed: 1930

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:43 17:03	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		17:09 17:40	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane stabbing 24" round piles into water outside sheet pile face
E ON PRE/POST CON S M OR E OFF		17:50 18:11	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round piles in the dry
E ON PRE/POST CON S M OR E OFF		18:21 18:57	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round pile in the dry
E ON PRE/POST CON S M OR E OFF		19:01 19:50	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 24" round piles - XZ in the dry
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction (No B zone) No mm Dark - observed
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI (V) DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		* Observer effort off.
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		* One MMO continued at UMC dock until 2020 - No B zone
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		but TMC continued vibing in the dry

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11/16/2017

Time Effort Initiated: 0830

Time Effort Completed: 1730

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swells
08:30	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	3	NSEW	NSEW
09:30	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	2	NSEW	NSEW
10:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
11:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	2	NSEW	NSEW
12:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	2	NSEW	NSEW
14:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
15:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ Dir of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Repos ure? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Observer effort on
E ON PRE/POST CON S M OR E OFF		08:30 09:13	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Preconstruction *All clear B zone 0913*
E ON PRE/POST CON S M OR E OFF		08:30 17:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Texted to Chris TMC working on drill equipment on barge
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		AS LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		14:30	Grid N or S W or E		LP AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		AS LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		Observer rotation - still on standby
E ON PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		OBS. EFFORT OFF FOR THE DAY. CHRIS CALLED SAID THEY ARE DONE. NO MAMMALS SIGHTED. NO ZONES ON, SO NO POST OBS CONS.
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/ NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 11-16-2017

Time Effort Initiated: 0830

Time Effort Completed: 1730

Page 1 of 1

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0-1	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0-2	NSEW	NSEW
10:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0-1	NSEW	NSEW
11:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	15%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	1	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0-1	NSEW	NSEW

Event Code	Height # (1 or 1.1 if sighted)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DAB of animal	Zone/ Radius/ Impact File #	Obs.	Sighting Obs	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Expense (Y/N)	Behavior Change/ Response to Activity/Comments/Status/ Activity/Vessel ID # or Name/ Vessel ID # or Name/ Vessel ID # or Name
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ONSITE LEVEL B ZONE OFF.
E ON PRE/POST CON S M OR E OFF		08:30 09:13	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE-CONS ALL CLEAR. NO MAMMALS OBSERVED
E ON PRE/POST CON S M OR E OFF		08:30 17:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC WORKING ON BARGE, PREP DRILLER, WELDING.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		LP/VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		VF AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Chris-texted that done for the day. Observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		* Were on standby - previously told would be vibrating and impacting.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No Post Can Needed

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11-17-2017

Time Effort Initiated: 1030

Time Effort Completed: 1930

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	1	NSEW	NSEW
11:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	1	NSEW	NSEW
12:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	1	NSEW	NSEW
13:30	B-P-M-G-E	20 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	20 %	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if so- alight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ Dir of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on - *No preconstruction - TMC already stabbing in water and vibing - no cell out.
E ON PRE/POST CON S M OR E OFF		10:30 10:40	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane already stabbing 36" round piles in water
E ON PRE/POST CON S M OR E OFF		10:50 11:25	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 36" round pile in the dry
E ON PRE/POST CON S M OR E OFF		10:30 19:00	Grid N or S W or E		AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore crane slinging gear to face of sheet pile/workers on platform and skill
E ON PRE/POST CON S M OR E OFF		11:32 11:43	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane vibing 36" round pile in the dry
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		AS LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION. *switched to one observer @ UMC only
E ON PRE/POST CON S M OR E OFF		12:30 13:17	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 36" ROUND PILE IN DRY.
E ON PRE/POST CON S M OR E OFF		13:20 13:56	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 36" ROUND PILE IN UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		14:54 15:28	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 36" ROUND PILE IN UPLAND.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - TMC

Date: 11-17-2017

Time Effort Initiated: 1030 (0830) WORKERS ON

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glaze	Weather Conditions	Wave Height	BSS	Wind	Swell
15:30	B-P-M-G-E	20%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:30	B-P-M-G-E	20%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	15%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:30	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-H	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Site # (1 or L1 if no sight)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Buoy/ Impact File #	Obs.	Sighting Obs	Species	Group Size	Behavior Code (see code sheet)	Conservation Time	Mitigation Time	Response Y/N	Behavior Change/ Response to Activity/Comments/ Human Activity/ Visual Effort # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING MATERIALS UPLAND DRY
E ON PRE/POST CON S M OR E OFF		15:40	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 30" ROUND PILING IN UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		16:10	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING MATERIALS UPLAND DRY
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		LP/AS	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBS. ROTATION
E ON PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		AS/4	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC DONE FOR THE DAY. START POST CON OBS. NO MAMMALS SIGHTED
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBS EFFORT OFF FOR TODAY.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: ROCKY POINT

Date: 11-17-2017

Time Effort Initiated: 1030

Time Effort Completed: 1230

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
11:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
12:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBS APP-WORKERS ALREADY WORKING BARGE CRANE STABBING VIBING, SHORE CRANE SLINGING GEAR.
E ON PRE/POST CON S M OR E OFF		10:30 10:40	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 36" ROUND IN WATER NEXT TO SITEET PILE.
E ON PRE/POST CON S M OR E OFF		10:50 11:25	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 36" ROUND PILE IN DRY UPLAND.
E ON PRE/POST CON S M OR E OFF		10:30 19:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SLINGING MATERIALS IN DRY UPLAND WORKERS ON SCAFFOLDING
E ON PRE/POST CON S M OR E OFF		11:32 11:43	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE VIBING 36" ROUND PILING IN UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		12:30 12:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		EFFORT OFF *OBSERVER ROTATION! NO NEED FOR B-ZONE.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		*one observer left (RP position) since
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		B zone covered by one mmo @ umc for rest of day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		for upland construction radii 10/35 to

50/150 meters only

Page 1 of 2

Event Code	Sight # (1 or 1.1 if so- right)	Time/Dur (Start/End time if cont.)	WT/ Gold #/ DIR of cont.	Zone/ Buoy/ Impact Pile #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Impact ion Type	Expos- ure (Y/N)	Behavior Change/ Response to Activity/Comments/Status Activity/Vessel End # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR ① DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER EFF ON - NO PRE-CONS + MC ALREADY IMPACTING IN DRY. NO CALL OUT. BARGE CRANE IMPACT &
E ON PRE/POST CON S M OR E OFF		15:30 16:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR ① DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE ALREADY IMPACTING CLEAR, AREA ANYWAY NO MORE SWINGING OPS.
E ON PRE/POST CON S M OR E OFF		15:30 16:48	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR ① DP ST OWC NOWC / NONE	SS/BC DE SD None		STORE CRANE ALREADY SLINGING MATERIALS TO WORKERS ON FACE PLATE/ SHEET PILE OVERWATER
E ON PRE/POST CON S M OR E OFF		15:48 15:55	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR ① DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 36" ROUND PILE IN UPLAND DRY.
E ON PRE/POST CON S M OR E OFF		15:58 16:04	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR ① DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 36" ROUND PILE UPLAND.
E ON PRE/POST CON S M OR E OFF		16:06 16:17	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR ① DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 24" Round pile in upland.
E ON PRE/POST CON S M OR E OFF		16:19 16:26	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR ① DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 24" Round Pile in UPLAND.
E ON PRE/POST CON S M OR E OFF		16:31 16:34	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR ① DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 24" ROUND PILE UPLAND
E ON PRE/POST CON S M OR E OFF		16:36 16:40	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR ① DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 24" ROUND PILE UPLAND

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC DOCK - TMC

Date: 11-18-2017

Time Effort Initiated: 1530 (1300)

Time Effort Completed: 1915

Page 2 of 2

Time	Visibility	Class	Weather Condition	Wave Height	BSS	Wind	Swell
18:30	B-P-M-G-E	Dust%	S-PC-L-R-F-OC-SN-HR	Lz/Mod/Hvy	G-1	NSEW	NSEW
19:15	B-P-M-G-E	Dust%	S-PC-L-R-F-OC-SN-HR	Lz/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lz/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lz/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lz/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lz/Mod/Hvy		NSEW	NSEW

Event Code	Light # (1 or 1.1 if no light)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zoo/ Radius/ Impact Pile #	Obs.	Sighting Class	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/Status/ Activity/Vessel ID # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:42 16:46	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE IMPACTING 24" ROUND PILE UPLAND.
E ON PRE/POST CON S M OR E OFF		16:48 18:43	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING MATERIALS FROM DRY UPLAND TO BARGE - STORM PREP.
E ON PRE/POST CON S M OR E OFF		17:30 18:40	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SLINGING MATERIALS FROM WATER SIDE SHEET PILE/FACE PLATE - REINFORCING SCAFFOLDING SKIFF.
E ON PRE/POST CON S M OR E OFF		18:45 :	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC DONE FOR DAY. START POST CONS. OBS ERVATION. NO MAMMALS SIGHTED.
E ON PRE/POST CON S M OR E OFF		18:45 19:15	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER EFFORT OFF FOR TODAY.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11-19-17 thru 11-28-17

Time Effort Initiated: _____

Time Effort Completed: _____

Page of

Time	Visibility	Glare	Weather Condition 47	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if no-sight)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Repos- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		11-19-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		thru
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		11-28-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		drilling in
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		uplands
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FACE Plate
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO MMO's
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Needed

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 11-29-17

Time Effort Initiated: 1330

Time Effort Completed: 1918

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIA of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
<u>E ON</u> PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort ON Arrive on site umc @ 1330 @ umc
<u>E ON</u> PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs All clear to Chris @ 1400 - no mammals sighted
<u>E ON</u> PRE/POST CON S M OR E OFF		14:01	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a SS on Vibe
<u>E ON</u> PRE/POST CON S M OR E OFF		14:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibbing - Barge 2-30" + 3-24" round pilling in water
<u>E ON</u> PRE/POST CON S M OR E OFF		14:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Started w/ 24" first Zone 10m/3300
<u>E ON</u> PRE/POST CON S M OR E OFF		14:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC vibbing 24" round pilling in water 10m/3300
<u>E ON</u> PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Canewalking on land - no radii
<u>E ON</u> PRE/POST CON S M OR E OFF		17:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a Soft Start on Vibe
<u>E ON</u> PRE/POST CON S M OR E OFF		17:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibbing 30" round pillings in water 115/3300m

Reference Note: Impact Radius: 2-30" pillings in water : HPBK - 215 m HSEA - 115 m > A zone
B zone = 1000 m KLW - 15m STSL - 15m

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 11-29-17

Time Effort Initiated: 1330

Time Effort Completed: 1918

Page 2 of 2

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
1815	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN- <u>HR</u>	Lt/Mod/Hvy	0	NSEW	NSEW
1900	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN- <u>HR</u>	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN- <u>HR</u>	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN- <u>HR</u>	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN- <u>HR</u>	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN- <u>HR</u>	Lt/Mod/Hvy		NSEW	NSEW

- DARK

Event Code	Sight # (1 or LI if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Threats/ Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		1825	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing SSON Impactore
E ON PRE/POST CON S M OR E OFF		18:26	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Impacting 24" round pilings in water
E ON PRE/POST CON S M OR E OFF		18:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day Start Post-Con Obs No mammals sighted
E ON PRE/POST CON S M OR E OFF		19:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off for day
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: ROCKY POINT - TMC

Date: 11-29-17

Time Effort Initiated: 1330

Time Effort Completed: 1918

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSE(W)	NSE(W)
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSE(W)	NSE(W)
15:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSE(W)	NSE(W)
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSE(W)	NSE(W)
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSE(W)	NSE(W)
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSE(W)	NSE(W)

TEMP 39°

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBS EFF ON TO CLEAR AREA RP
E ON PRE/POST CON S M OR E OFF		13:30 14:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		START PRE CON OBS. AUCLEAR TO CAROL ND
E ON PRE/POST CON S M OR E OFF		14:01 14:03	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE TMC BEGINS MITIGATION ON SOFT STAR VIBE.
E ON PRE/POST CON S M OR E OFF		14:03 14:15	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC BARGE CRANE VIBE 24" ROUND PILE IN WATER. (TRANSITION PILE)
E ON PRE/POST CON S M OR E OFF		14:45 14:51	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC BARGE CRANE VIBE 24" ROUND PILE IN WATER.
E ON PRE/POST CON S M OR E OFF		15:30 18:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE WORKING ON LAND.
E ON PRE/POST CON S M OR E OFF		17:40 17:42	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC PERFORM MITIG SS VIBE
E ON PRE/POST CON S M OR E OFF		17:42 18:08	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC BARGE CRANE VIBE 30" IN WATER.
E ON PRE/POST CON S M OR E OFF		18:25 18:26	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC BARGE CRANE MITIGATION SS IMPACTOR

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point - TMC

Date: 11-29-17

Time Effort Initiated: 1330

Time Effort Completed: 1918

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:30	(B)-P-M-G-E	25%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	?	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:26	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC IMP 24" ROUND PILING IN WATER.
E ON PRE/POST CON S M OR E OFF		18:48	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC DONE FOR THE DAY. POST CONS-OBS NO MARINE MAMMALS OBS
E ON PRE/POST CON S M OR E OFF		19:18	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBS. EFFORT OFF FOR TODAY
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 11-30-17

Time Effort Initiated: _____

Time Effort Completed: _____

Page of

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure ² (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		11-30-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO WORK
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		mms's
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NOT
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		dispatched
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FACE Plate upland work cut sheet piles

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 12-01-2017 thru 12-03-2017

Time Effort Initiated:

Time Effort Completed:

Page: of

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if so- night)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO WORK
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		12-01-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		thru
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		12-03-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NOT NEEDED
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PER TMC MARC
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Drilling in Upland FaceBeam

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 12-04-17

Time Effort Initiated: 0915

Time Effort Completed: 1930

Page: 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	0	NSEW	NSEW
09:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	0	NSEW	NSEW
11:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Baseline/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite to Level A zone TMC Stabbing
E ON PRE/POST CON S M OR E OFF		09:15 09:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-con Obs No mammals sighted All clear to man
E ON PRE/POST CON S M OR E OFF	? →	ON Arrival 09:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Stabbed 4-24" round pilings in water Before All Clear
E ON PRE/POST CON S M OR E OFF		09:52 09:53	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a SS on Vibe
E ON PRE/POST CON S M OR E OFF		09:53 11:32	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibration 24" round piles in upland Crane rail pile w/ Barge Crane
E ON PRE/POST CON S M OR E OFF		09:55 12:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane holding man-basket + welding over water
E ON PRE/POST CON S M OR E OFF		12:29 12:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing 24" round piles in water next to barge
E ON PRE/POST CON S M OR E OFF		13:15	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:27 13:28	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Does a SSV ON Vibe

For Reference Airborne Vibration - HSEA-35m
STGL-10m

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 12-4-17

Time Effort Initiated: 0915

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	Q	NSEW	NSEW
16:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	Q	NSEW	NSEW
18:30	B-P-M-G-E	Q%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy	Q	NSEW	NSEW
19:30	B-P-M-G-E	Q%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	L/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:28 15:19	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Begins Vibbing 24" crane rail pile
E ON PRE/POST CON S M OR E OFF		15:25 15:52	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Begins stabbing 24" Piles next to BARGE
E ON PRE/POST CON S M OR E OFF		16:00 16:01	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Does A SSV on the vibbe.
E ON PRE/POST CON S M OR E OFF		16:01 18:52	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE starts vibbing 24" crane rail Piles
E ON PRE/POST CON S M OR E OFF		17:15 :	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		UMC done for day Start Post-Con Obs No mammals sighted
E ON PRE/POST CON S M OR E OFF		19:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky pt.

Date: 12/4/17

Time Effort Initiated: 0915

Time Effort Completed: 1930

Page: 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on, start Preconst. obs Time is Stabbing 24" pile in water
E ON PRE/POST CON S M OR E OFF		09:15 09:51	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mammals observed All clear called to mark @ time - By CB UMC.
E ON PRE/POST CON S M OR E OFF		? : 09:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Stabbed 4. 24" Piles in water before All clear.
E ON PRE/POST CON S M OR E OFF		09:52 09:53	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does a SSV on vibbe.
E ON PRE/POST CON S M OR E OFF		09:53 11:32	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Begins vibbing 24" piles in the dry, Barge crane.
E ON PRE/POST CON S M OR E OFF		09:55 12:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time, welding gowc, with man BASKET on Faceplate with shore cranes.
E ON PRE/POST CON S M OR E OFF		12:29 12:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Stabs 24" piles in next to BARGE.
E ON PRE/POST CON S M OR E OFF		13:15	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:27 13:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane does SS on Vibe

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Deck Positions III and IV

Monitoring Location: RP

Date: 12-04-17

Time Effort Initiated: 0915

Time Effort Completed: 1930

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	2 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
19:30	B-P-M-G-E	2 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if ec- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibration 24" round pilling in dry. (10/35 A zone)
E ON VA PRE/POST CON S M OR E OFF		14:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug millennial Falcon outbound umc dock TR-E around RP + thru Unalaska Channel no mma observed
E ON PRE/POST CON S M OR E OFF		15:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing 24" piles next to Barge in water
E ON VA PRE/POST CON S M OR E OFF		15:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug millennium Falcon inbound Harbor from Unalaska Channel - no mma associated
E ON VA PRE/POST CON S M OR E OFF		15:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Oracle outbound from Trident dock TR-S around spit to sea. No mma observed
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc performs mitigation by doing a SS on Vibe
E ON PRE/POST CON S M OR E OFF		16:01	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC vibrating 24" in dry
E ON VA PRE/POST CON S M OR E OFF		16:12	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Guido assist w/ fuel Barge Double Hull outbound harbor TR-E from Reserve No mma associated
E ON PRE/POST CON S M OR E OFF		17:15	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 12-04-17

Time Effort Initiated: 0915

Time Effort Completed: 1930

Page: 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:30	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc crew ties crane down, end of shift. start post const. obs.
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10/35 meter zones All clear, no mammals observed! observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-Coast

Date: 12-05-17 Guard dock

Time Effort Initiated: 0700

Time Effort Completed: 1845

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BS6	Wind	Swell
0700	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
0830	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
0930	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
1030	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
1200	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
1400	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite @ UMC-CG side to clear area Level A & B zone
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Cleared area for proposed
			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Const. type-impacting in dry per TMC B zone - 150m/50m
E ON PRE/POST CON S M OR E OFF		10:40 11:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC decides to Stab 24" pilling next to barge in water- trouble w/impactor
E ON PRE/POST CON S M OR E OFF		11:14 11:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs SS on Vibe
E ON PRE/POST CON S M OR E OFF		11:15 13:09	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC vibbing 24" round pillings in dry 10/35 m B zone
E ON PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:58 14:18	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE Begins stabbing 24" crane rail Piles next to BARGE.
E ON PRE/POST CON S M OR E OFF		14:36 14:37	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE DOES a SS on the vibbe,

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Coast Guard

Date: 12-05-17

Time Effort Initiated: 0700

Time Effort Completed: 1845

Page: 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:37 15:44	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts vibbing 18" piles TB1-TB2-TB3
E ON PRE/POST CON S M OR E OFF		16:05 18:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Begins vibra-extraction of a 24" crane rail pile & continued 18" installation
E ON PRE/POST CON S M OR E OFF	189	16:15 16:19	P-7 Grid N or S W or E	B	TB	BL BO BR DF SA OTHER	stbl	Min: Max: Best:	Beh code(s): LO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	EXPOSURE Due to vibbing in UPLAND. Surfaced & looked @ vibbe operator went down & did NOT
		X	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Resurface, was NOT Traveling. Behavior was normal, curious! Inspecting Activity.
E ON PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:15 18:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc done for day Start Post-Con obs No mammals obs
E ON PRE/POST CON S M OR E OFF		18:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC - Crane Side
Date: 12/5/17 + Rocky Point
Time Effort Initiated: 0700
Time Effort Completed: 1845

Page 1 of 1 - UMC-CRANE SIDE
1 of 2 - Rocky Point Location

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hry	2	NSEW	NSEW
9:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hry	2	NSEW	NSEW
11:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hry	2	NSEW	NSEW
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hry	2	NSEW	NSEW
14:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hry	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hry		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cus	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start pre-con obs. for Impacting Per Time, 150/50 meters
E ON PRE/POST CON S M OR E OFF		10:40 11:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Trouble with pile driver, Time starts stabbing 24" piles next to barge
E ON PRE/POST CON S M OR E OFF		11:14 11:15	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does a SS on vibber. Barge crane
E ON PRE/POST CON S M OR E OFF		11:15 13:09	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts vibbing 24" crane rail piles in place, Barge crane.
E ON PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		13:58 14:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Stabbing 18" piles next to barge in water w/ Barge Crane
E ON PRE/POST CON S M OR E OFF		14:36 14:37	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time performs mitigation by doing a Soft Start on Vibber
E ON PRE/POST CON S M OR E OFF		14:37 15:44	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Starts Vibbing - 18" Tie Beam* piles TB 1, 2 & 3

Rocky Point Cont >

*radii < 15m - HSEA
10m - STSL

UMC - CRANE SIDE
Rocky Point

On same sheet
Rocky Point
UMC - CRANE SIDE - POS #5

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP - Rocky Point

Date: 12-5-17

Time Effort Initiated: 0700

Time Effort Completed: 1845

Page: 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	10 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Inspect Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Trident transiting from Unalaska channel TR-N into inner harbor to spit dock No mma observer
E ON PRE/POST CON S M OR E OFF		16:02	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Vibe extraction of 24" crane rail piling in dry + vibbing 18" piles too.
E ON PRE/POST CON S M OR E OFF		16:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		18:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Ends work for The Day. Start post con. Obs.
E ON PRE/POST CON S M OR E OFF		18:45	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		End post con Obs. 10/35 meter zones clear, observer effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Coast

Date: 12-6-17

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 1 of 2

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-BC-L-R-P-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:30	B-P-M-G-E	0%	S-PC-L-R-P-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

* Overall visibility Bad - Poor But can see radii 150m/50m for clearings/Obs.

Event Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cat	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite UMC - CG side @ 0700 Observer Effort on (2 mmo's @ UMC)
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted 150/150 TB called all clear to Marc
E ON PRE/POST CON S M OR E OFF		07:39 07:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc performs mitigation By doing a SS on Impactor
E ON PRE/POST CON S M OR E OFF		07:40 09:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts impacting 24" crane rail piles in dry 150m/50m *
E ON PRE/POST CON S M OR E OFF		09:34 11:02	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc impacting fillings in dry upland 150m/50m radii
E ON PRE/POST CON S M OR E OFF		09:45 10:01	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Afagnak Strait outbound harbor TR-S from Ice Island spit + out to sea - No mma
E ON PRE/POST CON S M OR E OFF		11:04 12:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc moved to impacting ST (24" + 30") piles in water 5m (station only)
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation mmo CB went to RP mmo TB came to UMC-Coast
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation mmo CB came to UMC-CG mmo TB went to

* Impactor Radii: 150 m (450') HSEA
50 m (150') STSL
in Dry

* Impacting In Water
varies per species - See Book

UMC - Crane side

UMC - Coast Guard Side

DARK

Guard
side

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-Coast Guard

Date: 12-6-17

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (V/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:01 17:02	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a SS on Impact Hammer in dry
E ON PRE/POST CON S M OR E OFF		17:02 18:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacting pillings in dry upland area.
E ON PRE/POST CON S M OR E OFF		18:00 18:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done early today Just cleaning up Stat Post-Con Obs
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear - no mammals sighted Observer Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

UMC-Coast Guard Side

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc - Crane

Date: 12/6/17 side

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 1 of 2

Time	Visibility	Glaze	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
8:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
9:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW

Event Code	Light # (1 or 2 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		observer Effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		start Pre const. obs. 50/150 meter zone. For Impacting called Allet to mare.
E ON PRE/POST CON S M OR E OFF		07:39 07:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Does a SSI on The Impactor! BARGE Crane!
E ON PRE/POST CON S M OR E OFF		07:40 9:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Begins Impacting 24" crane Rail Piles in The uplands & 18" (3)
E ON PRE/POST CON S M OR E OFF		09:34 11:02	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Begins Impacting 18" Piles In The Dry, & 24" Piles
E ON PRE/POST CON S M OR E OFF		11:04 12:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC moved & started only 24" + 0.30 inch piles in water 5 EA. In Pos. 5 transition Piles
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation mmo CB went to RP mmo TB moved to
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		umc - Coast Guard side
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

50 meters = 150 ft = Air Born Radii for upland Impacting
150 " = 450 ft

umc - Crane side

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP + UMC-Crane Side

Date: 12-6-17

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
12:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigut ion Type	Expos- ure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:20 12:41	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Gretchen Dunlap outboard from KDH dock TR-S past RP to Unalakleet No mma associated
E ON PRE/POST CON S M OR E OFF		16:00 :	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation * mmo CB went to umc-Coast Guard mmo TB went to umc-Crane side
E ON PRE/POST CON S M OR E OFF		17:01 17:02	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does A.SSI on The Impactor in The uplands;
E ON PRE/POST CON S M OR E OFF		17:02 18:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Begins Impacting Crane Rail Piles in The uplands / Dry
E ON PRE/POST CON S M OR E OFF		18:00 18:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Ends work DAY. Start post const. obs.
E ON PRE/POST CON S M OR E OFF		18:30 :	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		50/150 m. Zone 2 All clear, no mammals obs. Observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

* Doubled mmo's @ umc
both in AM + Later PM
hours due to reduced
light - Better to see zone
on either side of work site

Rocky Point obs.

umc - Crane side

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 12-07-17 thru 12-11-17

Time Effort Initiated: _____

Time Effort Completed: _____

Page of

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or L if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO WORK
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		12-07-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		thru
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		12-11-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NOT NEEDED PER TMC MARC
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): _____	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		CREW Drilling in upland

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc - Coast Guard

Date: 12-12-17 Side

Time Effort Initiated: 0930

Time Effort Completed: 1600

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
13:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cur	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite umc @ 0917 - Obs. Effort ON Level A zone
E ON PRE/POST CON S M OR E OFF		09:30 10:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted TB called At Clear to Make
E ON PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB to RP
E ON PRE/POST CON S M OR E OFF		14:03 14:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a Soft Start on Impact Hammer
E ON PRE/POST CON S M OR E OFF		14:04 15:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacting crane rail piles in dry upland 150m/50m radii
E ON PRE/POST CON S M OR E OFF		15:30 16:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC called mmo's off - not needed rest of day - Start Post-Con
E ON PRE/POST CON S M OR E OFF		16:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs - No mammals sighted Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Crane Side

Date: 12/12/2017

Time Effort Initiated: 0930

Time Effort Completed: 1330

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0-1	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	1-2	NSEW	NSEW
13:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hail # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer effort on, Start pre const. obs.
E ON PRE/POST CON S M OR E OFF		09:30 10:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre. con. Obs. All clear no mammals observed! called marc@tmc.
E ON PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation move to Rocky Pt. From UMC - Crane Side
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: U/MC Dock Positions III and IV
Monitoring Location: Rocky Pt.
Date: 12/12/17
Time Effort Initiated: 1330
Time Effort Completed: 1600
Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0-1	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact File #2	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:03 14:04	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does a SS on Impactors
E ON PRE/POST CON S M OR E OFF		14:04 15:04	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Impacting 24" Crane RAIL Piles in the Dry. 50/150 meter Radii.
E ON PRE/POST CON S M OR E OFF		15:30 16:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called off by tmc, not needed for the rest of the DAY, start postcon obs.
E ON PRE/POST CON S M OR E OFF		16:00 :	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		50/150 meter RADII All clear, NO mammals observed observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - CRANE Side

Date: 12/13/19

Time Effort Initiated: 0700

Time Effort Completed: 1842

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misgati on Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:36	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. obs. 50/150 m. Zones All clear. NO mammals observed
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB to Rocky Point TB to UMC-Craneside
E ON PRE/POST CON S M OR E OFF		16:51 17:22	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane begins stabbing 24" & 30" piles into template north transition, IN water.
E ON PRE/POST CON S M OR E OFF		17:39 17:40	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does A SSV on vide, 24" piles IN water, north transition.
E ON PRE/POST CON S M OR E OFF		17:40 18:12	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane begins vibbing 24" piles Down, north, Transitions, & 30" piles.
E ON PRE/POST CON S M OR E OFF		18:12 18:42	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Ends work day, start post const. obs. All clear NO mammals observed
E ON PRE/POST CON S M OR E OFF		18:42	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off,

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Coast Guard

Date: 12-13-17

Time Effort Initiated: 0700

Time Effort Completed: 1842

Page: 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0 %	S-PC-L-R-F- OC - SN -HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0 %	S-PC-L-R-F- OC - SN -HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0 %	S-PC-L-R-F- OC - SN -HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0 %	S-PC-L-R-F- OC - SN -HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0 %	S-PC-L-R-F- OC - SN -HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0 %	S-PC-L-R-F- OC - SN -HR	Lt/Mod/Hvy	0	NSEW	NSEW

dark

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misgation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Arrive Onsite UMC @ 0655 - level A zone obs Effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:26	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Start Pre-Can Obs-2 mmos on site @ umc to clear - NO mammals sighted - TB called AUC clear
E ON (A) PRE/POST CON S M OR E OFF		08:30 08:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		FN Makushin Bay to make outbound from Resolve Marine TR-E around spit. NO MMA activity assoc
E ON (VA) PRE/POST CON S M OR E OFF		10:52 11:09	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		FN Blue Army inbound harbor TR-N to spit dock No MMA observed
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Rotation! * - NO CRANE activity! TB to umc-Crane Side
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		CB to Rocky Point
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: U/MC Dock Positions III and IV
Monitoring Location: Rocky Point
Date: 12-13-17
Time Effort Initiated: 0700
Time Effort Completed: 1842
Page: 1 of 1

Time	Visibility	Gaze	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:42	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misg- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Gryfalcon outbound from sand line dock TR-E around spit - No mma associated
E ON PRE/POST CON S M OR E OFF		16:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Gryfalcon & Tug Millennium Falcon inbound from Sea-assist w/ APL Cargo ship TR-W to UMC dock - No mma
E ON PRE/POST CON S M OR E OFF		16:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Stalbbing 24" 30" round piles into water into template at Pos # 2
E ON PRE/POST CON S M OR E OFF	190	17:00 17:43	Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	N	Sighted HSEA Hauled out on rock near reef @ RP, watching me on hill, checked at 1743 and it was gone
E ON PRE/POST CON S M OR E OFF	191	17:03 18:20	Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	2 HSEAs spyhopping/floating nose up, looking at me. TMC started vibbing - no behavioral changes
E ON PRE/POST CON S M OR E OFF		17:39 17:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC does a SS on Vibe
E ON PRE/POST CON S M OR E OFF		17:40 18:12	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibbing 24" round pillings in North Transitions
E ON PRE/POST CON S M OR E OFF		18:12 18:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day Start Post-Con Obs No mammals sighted
E ON PRE/POST CON S M OR E OFF		18:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off

date
day

15 m
A 2017
3300
B 2017

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Duck Positions III and IV

Monitoring Location: UMC

Date: 12-14-17 thru 12-31-17

Time Effort Initiated: _____

Time Effort Completed: _____

Page of _____

Time	Visibility	Glare	Weather Condition 22	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if se- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO WORK
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		12-14-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		thru
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		12-31-17
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Christmas
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Break
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No Construction
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: 1-01-18

Date: 1-10-18

Time Effort Initiated:

Time Effort Completed:

Page: of

Time	Visibility	Glass	Weather Condition	Wave Height	SSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if so- cited)	Time/Dur (Cont./End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midnight Ion Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Status Activity/Vessel # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO WORK
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		1-01-18
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		thru
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		1-10-18
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Crew BACK in Dutch 1-2-18
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Back to work 1-3-18
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mmo's needed per Tmc Chris
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		- Redrill Upland Piles - No fender Panels have arrived yet

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Coast

Date: 1-11-18

Time Effort Initiated: 0630

Time Effort Completed: 0820

Page: 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
06:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
07:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
08:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite Level A zone @ 0620. Proposed con-impact in dry 50/150m radii
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs - No mammals sighted Called All Clear to Chris
E ON PRE/POST CON S M OR E OFF		07:42 07:43	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a soft start on Impact
E ON PRE/POST CON S M OR E OFF		07:43 07:47	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts Impacting 36" round TD pile in dry upland (50/150 m)
E ON PRE/POST CON S M OR E OFF		07:50 0820	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con Obs. No mammals sighted Done for Day
E ON PRE/POST CON S M OR E OFF		08:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off TMC planned only to impact the one pile
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: LMC - Crane Side

Date: 1/11/18

Time Effort Initiated: 0630

Time Effort Completed: 0820

Page 1 of 1

Time	Visibility	Cloud	Weather Condition	Wave Height	SSS	Wind	Swell
06:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	2	NSEW	NSEW
07:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	2	NSEW	NSEW
08:20	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy		NSEW	NSEW

Event Code	Site # (1 or 1.1 if re- sited)	Time/Date (Start/End time if cont.)	WT/ Grid #/ Dist of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Repor- t? (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks/ Activity/Vessel Height or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		on site @ 0622, observer effort on, 50/150 & 300 m.
E ON PRE/POST CON S M OR E OFF		06:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear, CB called Chris @ TMC, no observations Set for Impacting in Dry
E ON PRE/POST CON S M OR E OFF		07:42	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does a SSI on The Impactor.
E ON PRE/POST CON S M OR E OFF		07:43	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Starts Impacting 36' tie down pile in the dry - All clear, -
E ON PRE/POST CON S M OR E OFF		07:47	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time finished Impacting for the day, start post con, obs.
E ON PRE/POST CON S M OR E OFF		07:50	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time finished Impacting for the day, start post con, obs.
E ON PRE/POST CON S M OR E OFF		08:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		50/150 & 300 m. All clear, no observations observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: LAC Dock Positions III and IV

Monitoring Location: 1-12-18

Date: _____

Time Effort Initiated: _____

Time Effort Completed: _____

Page: 1 of 1

Time	Visibility	Glaze	Weather Condition	Wave Height	SSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if multiple)	Time/Date (Start/End time if cont.)	WT/ Grid #/ Dist of nearest	Zone/ Bathym/ Depth	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/Threats/ Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO WORK
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		1-12-18
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mmo's needed per Chr's- NO Notes on reason why
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky pt.

Date: 1/13/18

Time Effort Initiated: 1400

Time Effort Completed: 1900

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs over effort on. onsite 1352, start pre const. obs
E ON PRE/POST CON S M OR E OFF		14:00 14:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. obs. All clear no mammals observed, mno CB. called Chris @ TMC All clear
E ON PRE/POST CON S M OR E OFF		14:35 15:47	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time, welding template with shore crane, (fender pile template?)
E ON PRE/POST CON S M OR E OFF		15:52 16:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts stabbing 30" Piles in to Fender template. In water 3300 All clear, no observations
E ON PRE/POST CON S M OR E OFF		16:28 16:29	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Does A SS on the Vibbe, 30" Fender Piles. In water.
E ON PRE/POST CON S M OR E OFF		16:29 17:43	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts vibbing 30" Fender piles in water. 3300m. All clear!
E ON PRE/POST CON S M OR E OFF		18:00	Grid N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:30 19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con Obs. No mammals sighted
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs Effort off TMC done w/ crane work for today

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 1-13-18

Time Effort Initiated: 1400

Time Effort Completed: 1900

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1+ if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ Dir of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite @ umc Level A zone @ 1350 Obs. Effort ON
E ON PRE/POST CON S M OR E OFF		14:00 14:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Called Al Clea to Chris
E ON PRE/POST CON S M OR E OFF		14:35 15:47	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC holding templet + welding over water @ Pos. #5 w/shore crane
E ON PRE/POST CON S M OK E OFF		15:52 16:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane stabbing 30" round pile into templet - Pos 5 10m radii
E ON PRE/POST CON S M OR E OFF		16:28 16:29	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a SS (Soft Start) with Vibe.
E ON PRE/POST CON S M OR E OFF		16:29 17:43	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC vibrating 30" round fender piles - radii 15 m / 3300 m
E ON PRE/POST CON S M OR E OFF		18:00	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:30 19:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Ends Crane work. For the Day, Start Post, Const. Obs 15 m. zone v.
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off,

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Coast

Date: 11/14/18

Time Effort Initiated: 1300

Time Effort Completed: 2200

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
21:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
22:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on, 10m. Antic. Packed Drilling Fender piles.
E ON PRE/POST CON S M OR E OFF		13:00 13:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. obs 10 m water zone all clear, called Chris@tmc.
E ON PRE/POST CON S M OR E OFF		16:30 21:27	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Begins Drilling Fender piles.
E ON PRE/POST CON S M OR E OFF		16:35 19:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Slings man Basket over water.
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer rotation TB to UMC-Craneside
E ON PRE/POST CON S M OR E OFF		21:30 22:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day. Start Post-Con Obs No mammals sighted
E ON PRE/POST CON S M OR E OFF		22:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

UMC - USCG side

← getting dark
dark

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 1-14-18

Time Effort Initiated: 1300

Time Effort Completed: 2200

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #/9	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Migrant ion Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite RP @ 1256 - Level B zone Obs. Effort ON
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted TB called All clear to Chris
E ON PRE/POST CON S M OR E OFF		13:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tug Gyrfalcon departs UMC dock w/ freight Barge IlliniLink in tow TR-E out
E ON PRE/POST CON S M OR E OFF		13:37	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		to sea - No mma associated
E ON PRE/POST CON S M OR E OFF		14:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Gladiator in band TR-N to Trident dock - No mma
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC begins drilling fender piles w/ Barge Crane (10 m A zone)
E ON PRE/POST CON S M OR E OFF		21:27	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC slings man basket and hanging over front of cells doing welding etc. 10 m radius - A zone
E ON PRE/POST CON S M OR E OFF		16:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB to UMC - CG side
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

Rocky Point

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Crane Side

Date: 1/14/18

Time Effort Initiated: 1300 @ R.P.

Time Effort Completed: 2200

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
22:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

clock

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dir (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mainten- ance Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observed rotation, Rocky pt. to UMC, Crane Side, 10m.
E ON PRE/POST CON S M OR E OFF		21:30 22:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		The stops Drilling & Secures The Crane, start post const. obs.
E ON PRE/POST CON S M OR E OFF		22:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10m zone Drilling in water All clear, no observations observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

UMC - Crane Side

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-CG side

Date: 1-15-18

Time Effort Initiated: 0700

Time Effort Completed: 1730

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
0700	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SEW	N-SEW
0900	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SEW	N-SEW
0930	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SEW	N-SEW
1100	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SEW	N-SEW
1300	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SEW	N-SEW
1500	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SEW	N-SEW

dark

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull# or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort ON Arrive onsite @ 0653 Clear for 10m radii
E ON PRE/POST CON S M OR E OFF		07:00 07:33	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-can Obs No Mammals Sighted All Clear to TMC Chris N.
E ON PRE/POST CON S M OR E OFF		09:35 11:29	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC moves man basket & holding overwater on outside of cell walls - working
E ON PRE/POST CON S M OR E OFF		10:45 14:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts drilling 30" fenders Piles 10m radii
E ON PRE/POST CON S M OR E OFF		10:21 10:43	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Dominator inbound harbor TR-N to Trident dock - No MMA assoc.
E ON PRE/POST CON S M OR E OFF		10:26 10:53	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Saint Paul inbound harbor TR-N to Spit dock No MMA associated
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:45 17:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC slinging piles from dock to barge over water w/ barge Crane

UMC - USCG Side

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - CG side

Date: 1-15-18

Time Effort Initiated: 0700

Time Effort Completed: 1730

Page: 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misdiag- nion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		UMC done w/ pile driving + a/c work for today. No Post-
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Can Obs needed due to no pile driving today.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

UMC - USCG side

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Umc, crane side

Date: 1/15/18

Time Effort Initiated: 700

Time Effort Completed: 1730

Page: 1 of 1

192

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on on site 0650
E ON PRE/POST CON S M OR E OFF		07:00 07:33	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Preconst. Obs. 10m for In water Drilling Umc crane side.
E ON PRE/POST CON S M OR E OFF		09:35 11:29	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane slinging DUNE, MAN BASKETT over water.
E ON PRE/POST CON S M OR E OFF		10:45 14:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Begins Drilling Fender Piles IN water.
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		TB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation.
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation manot.B. moves to Rocky Pt.
		X	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		for 3300m zone for Impacting, End umc crane side
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

Umc-Crane Side

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 1/15/18

Time Effort Initiated: 700

Time Effort Completed: 1730

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

SNOW

-75%
-50%

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Routine/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minig ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	(SN)	16:00 16:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Snow/Rain - 75% of B- zone NOT visible @ water surface - A-Zone clear.
E ON PRE/POST CON S M OR E OFF		16:45 17:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slings Piles From Uscg Dock to Barge, OWC.
E ON PRE/POST CON S M OR E OFF	(SN)	16:30 17:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Snow/Rain - 50% of B- zone NOT visible @ water surface, A-Zone clear, 10m.
E ON PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called off by Chris @ time, Done with Drilling in water, no Post Required, no pile Driving.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

* Visibility issues in B zone only - OWC - No B zone in Play
No Estimated Exposure Rate needed

Rocky Point

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Umc-crane side

Date: 1/16/18

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on on site de 52
E ON PRE/POST CON S M OR E OFF		07:00 07:33	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start pre const. obs. All clear no observations CB called Chris/Tme.
E ON PRE/POST CON S M OR E OFF		07:45 08:25	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging materials over water, OWC.
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:05 12:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tme Barge Crane slinging materials from Barge to Shore
E ON PRE/POST CON S M OR E OFF		12:11 12:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing in 30' fender pile into template in water
E ON PRE/POST CON S M OR E OFF		12:35 12:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tme performs mitigation by doing a soft start on Vibe
E ON PRE/POST CON S M OR E OFF		12:36 13:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tme starts Vibbing fender piles F1 & F2 15 m / 3300 m
E ON PRE/POST CON S M OR E OFF		14:10 15:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging over water

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC Crane

Date: 1-16-18

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
1500	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
17:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
19:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Inspect File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts Drilling 30" Fender Piles In water.
E ON PRE/POST CON S M OR E OFF		17:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Restarts Drilling 30" Fender Piles In water. #1 & #2 After Drill Repair.
E ON PRE/POST CON S M OR E OFF		18:39	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off, NO Post Required Due To NO Impacting/Driving.
E ON PRE/POST CON S M OR E OFF		19:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		20:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Coast Guard side

Date: 1-16-18

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (acc code sheet)	Construction Type	Mingut ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite UMC Level A zone @ 0652 Obs Effort ON
E ON PRE/POST CON S M OR E OFF		07:00 07:33	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals Obs All clear to Chris
E ON PRE/POST CON S M OR E OFF		07:45 08:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging materials over water 10 m A zone
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:05 12:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Slinging materials to shore over water
E ON PRE/POST CON S M OR E OFF		12:11 12:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Stabbing 30" Fender Piles in water
E ON PRE/POST CON S M OR E OFF		12:35 12:36	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane Does A SSV on the Vibe in water 30"
E ON PRE/POST CON S M OR E OFF		12:36 13:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane vibrating 30" Fender piles in water
E ON PRE/POST CON S M OR E OFF		12:40	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		move to Rocky Pt. 3300 for vibrating, 30" piles in water

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - coast guard

Date: 1/16/18

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
2000	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Route/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:10	Grid N or S W or E		T.B	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts slinging over water, owc,
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		T.B CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		16:30 17:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts drilling fender pile 30" in water
E ON PRE/POST CON S M OR E OFF		18:39 19:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc starts drilling again - 30" fender piles
E ON PRE/POST CON S M OR E OFF		20:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off - No post-con
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		obs needed
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt

Date: 1/16/18

Time Effort Initiated: 0700

Time Effort Completed: 2000

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	8%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	①	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

10. Kts

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Realms/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misg- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		12:36 13:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time vibbing 30" Fender piles in water 3300m.
E ON PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		move Back to one, for Drilling, Observer Rotation.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 1-17-18

Time Effort Initiated: 0700

Time Effort Completed: 2005

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
0700	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
0800	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re- sights)	Time/Date (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (acc code aspect)	Construction Type	Minigut Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite @ 0642 Level A zone Obs. Efforts ON
E ON PRE/POST CON S M OR E OFF		07:00 07:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Called All Clear to TMC
E ON PRE/POST CON S M OR E OFF		07:35 07:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC does a soft start w/ impactor
E ON PRE/POST CON S M OR E OFF		07:36 07:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacting 2 ea 30" fender piles - various radii
E ON PRE/POST CON S M OR E OFF		07:45 08:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC does not need us while building template - called off till later in day.
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		08:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BREAK IN WORK
E ON PRE/POST CON S M OR E OFF		18:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called Back in by TMC - Arrive Onsite UMC - Level A zone

@ 1750 pm

dark
dark

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC

Date: 1-17-18

Time Effort Initiated: 0700

Time Effort Completed: 2005

Page: 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
20:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigut ion Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:00	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Called All Clear to TMC
E ON PRE/POST CON S M OR E OFF		18:27	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		cleared zone 15/3300
E ON PRE/POST CON S M OR E OFF		18:35	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC does Soft Start on Vibe
E ON PRE/POST CON S M OR E OFF		18:36	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibbing 30" fender piles - 4 ea
E ON PRE/POST CON S M OR E OFF		19:35	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for the day. Start Post-Obs No mammals sighted
E ON PRE/POST CON S M OR E OFF		20:05	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		20:05	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

dark
now

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 1/17/18

Time Effort Initiated: 0700

Time Effort Completed: 2005

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Observer Effort on, 3300 m For Impacting 0650
E ON PRE/POST CON S M OR E OFF		07:00 07:34	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Start Preconst Obs. 3300 m. All clear, CB @ one called Chris @ time.
E ON PRE/POST CON S M OR E OFF		07:35 07:36	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Time Does a SSI on The Impactor.
E ON PRE/POST CON S M OR E OFF		07:36 07:45	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Impacts ② 30" Fender Piles In water
E ON PRE/POST CON S M OR E OFF		07:45 08:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called Off until later, Time starts work on Templates.
E ON PRE/POST CON S M OR E OFF		08:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort off until later.
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BREAK IN WORK
E ON PRE/POST CON S M OR E OFF		18:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called In By time, @ 3300m RP, Observer effort on
E ON PRE/POST CON S M OR E OFF		18:00 18:27	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Preconst Obs. NO observations, 3300 m. All clear.

DARK
10 kts.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Pt.

Date: 11/7/18

Time Effort Initiated: 0700

Time Effort Completed: 2025

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:35	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
19:35	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
20:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Li/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does A SSU on The Vibe.
E ON PRE/POST CON S M OR E OFF		18:36	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time vibrating 30" Fender piles in water
E ON PRE/POST CON S M OR E OFF		19:35	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Seawaves come for The DAY. Start Post coast Obs. 3300 m.
E ON PRE/POST CON S M OR E OFF		20:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		3300m. Zone All clear, NO mammals observed Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Crane Side

Date: 1/18/11

Time Effort Initiated: 0730

Time Effort Completed: 1900

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
10:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Response? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
<u>E ON</u> PRE/POST CON S M OR E OFF		07:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on, UMC - Crane Side, clear 10m for Drilling in water.
<u>E ON</u> PRE/POST CON S M OR E OFF		07:30 08:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre Const. Obs. 10m, no mammals sighted Called All clear to Chris @Time.
<u>E ON</u> PRE/POST CON S M OR E OFF		08:18 09:44	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Begins Airlifting Fender Piles in water.
<u>E ON</u> PRE/POST CON S M OR E OFF		11:30	Grid N or S W or E		T.B. C.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
<u>E ON</u> PRE/POST CON S M OR E OFF		11:22 18:31	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC dulling 30" round fender piles in water
<u>E ON</u> PRE/POST CON S M OR E OFF		12:32 12:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC using Extenda-Beam Fender to lower fender bearing plate and work over water
<u>E ON</u> PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
<u>E ON</u> PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC CALLED DONE FOR THE DAY NO POST CON-OPSET
<u>E ON</u> PRE/POST CON S M OR E OFF			Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		due to No pile driving OBSERV. EFF OFF

*Out of sequence but times are accurate

UMC - Crane Side

↙ *

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Coast

Date: 1-18-18 Ground Side

Time Effort Initiated: 0730

Time Effort Completed: 1900

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:30	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DLR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Maint ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite UMC Obs Effort on Clean for drilling-10m
E ON PRE/POST CON S M OR E OFF		07:30 08:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Can Obs No mammals sighted Called All Clear to TMC
E ON PRE/POST CON S M OR E OFF		08:18 09:44	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC begins airlifting fender piles (7-10) in water / over water 10 m radius observed
E ON PRE/POST CON S M OR E OFF		09:50 10:06	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V N. Eagle inbound harbor TR-N to KDH dock- NO marine mammal activity Assoc.
E ON PRE/POST CON S M OR E OFF		11:30	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:22 18:37	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts drilling 30' fender piles
E ON PRE/POST CON S M OR E OFF		12:32 12:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC LAND CRANE EXTEND EQUIP TO LOWER HEAD dock equip over fender piles over water
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL UNBOUND. NO MMA. F/V AMERICAN TRIUMPH, TR-N.
E ON PRE/POST CON S M OR E OFF		13:20	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL UNBOUND. NO MMA. F/V ARICA " TR-N TOWARDS NPF DOCK

* Out of sequence but times are accurate

UMC - USCG

*
*

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-USCG

Date: 1-18-18

Time Effort Initiated: 0730

Time Effort Completed: 1900

Page 2 of 2

Time	Visibility	Glow	Weather Condition	Wave Height	DSS	Wind	Swell
15:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0-1	NSEW	NSEW
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1-2/Mod/Hvy		NSEW	NSEW

Event Code	Sign # (1 or 1A if no sign)	Time/Dur (Start/End time if cont.)	WT/ Grid W/ DNR of cont.	Zoon/ Bodine/ Import File #	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midnight Time	Exposure Y/N	Behavior Change/ Response to Activity/Comments/Observer Activity/Vessel End # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	14:28	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel UNBOUND F/N AMERICAN EAGLE TR-N.
E ON PRE/POST CON S M OR E OFF		15:30	Grid N or S W or E		LP CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc done for day No Post-Con Obs necessary due to no pile driving.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

UMC-USCG

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 1-19-18

Time Effort Initiated: 1805

Time Effort Completed: 1952

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:05	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
19:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite TMC Stabbing 30" pile Obs. Effort ON
E ON PRE/POST CON S M OR E OFF		18:05 18:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted TMC Vibbing before *
E ON PRE/POST CON S M OR E OFF		18:29 18:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear TMC does a soft start on the Vibe
E ON PRE/POST CON S M OR E OFF		18:30 19:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibbing 30" fender piles in water
E ON PRE/POST CON S M OR E OFF		19:22 19:52	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con Obs TMC done for day No mammals sighted
E ON PRE/POST CON S M OR E OFF		19:52	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

* Phone Lines down / Texting delayed - this contributed to miscommunication on being called out in a timely manner

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC
Date: 1-19-18
Time Effort Initiated: 1800
Time Effort Completed: 1952
Page 1 of 1

Time	Visibility	Glaze	Weather Condition	27	Wave Height	DSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		1/2 Mod/Hvy	1	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		1/2 Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		1/2 Mod/Hvy		NSEW	NSEW

Event Code	Light # (1 or 11 if no light)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure Time (Y/N)	Behavior Change/ Response to Activity/Comments/Observer Activity/Vessel Shift # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		18:05	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		ARR UMC. TMC EFFORT ON ALREADY STAB
E ON PRE/POST CON S M OR E OFF		18:05 18:34	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VIBING START PRE CON OPS NO MMO. TMC VIBING
E ON PRE/POST CON S M OR E OFF		18:29 18:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BEFORE AM CLEAR MITIGATE TMC SOFT START ON VIBE
E ON PRE/POST CON S M OR E OFF		18:30 19:10	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC VIBING 30" Pender pile LA WORK
E ON PRE/POST CON S M OR E OFF		19:22 19:52	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC DONE FOR THE DAY. POST CONS. OBS. NO MARINE MAMMALS OBSERVED.
E ON PRE/POST CON S M OR E OFF		19:52	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBS EFF OFF FOR TODAY
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC / USCG Dock

Date: 1-20-18

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
09:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	1 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

UMC-USCG side

Event Code	Sight # (1 or 1.1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		ON SITE UMC/USCG DOCK LEVEL A-ZONE EFFORT ON
E ON PRE/POST CON S M OR E OFF		07:00 07:27	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE-CONS OBSERV. NO MMO. ALL CLEAR
E ON PRE/POST CON S M OR E OFF		07:29 08:34	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING EQUIP ON
E ON PRE/POST CON S M OR E OFF		08:35 10:28	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC AIRLIFT DEARIS FOR EACH FENDER PILE IN WATER WORK
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		LP CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION
E ON (VA) PRE/POST CON S M OR E OFF		11:10 11:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Guardian inbound harbor TR-N to Trident dock - NO MMA assoc.
E ON (VA) PRE/POST CON S M OR E OFF		11:47 12:09	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		vessel Sea Trader inbound harbor TR-N to Trident dock - NO MMA
E ON PRE/POST CON S M OR E OFF		11:55 16:31	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts dilling 30" fender in water
E ON (VA) PRE/POST CON S M OR E OFF		12:05 12:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Northern Patriot inbound harbor TR-N to Trident dock - NO MMA

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc-Coast Guard

Date: 1-20-18

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

getting dark

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Car	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Response? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		mmo Laurie P. Grimmes became ill so had to leave position @ umc-Crane
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		side. mmo CB moved to her position @ umc-Crane side - which
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		left are mmo to monitor the 10m radii A zone - completely manageable *
E ON PRE/POST CON S M OR E OFF		17:01	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC does a mitigation by doing a soft start on impact hammer
E ON PRE/POST CON S M OR E OFF		17:02	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacting 4 ea 30" round piles (various radii)
E ON PRE/POST CON S M OR E OFF		17:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V farvar Sea inbound harbor TR-SW to Delta western dock - No mma
E ON PRE/POST CON S M OR E OFF		17:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC cutting and capping fender piles over water / welding
E ON PRE/POST CON S M OR E OFF		17:32	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done for day Start Post-Con Obs No mammals sighted
E ON PRE/POST CON S M OR E OFF		17:56	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		done - obs. effort off
E ON PRE/POST CON S M OR E OFF		18:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

* Note mmo Vic Fisher arrived just before impacting started - 2 mmo's on hand to cover A zone: STSL-KLW -15m / HSEA 185m / HPBK 340m / OTTR+ Eider 300m

B zone - 1000m

U

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-Crane Side

Date: 1-20-18

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
08:30	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
12:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
14:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (acc code short)	Construction Type	Minigut ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive On Site UMC-0655 Crane Side to clear 10m Level A zone
E ON PRE/POST CON S M OR E OFF		07:00 07:27	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort ON Start Pre-Can Obs-No Called All clear - mammals sighted
E ON PRE/POST CON S M OR E OFF		07:29 08:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging equip over water
E ON PRE/POST CON S M OR E OFF		08:35 10:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Airlifting debris from 4ea Fender Pile 30' in water work
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:55 16:31	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Begins Drilling 30" Fender Piles no MM sighted.
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		EFFORT OFF -mmo LP became ill & had to leave which left
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		LP CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		one mmo to monitor level A zone - 10m / B zone which was manageable
E ON PRE/POST CON S M OR E OFF		16:10 16:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		USCG Cutter outbound harbor TR-SE out to sea No MMA associated

UMC - Crane Side

MARINE MAMMAL

OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc-crane sideDate: 1-20-18Time Effort Initiated: 0700Time Effort Completed: 1930Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
16:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

* VIC STAYED at umc-Level A zone while mmo CB moved around entire 1000 m. radius

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc installing fender bearing plates to outside faceplate + welding it
E ON (VA) PRE/POST CON S M OR E OFF		16:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V majesty inbound humbae TR-N to Tribut stop + GO
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		CB VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		mmo vic came on to help monitor 1000 m * B zone / 10 m A zone
E ON PRE/POST CON S M OR E OFF		17:01 17:02	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc does SS on Impact Hammer
E ON PRE/POST CON S M OR E OFF		17:02 17:10	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Impacting 30" fender Piles - 4ea
E ON PRE/POST CON S M OR E OFF		17:56 18:48	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Base crane doing a/c cutting capping
E ON PRE/POST CON S M OR E OFF		19:00 19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Post construction observations
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		VF	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Effort + off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		

Impact 30" Radii (4ea) STSL-KLW - 15m/45' HSEF - 185m/555' HPB/K 340m/1020'

OTTR 300m/900'

umc-crane side

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC/USCG Dock

Date: 1-21-18

Time Effort Initiated: 0700

Time Effort Completed: 1915

Page 1 of 3

Time	Visibility	Glare	Weather Condition 32	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	1 %	S-PC-L-R-F-OC-SN-HR	(L) Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	2 %	S-PC-L-R-F-OC-SN-HR	(L) Mod/Hvy	1-2	NSEW	NSEW
11:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	(L) Mod/Hvy	2-3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	(L) Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	(L) Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	(L) Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Misgint ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Arrive Onsite @ 0653 Level A zone - 10 m Obs. Effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Start Pre-Con Obs No mammals sighted called All Clear to Chis
E ON PRE/POST CON S M OR E OFF		07:31 08:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			TMC slinging OWC getting set-up to work - cutting & capping fender pile
E ON PRE/POST CON S M OR E OFF		08:40 10:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			TMC continues with welding over water
E ON VA PRE/POST CON S M OR E OFF		10:18 10:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			F/V Pav lot inbound harbor TR-N to Spit dock - no MMA assoc.
E ON VA PRE/POST CON S M OR E OFF		10:19 10:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			F/V Billikin inbound harbor TR-N to Trident dock - No MMA
E ON PRE/POST CON S M OR E OFF		10:40 13:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			TMC continues welding caps on fender pile over water
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Observer Rotation
E ON VA PRE/POST CON S M OR E OFF		11:20 12:40	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			F/V ALEUTIAN LADY INBOUND TR-N then DRIFTING THEN BAY. FINALLY EXITS BAY TO FRONT BEACH AREA.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC/USCG DOCK

Date: 1-21-18

Time Effort Initiated: 0700

Time Effort Completed: 1915

Page 2 of 3

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2-3	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if no sight)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Inspect Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	11:30 11:43	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		F/V PACIFIC MARINER INBOUND TR-N TOWARDS DELTA WEST FUEL DOCK. TURNS AROUND EXITS BAY TOWARDS FRONT BEACH
E ON PRE/POST CON S M OR E OFF	VA	11:35 11:48	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		F/V MARGARET LYN INBOUND TR-N TOWARDS NORTH PACIFIC FUEL DOCK NO MMA ACTIVITY.
E ON PRE/POST CON S M OR E OFF	VA	12:50 13:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		F/V INBOUND VALIANT TR-N TO LCD DOCK. NO MMA ACTIVITY
E ON PRE/POST CON S M OR E OFF	VA	12:55 13:05	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		F/V PACIFIC FURY INBOUND TR-N NO MARINE MAMMAL ACT.
E ON PRE/POST CON S M OR E OFF	VA	14:00 14:15	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		F/V VIEKODA BAY INBOUND TR-SW TO DELTA WEST FUEL DOCK. NO MMA.
E ON PRE/POST CON S M OR E OFF	VA	14:24 16:35	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		BARGE CRANE SINKING TEMPLATE REMOVAL AS WELDERS USE CUTTING TORCH OVER WATER. NO MMA ACTIVITY.
E ON PRE/POST CON S M OR E OFF	VA	14:18 14:25	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		F/V INBOUND Bering Defender TR-SW TO DELTA FUEL DOCK. NO MMA ACT.
E ON PRE/POST CON S M OR E OFF	VA	14:24 14:35	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		F/V BRENNAN A TR-N TO NO MMA ACTIVITY.
E ON PRE/POST CON S M OR E OFF	VA	15:00 :	Grid N or S W or E		LP CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		OBSERVER ROTATION

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-USCG side

Date: 1-21-18

Time Effort Initiated: 0700

Time Effort Completed: 1915

Page: 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	2	NSEW	NSEW
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Getting dark

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mixing ion Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON VA PRE/POST CON S M OR E OFF		15:20	Grid		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Sea Traders inbound harbor TR-N to KDH dock no mma
E ON VA PRE/POST CON S M OR E OFF		15:39	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Atlantico inbound harbor TR-N to USCG dock
E ON VA PRE/POST CON S M OR E OFF		16:16	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Summer Bay inbound harbor TR-N to LKW dock no mma assoc.
E ON VA PRE/POST CON S M OR E OFF		16:17	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pacific Prince inbound TR-SE to Delta western dock - no mma assoc.
E ON VA PRE/POST CON S M OR E OFF		16:32	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane starts slinging first fender panels in place
E ON VA PRE/POST CON S M OR E OFF		16:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Trmc done today No Post-Can Obs Required.
E ON VA PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs Effort off
E ON VA PRE/POST CON S M OR E OFF		19:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No pile driving today
E ON VA PRE/POST CON S M OR E OFF		:	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON VA PRE/POST CON S M OR E OFF		:	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON VA PRE/POST CON S M OR E OFF		:	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC Dock - Crane Side

Date: 1-21-18

Time Effort Initiated: 0700

Time Effort Completed: 1915

Page 1 of 2

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
11:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW

Event Code	Sight # (1 or 1.1 if so- elected)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		onsite UMC dock LEVEL A-ZONE EFFORT ON
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE CONS OBSERV NO MM sighted ALL CLEAR
E ON PRE/POST CON S M OR E OFF		07:31 08:28	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Barge cranes slinging OW. cutting & capping piling OW.
E ON PRE/POST CON S M OR E OFF		08:40 10:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC continues welding over water
E ON PRE/POST CON S M OR E OFF		10:40 13:05	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC CONTINUES over water CONS. WELDING CAPS ON FENDER ROUNDS.
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		LP CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION
E ON PRE/POST CON S M OR E OFF		14:26 16:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging templet & workers welding
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		17:00 19:15	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC BARGE CRANE SETS 1ST FENDER PANEL IN PLACE OVER WATER. EXTENDING BOOM OVER WATER HOLDING BLACK ENERGY NO MM ACTIVITY

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UNC-CRANE SIDE

Date: 1-21-18

Time Effort Initiated: 0700

Time Effort Completed: 1915

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radial/ Impact Pile #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:15	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		JMC DONE FOR THE DAY NO POST OPS REQUIRED
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc - uscg side

Date: 1-22-18

Time Effort Initiated: 0700

Time Effort Completed: 0900

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	1 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	N S E W	N S E W
09:00	B-P-M-G-E	1 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Minigun Type	Response? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive on site umc - uscg Side @ 0654 - obs Effort ON
E ON PRE/POST CON S M OR E OFF		07:00 07:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs to clean 10m Level A zone. No mammals sighted
E ON PRE/POST CON S M OR E OFF		07:45 09:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called All Clear to Chris TMC welding over water - fender being plate
E ON PRE/POST CON S M OR E OFF		09:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		10m radii / No B zone Chris called us off for day - only welding
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		+ crew may go home early due to wind storm. No Post-Con
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Required - no in-water vibe a impacting obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC (channel side)

Date: 1-22-18

Time Effort Initiated: 0700

Time Effort Completed: 0900

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	3	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	3	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 11 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Response? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		ARRIVE AT TMC/UMC OBSERV EFFORT ON @0650
E ON PRE/POST CON S M OR E OFF		07:00 07:36	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		START PRE CONS. OBSERV TO CLEAR 10m LEVEL A-ZONE. ALL CLEAR
E ON PRE/POST CON S M OR E OFF		07:45 09:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC WELDING OVER WATER FENDER BEARING plates.
E ON PRE/POST CON S M OR E OFF		09:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		CAUSED OFF PERCHUS PHONE CALL TO CAPTAIN NO post-con required
F ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERV EFFORT OFF
F ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC/USCG DOCK

Date: 1-23-18

Time Effort Initiated: 0700

Time Effort Completed: 1845

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radius/ Inspect Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		ONSITE UMC/USCG DOCK @0655. LEVEL A-ZONE EFFORT ON.
E ON PRE/POST CON S M OR E OFF		07:00 07:35	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE-CONG OBSERV NO MM ACTIVITY ALL CLEAR
E ON PRE/POST CON S M OR E OFF		08:09 10:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING MATERIALS ONC.
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		LP CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		10:57 11:12	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Valiant inbound harbor TR-N to Resolve maine-NO mma assoc
E ON PRE/POST CON S M OR E OFF		11:05 12:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slings template + welding over water
E ON PRE/POST CON S M OR E OFF		11:55 15:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Shore Crane Slings Fender Being Plate over water + welding over water
E ON PRE/POST CON S M OR E OFF		13:26 13:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Stabbing 30" Fender Pile into template in water
E ON PRE/POST CON S M OR E OFF		13:54 13:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation By doing a Soft Start on Vibe

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc-USCG side

Date: 1-23-18

Time Effort Initiated: 0700

Time Effort Completed: 1845

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N(S)E W	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSE W	NSEW
17:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSE W	NSEW
18:45	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSE W	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSE W	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSE W	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		13:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibbing 30" fender piles in water F15 thru F18
E ON PRE/POST CON S M OR E OFF		14:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging lots of equip onto barge clearing upland area
E ON PRE/POST CON S M OR E OFF		14:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation LPG from RP to USCG CB from USCG to umc-Crane side
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESEL INBOUND SEA TRADER. TR-N TO TRIDENT DOCK. NO MM activity.
E ON PRE/POST CON S M OR E OFF		15:10	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC AIRLIFT DEBRIS FROM FENDER PILING S F15-18
E ON PRE/POST CON S M OR E OFF		15:28	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Uncoming F/V Alaskan Star LANDED LCD DOCK. NO MM activity.
E ON PRE/POST CON S M OR E OFF		17:41	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Unbound F/V PROGRESS LANDED AT FAIRLE. NO MM activity.
E ON PRE/POST CON S M OR E OFF		17:43	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE slinging equipment from shore to Barge.
E ON PRE/POST CON S M OR E OFF		17:48	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC DONE FOR THE DAY START POST-CONST. OBSERV NO MM Activity.
E ON PRE/POST CON S M OR E OFF		17:50	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERV. EFFORT OFF FOR TODAY.
E ON PRE/POST CON S M OR E OFF		18:03	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		18:15	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		18:45	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

(E OFF)

1845

LP

(NONE)

OBSERV. EFFORT OFF
FOR TODAY.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc - Crane Side

Date: 1-23-18

Time Effort Initiated: 0700

Time Effort Completed: 1845

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy	0	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mixing ion Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite umc @ 0657 to Clean Level A Zone - 10m Obs. Effort on
E ON PRE/POST CON S M OR E OFF		07:00 07:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Can obs No mammals sighted Called AU Clean to Chris
E ON PRE/POST CON S M OR E OFF		08:09 10:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC working overwater setting up/putting skiff in water move barge & sling piles overwater.
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observed Rotation - CB to USCG side of umc LGP to RP - Vibbing soon mmo CB back on @ umc - Crane side
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Airlifts debris from fender pillings F15-F18
E ON PRE/POST CON S M OR E OFF		15:28 17:41	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slinging equip from shore to Barge
E ON PRE/POST CON S M OR E OFF		17:50 18:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC wrapping up - tied crane down. Start Post-Can obs
E ON PRE/POST CON S M OR E OFF		18:15 18:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mammals observed Obs. Effort off
E ON PRE/POST CON S M OR E OFF		18:45	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

11:00 - 15:00 LP went to RP
* 15:00 - CB at umc - CRANE

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 1-23-18

Time Effort Initiated: 1100

Time Effort Completed: 1500

Page 1 of 2

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if no sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ Dir of travel	Zone/ Radius/ Inspect Pile #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitig ion Type	Expo- sure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		LP BEGIN OBSERVATION AT ROCKY POINT SITE.
E ON PRE/POST CON S M OR E OFF		8:09 10:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC WORKING OVER WATER SETTING UP PUTTING LARGE SM SKIFF IN WATER IN PREP TO MOVE BARGE & SLING PILING ROUNDS ON DECK FROM USCG DOCK.
E ON PRE/POST CON S M OR E OFF		11:05 12:34	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane slings template & welding OW.
E ON PRE/POST CON S M OR E OFF		11:30 11:38	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel Incoming, TUG/MEH FALCON TR-W TO MASON CRANE. NO MM Activity
E ON PRE/POST CON S M OR E OFF		11:55 15:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		SHORE CRANE SURGING fender plate over water welding over water.
E ON PRE/POST CON S M OR E OFF		13:11 13:17	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL INBOUND BAY "COMADORE" TR-SW TO DELTA WEST FUEL DOCK
E ON PRE/POST CON S M OR E OFF		13:26 13:48	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE STABBING 30" PILE INTO Template OVER WATER
E ON PRE/POST CON S M OR E OFF		13:54 13:55	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC mitigation soft start on vibrate
E ON PRE/POST CON S M OR E OFF		13:55 14:34	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC VIBING 30" Fender Round Piling in water FIS thru FDR

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: Rocky Point

Date: 1-23-18

Time Effort Initiated: 1100

Time Effort Completed: 1500

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
13:55	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if no sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure/ (V/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	192	13:55 14:44	E-15 Grid N or S W or E	B	LP	BL BO BR DF SA OTHER	HBSL	Min: Max: Best: 2	Beh code(s): LO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	2 HBSL, LOOKING & MILLING staying in general area at point of RP. @ 1444 still in same area.
E ON PRE/POST CON S M OR E OFF	193	13:55 14:44	E-16 Grid N or S W or E	B	LP	BL BO BR DF SA OTHER	HBSL	Min: Max: Best: 3	Beh code(s): MI	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	3 HBSL, APL AREA & MILLING staying in general area @ 1444 still in same area.
E ON VA PRE/POST CON S M OR E OFF		14:40 14:52	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL INBOUND VIKODA BAY TR-NW TO DELTA WEST FUEL DOCK.
E ON PRE/POST CON S M OR E OFF		14:40 15:08	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane unloading EQUIPMENT on to BARGE
E ON PRE/POST CON S M OR E OFF		15:00 :	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		END TIME AT RP SITE, move to un- USCG side
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC / USCG DOCK

Date: 1-24-18

Time Effort Initiated: 0700

Time Effort Completed: 1915

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgation Type	Exposure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		0700	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Arrive Onsite umc @ 0655 - 10m / Level A zone Observer Effort ON
E ON PRE/POST CON S M OR E OFF		07:00 07:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Start Pre-Con Obs NO mammals sighted Called At/Clean to Chris
E ON PRE/POST CON S M OR E OFF		07:45 10:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time welding over water - Fender Being plates
E ON PRE/POST CON S M OR E OFF		09:37 09:51	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/v Aleutian Lady in board harbor TR-N to KDH dock - No mma assoc.
E ON PRE/POST CON S M OR E OFF		10:30 11:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Millinien Falcon tug assist to Fuel Barge Edward Itta in board harbor TR-W to umc dock - No mma
E ON PRE/POST CON S M OR E OFF		10:55 18:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time starts dawning fender pile 10m A zone / B zone
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Rotation LP to umc/uscg dock CB to RP
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		LP CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBS. ROTATION LP to RP - SEE RP data CB to uscg-umc sheet
			Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Cont. →

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc/uscg side

Date: 1-24-18

Time Effort Initiated: 0700

Time Effort Completed: 1915

Page: 2 of 2

Time	Visibility	Glare	Weather Condition	45	Wave Height	BSS	Wind	Swell
19:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR		Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		19:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc done for the day. Obs effort off - No post needed due to no pile driving
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: VMC / Crane side

Date: 1-24-78

Time Effort Initiated: 0700

Time Effort Completed: 1915

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBS. on site to clear 10m ZONE @ 655 EFFORT ON A
E ON PRE/POST CON S M OR E OFF		07:00 07:35	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE CONS OBS. NO MM ACTIVITY ALL CLEAR
E ON PRE/POST CON S M OR E OFF		07:45 10:33	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC WELDING FENDER BEARING PLATES OVER WATER
E ON PRE/POST CON S M OR E OFF		10:55 18:36	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC STARTS drilling fender pile 10m Azone / 10m Bzone
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERV. ROTATION LP to UMC-USCG CB to RP
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: RP
Date: 1-24-18
Time Effort Initiated: 11:30am
Time Effort Completed: 1915
Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re- sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite RP after first trying to rotate to umc-crane side. NPF's
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Fuel tanker just arrived at Pos 5 of umc dock Security gated off +
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		told to go somewhere else by COU Ports Dept. Tried to go above umc
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		to the perch but slid off road. Decided RP would be the best,
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Safest place to monitor current const. is ongoing *drilling 30" fenders
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		in water. (10 m A zone)
E ON PRE/POST CON S M OR E OFF	VA	12:39 12:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Cindra Gene inbound harbor TR-W to DW dock - no mma
E ON PRE/POST CON S M OR E OFF	VA	13:25 13:39	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V AK Enterprise inbound harbor TR-N to Spit dock - NO mma assoc.
E ON PRE/POST CON S M OR E OFF	VA	14:09 14:19	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Alaskan Dream inbound TR-W to DW dock. No mma assoc.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: RP

Date: 1-24-18

Time Effort Initiated: 11:30

Time Effort Completed: 1915

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
19:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Palc #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	(VA)	14:40 14:56	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FV Half moon Bay inbound humbre TR-N to Spit dock No mma associated
E ON PRE/POST CON S M OR E OFF	(VA)	15:00	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB to USCG dock LP to RP
E ON PRE/POST CON S M OR E OFF	(VA)	15:41 16:20	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel INBOUND TR-N TUG TOWING BARGE. TIE UP TO ANCHOR BUOY at END OF SPIT. NO MMA
E ON PRE/POST CON S M OR E OFF	(VA)	16:10 16:21	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel FV BRENN A INBOUND. TR-N TRIDENT DOCK.
E ON PRE/POST CON S M OR E OFF	(VA)	1915	Grid N or S W or E		HP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OB'S EFFORT OFF FT TAC DONE FOR THE DAY. NO MMA (needed)
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc-uscg side

Date: 1-25-18

Time Effort Initiated: 0700

Time Effort Completed: 1855

Page 1 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
09:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #P	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite 0655 umc-uscg side Obs Effort ON
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-con Obs No mammals sighted Called All Clear to Chris
E ON PRE/POST CON S M OR E OFF		07:20 07:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slings equip + materials over water
E ON PRE/POST CON S M OR E OFF		07:32 07:33	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a SS on Impact Hammer
E ON PRE/POST CON S M OR E OFF		07:33 07:42	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Impacts 30" fender's FIS-FIB Various Radius / 1000 m
E ON PRE/POST CON S M OR E OFF		07:50 08:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Slings B zone Various Equip + materials over water w/ Barge Crane
E ON PRE/POST CON S M OR E OFF		09:35 12:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane setting Fender Panels over water
E ON PRE/POST CON S M OR E OFF	VA	08:23 08:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Fuel Tanker Sea Friend inbound harbor w/ tug assist by Millieum Falcon TR-W to USCG dock
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Also Chadux Oil Spill response skiff setting boom around tanker

* Out of sequence on here but times are accurate

* No mma associated
* TMC also moves barge farther S

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-USCG side

Date: 1-25-18

Time Effort Initiated: 0700

Time Effort Completed: 1855

Page 2 of 2

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERVER ROTATION
E ON PRE/POST CON S M OR E OFF		14:07 17:34	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge crane OWC to set fender panels no mm activity
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		LP CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERV ROTATION
E ON PRE/POST CON S M OR E OFF		15:01 18:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC welding + securing chain from dock to fender panels and building out wood framework for cement
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		18:05 18:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slings boats + Equip overwater on to deck
E ON PRE/POST CON S M OR E OFF		18:25 18:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC ties up crane Dane for the Day Start Post-Con Obs.
E ON PRE/POST CON S M OR E OFF		18:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mammals sighted Obs Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC/1000 m/crane

Date: 1-25-18

Time Effort Initiated: 0700

Time Effort Completed: 1855

Page 1 of 3

Time	Visibility	Glass	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	Q	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	1	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy	0	NSEW	NSEW
	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if no sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ Dir of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		06:55	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		ON SITE UMC @ 0655 LEVEL A-ZONE EFFECT ON
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE CONS OBSERV. NO MM SIGHTED
E ON PRE/POST CON S M OR E OFF		07:20 07:30	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING MATERIALS OVERWATER NO MM ACTIVITY
E ON PRE/POST CON S M OR E OFF		07:32 07:33	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC MITIGATION by soft start on Impact HAMMER
E ON PRE/POST CON S M OR E OFF		07:33 07:42	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC IMP 30" fender F 15-18 VARIOUS A-ZONE RADII 1000mB-ZONE. NO MM A
E ON PRE/POST CON S M OR E OFF		07:50 08:50	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Barge crane/shore slinging materials over water. SETTING FENDER PANELS. NO MM A
E ON PRE/POST CON S M OR E OFF		09:35 12:40	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Barge crane OWC. Setting Fender Panels in place over water. NO MM A
E ON PRE/POST CON S M OR E OFF		10:28 10:40	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL INBOUND F/V FARRAR SEA TR-N TO LCD DOCK. NO MM A
E ON PRE/POST CON S M OR E OFF		10:29 10:40	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel - SKIFF "CHADIX" landing craft trailing containment boom from Delta Fuel-over to USCG dock to Fuel Barge NO MM ACTIVITY.

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC/CRANE SIDE

Date: 1-25-18

Time Effort Initiated: 0700

Time Effort Completed: 1855

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
11:00	B-P-M-G-E	2 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
13:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
15:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0-1	NSEW	NSEW
17:00	B-P-M-G-E	1 %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or LI if re-sight)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	10:39 10:48	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL INCOMING TR-N FN MISTY DAWN TO SPIT DOCK NO MM ACTIVITY
E ON PRE/POST CON S M OR E OFF	VA	10:57 11:11	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL INBOUND TR-S TO DELTA FUEL DOCK American Eagle NO mma activity
E ON PRE/POST CON S M OR E OFF	VA	11:00	Grid N or S W or E		LP CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBSERV. ROTATION
E ON PRE/POST CON S M OR E OFF	VA	11:10 12:01	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FV motherShip Excellence inbound harbor TR-N to umc dock - no mma
E ON PRE/POST CON S M OR E OFF	VA	11:47 12:02	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Assisted by Tug James P. Dwyer FV ALC Star inbound TR-N to Spit dock - no mma
E ON PRE/POST CON S M OR E OFF	VA	13:03 13:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Freight Barge Brusco 401 Inbound harbor TR-N w/ Tug Assist to Resolve No mma associated
E ON PRE/POST CON S M OR E OFF	VA	13:15 13:38	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Delta Western Skiff TR-N to KPH dock @ 1333 Back to PW dock
E ON PRE/POST CON S M OR E OFF	VA	14:07 17:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		no mma assoc. TMC - owc using Barge Crane to set fender
E ON PRE/POST CON S M OR E OFF	VA	15:00	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-Crane side

Date: 1-25-18

Time Effort Initiated: 0700

Time Effort Completed: 1855

Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
18:55	B-P-M-G-E	1 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if no sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		1501 18:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC crew welding waking over water to attach fender panel and some other things to the Vessel KUSA SEA cement INBOUND TR-N TO: NO NM ASSOCIATED
E ON PRE/POST CON S M OR E OFF		1501 15:12	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE CRANE SLINGING BOATS & EQUIP ON ONTO BARGE DECK.
E ON PRE/POST CON S M OR E OFF		18:05 18:25	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC TIES UP CRANE DONE FOR THE DAY START POST CON OBS
E ON PRE/POST CON S M OR E OFF		18:25 18:55	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBS. EFFORT OFF FOR TODAY.
E ON PRE/POST CON S M OR E OFF		18:55	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: 1-26-2018

Date: 1-27-2018

Time Effort Initiated: 1-28-2018

Time Effort Completed:

Page 1 of 1

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or L1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		1-26-18
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		thru
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		1-28-18
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO WORK
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		WIND STORM
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		& mmo's NOT
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NEEDED
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FOR WORK
E ON PRE/POST CON S M OR E OFF	:	:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PERFORMED

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC-Crane Side
Date: 1-29-18 1000m B zone
Time Effort Initiated: 0700
Time Effort Completed: 1730
Page 1 of 3

#194

Time	Visibility	Glass	Weather Conditions	Wave Height	SSS	Wind	Swell
07:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	2	NSEW	NSEW
09:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:43	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

dark

Event Code	Light # (1 or L1 if so- called)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of animal	Zone/ Radius/ Impact Pile #	Obs.	Sighting Circ	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Migrant Imm Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/Observer Activity/Vessel ID # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		0700	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite UMC to clear 1000m *proposed Obs. Effort on const. impacting
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Called AT1 Clear to Chis
E ON PRE/POST CON S M OR E OFF	VA	07:10 07:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Sea Trader inbound harbor TR-W to UMC dock - No mma assoc.
E ON PRE/POST CON S M OR E OFF		08:01 09:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging Equip over water
E ON PRE/POST CON S M OR E OFF	VA	08:49 09:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Ocean Rover inbound harbor TR-N to KDH dock - No mma obs.
E ON PRE/POST CON S M OR E OFF		09:35 09:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC dues soft start on Vibe
E ON PRE/POST CON S M OR E OFF		09:36 10:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC vibrating 30" +24" round pilings in water
E ON PRE/POST CON S M OR E OFF	194	09:43 10:05	E15 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s): LO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	HSEA observed in cove between RPT + APC, spyhopping + looking around, not traveling
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		In any direction. No behavior changes in vibrating was still there when I left area of rocky point

*

For Reference: 5 pile impact radii HPBK 400m / KLV 15m / HSEA 215m / STSL 15m / OTTR/eider 300m / 1000m B zone

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-Crane Side

Date: 12-29-18 1000m/RP

Time Effort Initiated: 0700

Time Effort Completed: 1730

Page 2 of 3

#195

Time	Visibility	Glaze	Weather Condition	Wave Height	SSS	Wind	Swell
09:46	B-P-M-G-E	9%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	01	NSEW	NSEW
11:00	B-P-M-G-E	9%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	01	NSEW	NSEW
:	B-P-M-G-E	9%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	9%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	9%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	9%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if no sight)	Time/Date (Start/End date if cont.)	VP/ Grid #/ DIR of travel	Zone/ Bottom/ Inquest File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Response? (Y/N)	Behavior Change/ Response to Activity/Comment/Status/ Activity/Vessel Name/Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		09:40 10:09	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC using extended beam to work over water
E ON PRE/POST CON S M OR E OFF	195	09:46 10:10	E14 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best: 1	Beh code(s): SP	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Sighted 2nd HSEA off RP, spy hopping real briefly waves crashing hard to tell
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		if mammal behavior changes due to vibrations watched until I left RP
E ON (VA) PRE/POST CON S M OR E OFF		09:58 10:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FV Africa Inbound harbor TR-N to KDM dock No MMA assoc.
E ON PRE/POST CON S M OR E OFF		10:20 10:21	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a SS on Impact Hammer
E ON PRE/POST CON S M OR E OFF		10:21 11:11	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Impacting 24" + 30" piles in water
E ON PRE/POST CON S M OR E OFF		11:00 :	Grid N or S W or E		CB LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation
E ON PRE/POST CON S M OR E OFF		11:15 11:45	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC DONE PILE DRIVING FOR A FEW HRS. START POST CON OBS. EFFORT NO MMA sighted
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BREAK IN WORK

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC/CRAVE SIDE
Date: 1-29-18
Time Effort Initiated: 0700
Time Effort Completed: 1730
Page 3 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	1 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N S E (W)	N S E (W)
16:00	B-P-M-G-E	1 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	N S E (W)	N S E (W)
17:30	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1-2	N S E (W)	N S E (W)
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BREAK IN WORK
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		requested to return to site at 1400 by TMC crews
E ON PRE/POST CON S M OR E OFF		14:00 14:30	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PRE CON OBS. NO MM SIGHTED ALL CLEAR TO CB
E ON (VA) PRE/POST CON S M OR E OFF		14:54 15:03	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL INCOMING, F/V SAINT PETER, TR-W, N TO LCD DOCK. NO MM ASSOCIATED
E ON PRE/POST CON S M OR E OFF		14:55 15:44	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC WELDING NEAR OVER WATER SURFACE ON PILING
E ON (VA) PRE/POST CON S M OR E OFF		15:02 15:15	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		VESSEL "SCOTCH CAP" F/V INCOMING TR-N, TO TRIDENT DOCK. NO MM ASSOCIATED
E ON PRE/POST CON S M OR E OFF		15:18 15:41	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC BARGE CRANE TO TRANSFER 24" pile to splice into piling over water NO MM ASSOCIATED
E ON PRE/POST CON S M OR E OFF		16:55 16:56	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC perform mitigation SIG on Impact Hammer
E ON PRE/POST CON S M OR E OFF		16:56 16:58	Grid N or S W or E		LP	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Impacting 24" pile OW VARIOUS A-ZONE RADII 1500m B-ZONE. NO MM ASSOCIATED
(POST) (EOFF)		17:00 1730 1730			LP					(NOWC)			TMC CALLED US OFF FOR TODAY. START. POST OBS CON. MM ASSOCIATED

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC/1129

Date: 1-29-18

Time Effort Initiated: 0700

Time Effort Completed: 1730

Page 1 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
09:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	1%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		OBSERV EFFORT ON ARR USEG DOCK LEVEL A-ZONE
E ON PRE/POST CON S M OR E OFF		07:00 07:30	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		PRE-CONS. OBSERV NO MARINE MAMMALS SIGHTED ALL CLEAR TO CB
E ON PRE/POST CON S M OR E OFF		08:01 09:30	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		BARGE CRANE SLINGING MATERIALS
E ON PRE/POST CON S M OR E OFF		09:35 09:36	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		SOFT START VIBE/TUC
E ON PRE/POST CON S M OR E OFF		09:36 10:03	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		TMC VIBING 30" & 24" ROUND fender piles. in water
E ON PRE/POST CON S M OR E OFF		09:40 10:09	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		EXTEND BOOM SLINGING MATERIALS over water
E ON PRE/POST CON S M OR E OFF		10:20 10:21	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		TMC PERFORMS mitigation FOR IMPACT HAMMER
E ON PRE/POST CON S M OR E OFF		10:21 11:11	Grid N or S W or E		4P	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		TMC IMPACTING 24" & 30" Round piles in water
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		4P CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		OBSERVER Rotation

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC/USCG

Date: 1-29-18

Time Effort Initiated: 0700

Time Effort Completed: 1730

Page 2 of 3

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
14:00	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	3%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WP/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #?	Obs.	Sighting Cue	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigat ion Type	Expos- ure? (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:15 11:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC done pile driving for a few hours - start Post-can Obs - No mammals
E ON PRE/POST CON S M OR E OFF		11:45 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		sighted. Obs Effort off
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		BREAK IN WORK for mmo's
E ON PRE/POST CON S M OR E OFF		14:00 :	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Requested to come back @ 1400 by TMC Chris Obs Effort on
E ON PRE/POST CON S M OR E OFF		14:00 14:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		Start Pre-can Obs again No mammals sighted Called All Clear to Chris
E ON PRE/POST CON S M OR E OFF		14:04 14:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		F/V Viking Queen in board harbor T12-N@ Northern Victor/Teide - nomma
E ON PRE/POST CON S M OR E OFF		14:55 16:44	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC welding at waters surface on pillings in water
E ON PRE/POST CON S M OR E OFF		15:18 15:41	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC using Barge Crane to transfer 24" pile to splice onto NT pile - owc
E ON PRE/POST CON S M OR E OFF		16:55 16:56	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC/NONE	SS/BC DE SD None		TMC perform mitigation by doing a SS on Impact Hammer

Reference: Impact 24" (use 30" radii instead) - 1 pile - HPBK 135m / KLV 10m / HSEA 75m / STSL 10-15m / OTTR 300m
Eider

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-USCG side

Date: 1-29-18

Time Effort Initiated: 0700

Time Effort Completed: 1730

Page 3 of 3

Time	Visibility	Glow	Weather Conditions	Wave Height	SSS	Wind	Drift
17:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW

Event Code	Sign # (1 or 1.1 if sighted)	Time/Dur (Start/End time if cont.)	WT/ Gold #/ DIR of tunnel	Zone/ Radius/ Buoy #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midnight Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/Classroom Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:56	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacting 1 ea 24" NT pile in water various A zone radii/1000m
E ON PRE/POST CON S M OR E OFF		16:58	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC called us B zone off for day. Start Post-Con Obs
E ON PRE/POST CON S M OR E OFF		17:00	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		No sightings or issues to report Obs. Effort off
E ON PRE/POST CON S M OR E OFF		17:30	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: 1-30-2018

Date: 1-31-2018

Time Effort Initiated:

Time Effort Completed:

Page of

Time	Visibility	Glare	Weather Condition	Wave Height	BSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Recline/ Impact Pile #	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/ Visual Effect # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO WORK
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		1-30-2018
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		and
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		1-31-2018
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO mmo's
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Needed
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		30) Pour Concrete
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Weld DAY
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		31) Clean up -
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pos 5

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dark Positions III and IV

Monitoring Location: umc - uscg side

Date: 2/1/18

Time Effort Initiated: 11:30

Time Effort Completed: 1300

Page 1 of 1

Time	Visibility	Glaze	Weather Condition	Wave Height	BSS	Wind	Swell
11:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	8	NSEW	NSEW
12:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	8	NSEW	NSEW
1300	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if no sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Time	Mitigate Time	Expe- rience? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:30	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		ARRIVE on Site, use 9-Level A, Zone pre file obs.
E ON PRE/POST CON S M OR E OFF		11:30 12:04	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		pre, const obs, All clear, called in to Chris @tmc.
E ON PRE/POST CON S M OR E OFF		11:30 12:26	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time slinging Black Energy, for Fenders OWC.
E ON PRE/POST CON S M OR E OFF		12:33 13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Doing const. on Shores
F ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called off by Chris @Time. Canceled Driving Today, no post Required, Observer Effort off.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Crane Side

Date: 2-01-18

Time Effort Initiated: 1130

Time Effort Completed: 1300

Page 1 of 1

Time	Visibility	Clouds	2 Weather Condition	Wave Height	SSS	Wind	Swell
11:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if sighted)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radio/ Inspot File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Midgut Int. Type	Exposure (V/N)	Behavior Change/ Response to Activity/Comments/Season Activity/Vessel # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite - UMC Crane Side - Level A zone Obs Effort ON
E ON PRE/POST CON S M OR E OFF		11:30 12:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Called A11 Clear to Chris
E ON PRE/POST CON S M OR E OFF		11:30 12:26	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC using Barge Crane to support Black energy rubber as they get it put in place and attached (over water)
E ON PRE/POST CON S M OR E OFF		12:33 13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC working on fender Panels, etc in uplands
E ON (VA) PRE/POST CON S M OR E OFF		12:46 12:57	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Alaskan Enterprise inbound TR-N to Spit dock - No imm
E ON PRE/POST CON S M OR E OFF		13:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called off by TMC - pile driving delayed/ cancelled for today
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No post-Con Obs required - No pile driven - Obs Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: LMC Dock Positions III and IV

Monitoring Location: LMC

Date: 2-2-2018

Time Effort Interval: _____

Time Effort Completed: _____

Page: of _____

Time	Visibility	Glac	3 Weather Condition	Wave Height	SSS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Light # (1 or 1.1 if no light)	Time/Dur (Start/End time if cont.)	WT/ Gold #/ DIR of Cue	Zone/ Radius/ Inspec File #	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mittig Int Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Unknown Activity/Vessel Head # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO WORK
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		2-2-18
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mmo's
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NEEDED
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		INSTALLING
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FENDER
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		PANELS

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV
Monitoring Location: UMC - Crane & USCG sides
Date: 02/03/18
Time Effort Initiated: 0700
Time Effort Completed: 1930
Page 1 of 2

Time	Visibility	Cloud	4 Weather Condition	Wave Height	BSS	Wind	Swell
07:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
08:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

** observer Rotation occurred at 10:00am but forgot to add it here. -CB

UMC - Crane Side

10:00

**
See below

UMC - USCG Side

**

Event Code	Sight # (1 or 1.1 if no sight)	Time/Date (Start/End time if cont.)	WT/ Grid #/ Dir of travel	Zone/ Bathym. Impact Pile #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Countdown Type	Mitigation Type	Response IV/N	Behavior Change/ Response to Activity/Comments/Threat Activity/Vessel Name/ Visibility Notes
EON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on, 10m-A-Zone, crane side.
EON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Puc coast, obs 10m A-zone crane side.
EON PRE/POST CON S M OR E OFF		07:34	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear called to Chris.
EON PRE/POST CON S M OR E OFF		08:15	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane slinging torch S&D to shore & back & materials
EON PRE/POST CON S M OR E OFF		10:19	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts stabbing 24" pile in north transition / In water.
EON PRE/POST CON S M OR E OFF		10:21	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts SSV.
EON PRE/POST CON S M OR E OFF		10:48	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time vibbing 24" pile in the Dry Pos. #5 AirBom 10-35-100 meter RADII
EON PRE/POST CON S M OR E OFF		10:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Switches to vibbing in water: Nt 12 15/3300 All clear!
EON PRE/POST CON S M OR E OFF		10:56	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Vibbing BACK in the Dry: Nt 1 & Nt 3.
EON PRE/POST CON S M OR E OFF		12:01	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. moved to RP. CB@UMC.
EON PRE/POST CON S M OR E OFF		12:03	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation - CB to RP TB from UMC Crane to UMC-USCG
EON PRE/POST CON S M OR E OFF		12:10	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF		12:14	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF		12:55	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF		10:00	Grid N or S W or E		T.B./CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - USCG Side

Date: 2-3-2018

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 2 of 2

Time	Visibility	Glac	5	Weather Condition	Wave Height	BSS	Wind	Swell
15:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy	0	NSEW	NSEW	
17:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy	0	NSEW	NSEW	
19:00	B-P-M-G-E	4%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy	0	NSEW	NSEW	
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy		NSEW	NSEW	
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy		NSEW	NSEW	
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	12/Mod/Hvy		NSEW	NSEW	

Event Code	Sight # (1 or 1.1 if sp- sight)	Time/Date (Start/End time if cont.)	WP/ Grid #/ Dist of animal	Zone/ Bathymetry/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Contextual Type	Mitiga- tion Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Ball # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		14:02	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a SS on Impact Hammer
E ON PRE/POST CON S M OR E OFF		14:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts impacting 24" pile in upland
E ON PRE/POST CON S M OR E OFF		14:47	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC using large crane to p/u pile from USCG dock and stabbing into water for new
E ON PRE/POST CON S M OR E OFF		16:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC does a soft start w/Vibber
E ON PRE/POST CON S M OR E OFF		16:37	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Vibbing in uplands NT5-NT8 in uplands
E ON PRE/POST CON S M OR E OFF		18:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OR - Observer Rotation
E ON PRE/POST CON S M OR E OFF		18:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Does A SSI on The Impactor, 18" uplands
E ON PRE/POST CON S M OR E OFF		18:51	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Impacting 18" TB4 - pile. & NT-8 = 30" pile.
E ON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Ends work DAY, start Post, Const. OBS. All clear, NO sightings
E ON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OBS server effort off.

All UMC - USCG Side

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - USCG Side

Date: 2-03-18 FRP

Time Effort Initiated: 0700

Time Effort Completed: 1930

Page 1 of 3

Time	Visibility	Cloud	6 Weather Condition	Wave Height	SSS	Wind	Swell
07:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IR	1.5/Mod/Hvy	0-1	NSEW	NSEW
09:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1.5/Mod/Hvy		NSEW	NSEW

*** OR - OBSERVER ROTATION OCCURRED AT 10:00 AM but NOT NOTED on sheet

Event Code	Sight # (1 or 1.1 if no date)	Time/Date (Start/End time if cont.)	Grid # or S W or E	Zone/ Region/ Impact Pile #	Obs.	Sighting Code	Remarks	Group Size	Behavior Code (see code sheet)	Construction Type	Midnight Time	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks Activity/Heard Hail # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Arrive onsite UMC USCG side to Clear level A Obs. Effort ON
E ON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Called All Clear to Chris
E ON PRE/POST CON S M OR E OFF		08:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging Equip over water also slings piles from USCG dock
E ON PRE/POST CON S M OR E OFF		10:19	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Stabbing 24" piles w Barge Crane in water
E ON PRE/POST CON S M OR E OFF		10:21	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Murimilach inbound harbor TR-N Trident - No mmm assoc.
E ON PRE/POST CON S M OR E OFF		10:48	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane performs mitigation by doing a SS on Vibe
E ON PRE/POST CON S M OR E OFF		10:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC vibbing 24" NT pile in upland airborne noise radii
E ON PRE/POST CON S M OR E OFF		10:57	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Defender inbound TR - W to Delta Western dock - No mmm assoc.
E ON PRE/POST CON S M OR E OFF		10:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC vibbing 24" NT pile in water NT12 - radii changes
E ON PRE/POST CON S M OR E OFF		10:56	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation: CB to RB TB from UMC-Crane to UMC-USCG
E ON PRE/POST CON S M OR E OFF		12:01	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		12:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		12:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
OR		10:00			CB/TB					OWC			

UMC - USCG Side

see
comments

Rocky Point

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Positions III and IV

Monitoring Location: RP

Date: 2-03-2018

Time Effort Interval: 0700

Time Effort Completed: 1930

Page 2 of 3

#196

Time	Visibility	Clouds	7	Weather Conditions	Wave Height	SSS	Wind	Swell
12:03	B-P-M-G-E	0%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
13:00	B-P-M-G-E	0%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	N-SE-W	N-SE-W
:	B-P-M-G-E	%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N-SE-W	N-SE-W
:	B-P-M-G-E	%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N-SE-W	N-SE-W
:	B-P-M-G-E	%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N-SE-W	N-SE-W
:	B-P-M-G-E	%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N-SE-W	N-SE-W

Event Code	Sight # (1 or 1.1 if multiple)	Time/Date (Start/End time if cont.)	WR/ Grid #/ DIR of travel	Zone/ Refine/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Intelligible Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks Activity/Vessel ID# or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF	196	12:03 12:10	E16 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: 2 Best:	Beh code(s): LO	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	Obs 2 HSEA in cove between RP and APL, spy hopping, floating and looking at me, sometimes w/ just nose out of water.
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Milking about here, not traveling normal behavior exhibited no changes when vibbing started or ended as I observed them
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		before and after vibbing TMC switched to upland vibbing so Airborne noise in play at end of sighting time
E ON PRE/POST CON S M OR E OFF		12:14 12:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC switches from vibbing 24" in water to vibbing 24" in upland
E ON PRE/POST CON S M OR E OFF	NA	12:40 12:57	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FV Andronica inbound harbor TR-N to Trident dock - No marine mammal behavior associated
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB from RP to WNC- USCG Side / TB to RP
E ON PRE/POST CON S M OR E OFF		14:02 14:03	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Does ASSI on Impactor, In the Dry!
E ON PRE/POST CON S M OR E OFF		14:03 14:39	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC Starts Impacting 24" Piles in the Dry.
E ON PRE/POST CON S M OR E OFF	VA	14:40 15:00	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FV Caravelle enters Harbor, ties up @ the city spit Dock,

All Rocky Point

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Piers III and IV
Monitoring Location: RP / UMC-Crane Side
Date: 2/3/18
Time of First Incident: 0700
Time of Last Completion: 1930
Page 3 of 3

Time	Visibility	Class	8	Weather Condition	Wave Height	DBS	Wind	Swell
1500	B-P-M-G-E	2%		S-FC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	2	NSEW	NSEW
17:00	B-P-M-G-E	2%		S-FC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	2	NSEW	NSEW
18:00	B-P-M-G-E	2%		S-FC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	2	NSEW	NSEW
19:30	B-P-M-G-E	2%		S-FC-L-R-F-OC-SN-HR	1.5/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%		S-FC-L-R-F-OC-SN-HR	1.5/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%		S-FC-L-R-F-OC-SN-HR	1.5/Mod/Hvy		NSEW	NSEW

Getting dark now

Event Code	Light # (1 or 1.1 if on night)	Time of Day (Start/End time if event)	Grid/Cell ID/ID of event	Zone/Track/Impact Pile #	Obs.	Sighting Obs	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure #/N	Behavior Change/Response to Activity/Comments/Remarks Activity/Vessel Hull # or Name/Visibility Notes
EON PRE/POST CON S M OR E OFF		14:47	Grid N or S W or E		TB	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Stabbs 24" pile N+8 in place 1
EON PRE/POST CON S M OR E OFF		14:59	Grid N or S W or E		TB	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Does a SSV on vibbe, 24" N+5 pile
EON PRE/POST CON S M OR E OFF		16:36	Grid N or S W or E		TB	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Starts vibbing 24" pile N+5
EON PRE/POST CON S M OR E OFF		16:37	Grid N or S W or E		TB	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB/CB → uscg side to UMC-Crane side
EON PRE/POST CON S M OR E OFF		18:40	Grid N or S W or E		TB	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation By doing a SS on Impact Hammer
EON PRE/POST CON S M OR E OFF		18:50	Grid N or S W or E		CB	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacting TB4-18" round NT8-30" - supposed to be 24" But it's a 30"
EON PRE/POST CON S M OR E OFF		18:51	Grid N or S W or E		CB	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done w/ pile driving still splicing pile in upland - Start Post-
EON PRE/POST CON S M OR E OFF		19:00	Grid N or S W or E		CB	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Can OBS - no mammals were observed All Clear - Obs Effort off
EON PRE/POST CON S M OR E OFF		19:30	Grid N or S W or E		CB	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

** Impact Radii For upland 30" 150m HSEA / 50m STSL 300m OTTR / Eider - B zone

Rocky Point
UMC - Crane Side

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Repairs III and IV

Monitoring Location: umc - uscg

Date: 2-04-18

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 1 of 3

Time	Visibility	Glaze	9	Weather Conditions	Wave Height	DBS	Wind	Swell
07:00	B-P-M-G-E	1%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:00	B-P-M-G-E	1%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	0%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%		S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Site # (1 or 1.1 if no- slight)	Time/Date (Start/End time if cont.)	WP/ Grid #/ Dir of travel	Zone/ Bedrock/ Insect Pile #	Obs.	Lighting Cue	Reaction	Group Size	Behavior Code (see code sheet)	Construction Type	Minigun Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks Activity/Vessel Haul # or Name/ Visibility Notes
EON PRE/POST CON S M OR E OFF		07:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite Level A Zone Obs. Effort on
EON PRE/POST CON S M OR E OFF		07:00 07:34	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals Obs Called Ari Clean to Chris
EON PRE/POST CON S M OR E OFF		08:02 08:03	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs Soft Start on Vibber
EON PRE/POST CON S M OR E OFF		08:03 08:08	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC vibbing 30" pile in water 15m/3300m
EON PRE/POST CON S M OR E OFF		09:17 10:05	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC using barge crane to sling pile overwater + splice
EON PRE/POST CON S M OR E OFF		10:27 10:28	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a Soft Start on Vibe
EON PRE/POST CON S M OR E OFF		10:28 10:38	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC vibbing 24" pile NT5 in upland various radii apply
EON PRE/POST CON S M OR E OFF		10:49 10:50	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC does soft start on Impact hammer
EON PRE/POST CON S M OR E OFF		10:50 11:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacts 24" NT5 in upland and continues w/ smaller pile in upland

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-USCG

Date: 2-4-18

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 2 of 3

Time	Visibility	Glaze	10	Weather Condition	Wave Height	SSS	Wind	Swell
12:00	B-P-M-G-E	0%		S-FC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%		S-FC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%		S-FC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	0%		S-FC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	1	NSEW	NSEW
:	B-P-M-G-E	0%		S-FC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%		S-FC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Flight # (1 or 1.1 if so- called)	Time/Date (Start/End time if cont.)	WT/ Grid #/ Dir of travel	Zone/ Region/ Inspection File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks Activity/Vessel Name/ or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		OR-TB comes down from RP. CB to robble 1000 m zone
E ON PRE/POST CON S M OR E OFF		12:00 12:07	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		drive around TMC-BARGE crane moves to N+12 In water & begins to impact CB. moves from 1000 m. RADII to RP. 3300.
E ON PRE/POST CON S M OR E OFF		12:15 13:10	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane starts
		X	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Start slinging main basket & slinging cut off pile tops. OWC.
E ON PRE/POST CON S M OR E OFF		14:35	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane slinging pile extension N+5 24" for welding, 10 m
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation TB CB
E ON PRE/POST CON S M OR E OFF	VA	15:18 15:36	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		FIV Unimak inbound harbor TR-N to KDH dock- No mm a seen
E ON PRE/POST CON S M OR E OFF		17:03 17:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a soft start w/ impact hammer
E ON PRE/POST CON S M OR E OFF		17:04 17:46	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC starts impacting in uplands

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc-uscg side

Date: 2-04-18

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 3 of 3

Time	Visibility	Cloud	Weather Condition	Wave Height	SSS	Wind	Swell
18:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		N S E W	N S E W

Event Code	Sight # (1 or 1.1 if re-sighted)	Time/Date (Start/End time if event)	WP/ Grid #/ DIR of travel	Zone/ Section/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Measures Taken	Response (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks Activity/Vessel Name/Visibility Notes
E ON PRE/POST CON S M OR E OFF	VA	17:20	Grid N or S W or E		CB	BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Northern Endurance inbound TR-N to LCO dock-no mma assoc.
E ON PRE/POST CON S M OR E OFF		17:46	Grid N or S W or E		CB	BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done during called off 1800. Start Post-Can Obs - No mammals sighted.
E ON PRE/POST CON S M OR E OFF		18:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		18:30	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: USMC Dock Position VI and IV

Monitoring Location: RP

Date: 2/4/18

Time Effect Initiated: 0700

Time Effect Completed: 1830

Page: 1 of 2

Time	Visibility	Glaze	12 Weather Condition	Wave Height	BBB	Wind	Swell
07:00	B-P-M-G-E	X %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	X	NSEW	NSEW 5kts.
09:00	B-P-M-G-E	X %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	X	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Light # (or Ld if no light)	Time/Date (Start/End time if over)	WF/ Gold #/ DEB of event	Zone/ Barrels/ Impact File #	Obs.	Signaling Code	Species	Group Size	Behavior Code (see code sheet)	Observation Type	Notes in Time	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks Activity/Notes Start # or Name/ Visibility Notes
EON PRE/POST CON S M OR E OFF		07:00	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on 3300 B-Zone
EON PRE/POST CON S M OR E OFF		07:00	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start pre con. obs. all clear, no sightings, or observations. All clear called to true.
EON PRE/POST CON S M OR E OFF		07:34	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does A. SSV. On The Vibbe 24"
EON PRE/POST CON S M OR E OFF		08:02	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		In water, Nt-12 extended BARGE.
EON PRE/POST CON S M OR E OFF		08:03	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		24" Nt-12 Down In water 3300m. All clear, RP.
EON PRE/POST CON S M OR E OFF		08:08	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF		09:17	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time-BARGE crane Slings a pile Extension to Nt-8 & holding for splice
EON PRE/POST CON S M OR E OFF		10:05	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF		10:27	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time-BARGE crane Does a soft start, on the vibbe 24" In the uplands. Nt-5
EON PRE/POST CON S M OR E OFF		10:28	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF		10:38	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time-BARGE crane Starts vibbing 24" Piles in The uplands Nt-5
EON PRE/POST CON S M OR E OFF		10:49	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Does a SSI On The Impactor In uplands
EON PRE/POST CON S M OR E OFF		10:50	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time Impacts 24" Nt-5 In uplands, & Nt-1 & Nt-3
EON PRE/POST CON S M OR E OFF		11:55	Gold N or S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: Roaming 1000m/ RP

Date: 2-4-18

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 2 of 2

#197

Time	Visibility	Glass	13 Weather Condition	Wave Height	SSS	Wind	Overall
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
12:03	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
13:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
15:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if multiple)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Integr. Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks Activity/Vessel Name/ or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		11:00	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TB moves from RP-to umc-USCG side CB goes mobile to clear 1000 m radii
E ON PRE/POST CON S M OR E OFF		12:00	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC switches from impacting in dry to impacting NT12 in water CB moves to RP to clear
E ON PRE/POST CON S M OR E OFF	197	12:03	E-16 Grid N or S W or E	B	CB	BL BO BR DF SA OTHER	HSEA	Min: Max: Best:	Beh code(s): RE	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None	Y	3300m radii B zone Sighted HSEA resting/floating on surface of water w/ body
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		mammal not traveling in any direction - popular spot to float in this cove. No behavior changes to vibing
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		checked on it a few times and could see it, dark head, smaller in size, checked continuously at 1315 did not see
E ON PRE/POST CON S M OR E OFF		12:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc slings man basket and then piles over water
E ON PRE/POST CON S M OR E OFF		14:35	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc Barge Crane slinging pile from USCG overwater
E ON PRE/POST CON S M OR E OFF		15:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Rotation- CB from RP to umc-USCG side TB from umc-USCG to umc-Crane side
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Cont. → see umc-Crane side Data next

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Position U and IV

Monitoring Location: UMC - Crane Side

Date: 2/04

Time Effort Initiated: 0700

Time Effort Completed: 1830

Page 1 of 1

Time	Visibility	Glaze	14 Weather Condition	Wave Height	DBS	Wind	Swell
15:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy	1	NSEW	NSEW
17:00	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy	1-2	NSEW	NSEW
18:30	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy	1-2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/Mod/Hvy		NSEW	NSEW

Event Code	Light # (or L if available)	Time/Date (Start/End time if event)	WT/ Gold #/ DER of event	Zone/ Radius/ Impact PIR #	Obs.	Sighting Code	Species	Group Size	Behavior Code (one code allowed)	Contamination Time	Effort Time	Exposure #/Day	Behavior Change/ Response to Activity/ Comments/ Remarks/ Activity/Vessel # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		15:00	Gold N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		T.B. moves from UMC CGI to UMC Crane Side. Time still slinging pile extensions
E ON PRE/POST CON S M OR E OFF		17:03	Gold N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time BARGE Crane Docs. A SSI on Impactor.
E ON PRE/POST CON S M OR E OFF		17:04	Gold N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time BARGE Crane Starts Impacting Mt-5 Extension in the Dry.
E ON PRE/POST CON S M OR E OFF		18:00	Gold N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time completes Driving for the Drive. Start post const. obs.
E ON PRE/POST CON S M OR E OFF		18:30	Gold N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear NO sightings on observations. Observer effort off.
E ON PRE/POST CON S M OR E OFF		:	Gold N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Gold N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: USMC Dock Operations III and IV

Monitoring Location: Umc - USCg side

Date: 2/5/18

Time Effort Interval: 0830

Time Effort Count: 1115

Page: 1 of 1

Time	Visibility	Glass	15 Weather Condition	Wave Height	SSC	Wind	Swell
0830	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	Q	NSEW	NSEW
11:00	B-P-M-G-E	Q %	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	Q	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW

Event Code	Signif (1 or 11 if re- sult)	Time/Date (Start/End date if cont.)	WT/ Gold W/ DNR of event	Zone/ Region/ Target File #	Obs.	Sighting One	Remarks	Group Size	Behavior Code (see code sheet)	Countdown Time	Height in Feet	Response Code (1/2)	Behavior Change/ Response to Activity/Comments/Remarks Activity/Vocal Effort or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Gold Nor S W or E		T.B.	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			on site, umc cs. side, observer effort on A-Zone
E ON PRE/POST CON S M OR E OFF		08:30	Gold Nor S W or E		T.B.	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			start Pre con. obs. A-Zone All clear, NO sightings or observations All clear/called to Tmc
E ON PRE/POST CON S M OR E OFF		09:04	Gold Nor S W or E		T.B.	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Barge @ crane slinging pile extension to Nt-5, 24"
E ON PRE/POST CON S M OR E OFF		09:30	Gold Nor S W or E		T.B.	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			called off by Chris @ Tmc, change of schedule, pile Drive Later today, no post con. NO Driving!
E ON PRE/POST CON S M OR E OFF		10:00	Gold Nor S W or E		T.B.	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Observer effort off,
E ON PRE/POST CON S M OR E OFF		11:15	Gold Nor S W or E		T.B.	BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			Break in work - Return @ 1730
E ON PRE/POST CON S M OR E OFF		:	Gold Nor S W or E			BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			
E ON PRE/POST CON S M OR E OFF		:	Gold Nor S W or E			BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			
E ON PRE/POST CON S M OR E OFF		:	Gold Nor S W or E			BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			
E ON PRE/POST CON S M OR E OFF		:	Gold Nor S W or E			BL BO BR DP SA OTHER	Min: Max: Best:		Beh code(s): SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None			

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - Roaming

Date: 2-5-18 1000m

Time Effort Initiated: 0830 CRANE

Time Effort Completed: 1115 Side

Page 1 of 1

Time	Visibility	Glare	16 Weather Condition	Wave Height	BS	Wind	Swell
08:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
10:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Site # (1 or 11 if so-cloth)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DMR of target	Zone/ Radius/ Magnet File #	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Migrant Type	Response? (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks Activity/Vessel Name/ or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive OnSite UMC @ 0824 - Level B zone Roaming/mobile position Obs. Effort ON
E ON PRE/POST CON S M OR E OFF		08:30 09:04	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Called All Clear to Chris
E ON PRE/POST CON S M OR E OFF		09:30 10:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane slinging pile extension over water to NTS
E ON (VA) PRE/POST CON S M OR E OFF		09:31 09:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Gold Rush inbound harbor TE-SW to Delta Western dock - No mma
E ON (VA) PRE/POST CON S M OR E OFF		10:31 10:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Pavlov inbound harbor TE-N to area near spit dock but not tied up at spit - No mma
E ON PRE/POST CON S M OR E OFF		11:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called off by TMC look to pile drive later in day now - schedule
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		changed. No Post-Con Obs required due to no pile driving.
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs Effort off maybe work later today
		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		on call Break in work - Return @ 1730

still dark

position

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-USCG side

Date: 2-05-18

Time Effort Initiated: 1730

Time Effort Completed: 2115

Page: 1 of 2

#198

Time	Visibility	Glaze	17 Weather Condition	Wave Height	BSS	Wind	Swell
17:30	B-P-M-G-E	10%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
18:46	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
2000	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Site # (1 or 11 if multiple)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Innards Pile #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitig ion Type	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/Remarks Activity/Vessel Grid # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		17:30	Grid Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite UMC level A zone After Break Obs Effort on in work
E ON PRE/POST CON S M OR E OFF		17:30	Grid Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs No mammals sighted Called Al Chan to chins
E ON PRE/POST CON S M OR E OFF		18:20	Grid Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Barge Crane Slinging Equip + materials, 9 over water template
E ON PRE/POST CON S M OR E OFF	198	18:46	G-7 Grid Nor S W or E	B	CB	BL BO BR DF SA OTHER	STSL	Min: Max: Best: 1	Beh code(s): HO	SSV SSI V DR I DP ST OWC * NOWC / NONE	SS/BC DE SD None	Y	Sighted STSL hauled out on 2nd Bay Buoy looking around - stayed there until Barge came + tied up there
E ON VA PRE/POST CON S M OR E OFF		19:02	Grid Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Alaskan Defender TR-w to Delta Western No mma
E ON PRE/POST CON S M OR E OFF		19:05	Grid Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		UMC Stabs 30" fender pile in water
E ON VA PRE/POST CON S M OR E OFF		19:05	Grid Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V AK Mist inbound harbor TR-w to Delta Western No mma
E ON PRE/POST CON S M OR E OFF		19:38	Grid Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		UMC performs mitigation By doing a SS on Vibe
E ON PRE/POST CON S M OR E OFF		19:39	Grid Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		UMC vibrating 30" 4eq fender pile in water

** AS Barge approached Buoy STSL dove off buoy into water in direction of N - Two minutes later TMC started vibrating - mammal exposed

However did not see again
Normal behavior or not
→ could not have left the 3300 B zone in those 2 minutes

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-USCG

Date: 2-5-18

Time Effort Initiated: 1730

Time Effort Completed: 2115

Page: 2 of 2

Time	Visibility	Cloud	18 Weather Condition	Wave Height	SSS	Wind	Swell
20:45	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

dark
But
good
vis in
A
zone
15m

Event Code	Signs of (1 or 1.1 if so-sight)	Time/Dur (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #?	Obs.	Sighting Date	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (V/N)	Behavior Change/ Response to Activity/Comments/Threats/ Activity/Vessel ID # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		20:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done vibking. Lock crane down - done. Start Post-Con Observations
E ON PRE/POST CON S M OR E OFF		20:45 21:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No mammals sighted Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UAC Dock Position III and IV

Monitoring Location: UAC Crane Side

Date: 2/5/18

Time Effect Initiated: 1730

Time Effect Completed: 2115

Page: 1 of 1

Time	Visibility	Glass	19 Weather Condition	Wave Height	SEA	Wind	Swell
17:30	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	X	NSEW	NSEW
19:00	B-P-M-G-E	5%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	X	NSEW	NSEW
20:10	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	X	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Light # (or L if re-sighted)	Time/Date (Start/End time if cont.)	WT/ Gold #/ DIB of animal	Zone/ Redness/ Inquest PIR #	Obs.	Fighting Obs	Struck	Camera Obs	Behavior Code (per code sheet)	Contamination Type	Midnight Time	Repeat # (R/R)	Behavior (Change/ Response to Activity/Comments/Remarks Activity/Vocal Effort # or Name/ Visibility Notes)
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		17:30	Grid Nor S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		Observer effort on start Pre-con. obs.
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		17:30	Grid Nor S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		All clear NO observations or sightings. Called to Time. mmo-eb.
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		18:20	Grid Nor S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		Time-Barge crane slings equip. to shore E BACK.
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		19:00	Grid Nor S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		Time-Barge crane starts stabbing 30" Fender Piles in water.
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		19:05	Grid Nor S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		Time-Barge crane starts stabbing 30" Fender Piles in water.
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		19:35	Grid Nor S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		Time-Barge crane starts stabbing 30" Fender Piles in water.
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		19:38	Grid Nor S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		Barge crane Does A, SSV on the Vibbe.
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		19:39	Grid Nor S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		Barge crane Begins Vibbing 30" Fender Piles in water.
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		20:44	Grid Nor S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		15m A-Zone 5300m B-Zone
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		20:45	Grid Nor S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		Time completes Vibbing for the DAY, start Post- const. obs. A-Zone.
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		21:15	Grid Nor S W or E		T.B.	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		NO sightings in Post obs. Observer effort off.
<u>E ON</u> <u>PRE/POST</u> <u>CON S M</u> <u>OR E OFF</u>		:	Grid Nor S W or E			BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSV V DR I DP ST OWC <u>NOVC</u> NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - USCG side

Date: 2-6-18

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page 1 of 2

Time	Visibility	Glue	20 Weather Condition	Wave Height	SSS	Wind	Swell
08:30	B-P-M-G-E	1 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
09:30	B-P-M-G-E	1 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0	NSEW	NSEW
11:30	B-P-M-G-E	5 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
13:30	B-P-M-G-E	8 %	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy	0-1	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Still dark
But
can
see
A zone

Event Code	Sight # (1 or 11 if no sight)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact File #	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Repos- ition (Y/N)	Behavior Change/ Activity/Comments/Remarks Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive site UMC - Level A zone - 10m Obs Effort on
E ON PRE/POST CON S M OR E OFF		08:30 08:58	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre-Con Obs Clear for 10m A zone No mammals PB zone
E ON PRE/POST CON S M OR E OFF		09:41 13:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Sighted - called All Clear TMC using large crane to airlift debris from Fender
E ON (VA) PRE/POST CON S M OR E OFF		09:50 10:18	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U Pacific Ferry inbound w/ tug assist - Dredge Sargassum TR-N to LCD dock no mammals.
E ON PRE/POST CON S M OR E OFF		12:30	Grid N or S W or E		CB TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		OR Observer Rotation CB to UMC-Crane TB to UMC-USCG
E ON (VA) PRE/POST CON S M OR E OFF		12:35 12:41	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U chelsie K enters Harbor & ties up @ D.W. Dock.
E ON (VA) PRE/POST CON S M OR E OFF		12:58 13:09	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U comilia marie enters Harbor & ties up @ Spit Dock. LCD.
E ON (VA) PRE/POST CON S M OR E OFF		13:30	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/U trail Blazer enters Harbor & ties up @ NPF Dock.
E ON PRE/POST CON S M OR E OFF		14:15 14:50	Grid N or S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC-BARGE crane slings skiff on BARGE, OWC.

Files

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Position III and IV

Monitoring Location: UMC - USCG side

Date: 2/6/18

Time Effort Initiated: 0830

Time Effort Completed:

Page 2 of 2

Time	Visibility	Glaze	21	Weather Conditions	Wave Height	DSE	Wind	Swell
15:30	B-P-M-G-E	0%		S-FC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	0-1	NSEW	NSEW
17:30	B-P-M-G-E	0%		S-FC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	1	NSEW	NSEW
19:30	B-P-M-G-E	0%		S-FC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%		S-FC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%		S-FC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%		S-FC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW

Event Code	Sign # (or L1 if available)	Time/Date (Start/End time if available)	WF/ Gold #/ DSE of event	Zone/ Redline/ Impact File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Exposure (Y/N)	Behavior Change/ Response to Activity/ Comments/ Remarks Activity/ Visual Effort # or Name/ Visibility Name
EON PRE/POST CON S M OR E OFF		15:24	Gold N or S W or E		T.B.	BL BO BR DF SA OTHER		Misc	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc - Starts Dilling Fender Pile in water 10m-A zone, NO-B zone, Barge-Crane.
EON VA PRE/POST CON S M OR E OFF		16:06	Gold N or S W or E		T.B.	BL BO BR DF SA OTHER		Misc	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Flu Dominator enters Harbor & ties up @ Trident Dock. NO Interaction.
EON VA PRE/POST CON S M OR E OFF		16:12	Gold N or S W or E		T.B.	BL BO BR DF SA OTHER		Misc	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Flu Western Dawn, enters Harbor & ties up @ NPF Fuel.
EON PRE/POST CON S M OR E OFF		16:30	Gold N or S W or E		T.B. CB	BL BO BR DF SA OTHER		Misc	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. to umc - crane side, CB. to uscg-side.
FON PRE/POST CON S M OR E OFF		19:30	Gold N or S W or E		CB	BL BO BR DF SA OTHER		Misc	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Tmc done for day No Post Required No pile driving
FON PRE/POST CON S M OR E OFF		:	Gold N or S W or E			BL BO BR DF SA OTHER		Misc	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
EON PRE/POST CON S M OR E OFF		:	Gold N or S W or E			BL BO BR DF SA OTHER		Misc	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF		:	Gold N or S W or E			BL BO BR DF SA OTHER		Misc	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
EON PRE/POST CON S M OR E OFF		:	Gold N or S W or E			BL BO BR DF SA OTHER		Misc	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

Getting dark still see A zone

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Facilities III and IV

Monitoring Location: UMC-Crane Side

Date: 2/6/18

Time Effort Initiated: 0830

Time Effort Completed: 1930

Page: 1 of 1

Time	Visibility	Glaze	Weather Condition	Wave Height	DBE	Wind	Swell
08:30	B-P-M-G-E	0%	S-FC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW
10:30	B-P-M-G-E	0%	S-FC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW
12:30	B-P-M-G-E	0%	S-FC-L-R-F-OC-SN-HR	Le/Mod/Hvy	1	NSEW	NSEW
14:30	B-P-M-G-E	0%	S-FC-L-R-F-OC-SN-HR	Le/Mod/Hvy	1	NSEW	NSEW
16:30	B-P-M-G-E	0%	S-FC-L-R-F-OC-SN-HR	Le/Mod/Hvy	1	NSEW	NSEW
18:30	B-P-M-G-E	0%	S-FC-L-R-F-OC-SN-HR	Le/Mod/Hvy	1	NSEW	NSEW

Event Code	Light # (or L1 if no light)	Time/Date (Start/End time if event)	Off/On/DB of event	Zone/Location/Project File #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Observation Time	Light # in Time	Expected # of Obs	Behavior Change/ Response to Activity/Comments/Remarks Activity/Vessel Name/Visibility Notes
E ON PRE/POST CON S M OR E OFF		08:30	Grid Nor S W or E		T.B.	HL BO HR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Effort on, 10m-A-Zone, (Crane Side)
E ON PRE/POST CON S M OR E OFF		08:30 08:58	Grid Nor S W or E		T.B.	HL BO HR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Pre const. obs, 10m, A-Zone, Q-B-Zone. Air lifting, All clear.
E ON PRE/POST CON S M OR E OFF		09:41 13:25	Grid Nor S W or E		T.B.	HL BO HR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Time-Begins Air lifting last 4-Fender Piles.
E ON PRE/POST CON S M OR E OFF		12:30	Grid Nor S W or E		T.B. CB	HL BO HR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation T.B. to eg side CB to crane side.
E ON PRE/POST CON S M OR E OFF		14:15 14:50	Grid Nor S W or E		CB	HL BO HR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC using barge crane to do owc & load skiffs onto barge-storm coming.
E ON PRE/POST CON S M OR E OFF		15:24 19:10	Grid Nor S W or E		CB	HL BO HR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC drilling fender pile in water 10m A-zone/Q Bzone
E ON PRE/POST CON S M OR E OFF		16:30	Grid Nor S W or E		CB T.B.	HL BO HR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB to UMC-USCG T.B. to UMC-Crane Side
E ON PRE/POST CON S M OR E OFF		19:30	Grid Nor S W or E		T.B.	HL BO HR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO Post const. obs. Required Due to Drilling, All clear, no sightings, Observer Effort off.
E ON PRE/POST CON S M OR E OFF			Grid Nor S W or E			HL BO HR DF SA OTHER	Min: Max: Best:		Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: umc

Date: 2-07-18

Time Effort Initiated: _____

Time Effort Completed: _____

Page: of _____

Time	Visibility	Glaze	23 Weather Condition	Wave Height	DBS	Wind	Swell
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if so- cited)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Insect Fly #?	Obs.	Sighting Case	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Integrit Type	Expo- sure? (Y/N)	Behavior Change/ Response to Activity/Comments/Threats/ Activity/Vessel # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		NO WORK
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		2-07-18
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		WEATHER
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		DAY
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Windstorm
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC - USCG side

Date: 2-08-18 1015

Time Effort Initiated:

Time Effort Completed: 1700

Page 1 of 2

Time	Visibility	Glass	24 Weather Condition	Wave Height	BSS	Wind	Swell
10:15	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0-1	NSEW	NSEW
12:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
14:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
16:00	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-IIR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if so- sight)	Time/Date (Start/End time if cont.)	WT/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitiga- tion Type	Expos- ure (Y/N)	Behavior Change/ Response to Activity/Comments/Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:15	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Arrive Onsite UMC-1015 Level A zone - 10m Obs Effort on
E ON PRE/POST CON S M OR E OFF		10:15 10:45	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Pre Con obs No mammals sighted Called Au clean to Chris
E ON PRE/POST CON S M OR E OFF		10:48 13:46	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC begins chugging 30' fender piles in water 10m A zone / B zone
E ON VA PRE/POST CON S M OR E OFF		11:54 12:08	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		FN Sea wolf in band hauled TR-W to Delta Western dock - no mma
E ON PRE/POST CON S M OR E OFF		14:00	Grid N or S W or E		CB T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation CB to UMC-Crane Side/ Roaming/mobile position
E ON VA PRE/POST CON S M OR E OFF		14:02 14:20	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V comilia name Tie up @ Spit Dock
E ON PRE/POST CON S M OR E OFF		15:35 16:00	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Slings Template sections to shore, OWC,
E ON PRE/POST CON S M OR E OFF		16:04 16:05	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Does SSI on the Impactor.
E ON PRE/POST CON S M OR E OFF		16:05 16:13	Grid N or S W or E		T.B.	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE Crane Starts Impacting 30" Fender Piles in water.

MARINE MAMMAL OBSERVATION RECORD

Project Name: I/MC Deck Positions III and IV

Monitoring Location: Umo - USC9 Deck

Date: 2/8/18

Time Effort Initiated: 10:15

Time Effort Completed: 1700

Page 2 of 2

Time	Visibility	Cloud	25 Weather Condition	Wave Height	BBB	Wind	Swell
17:00	B-P-M-G-E	2%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy	2	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	1/2 Mod/Hvy		NSEW	NSEW

Event Code	Light # (or 1 if no light)	Time/Date (Start/End time if cont.)	Grid #/ DNR of area	Zone/ Position/ Request PIR #	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Contamination Type	Effort Time	Exposure Time	Behavior Change/ Response to Activity/Comments/Remarks Activity/Vessel Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:14 16:25	Grid Nor S W or E		TB	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane impacts, 24" pile in uplands.
E ON PRE/POST CON S M OR E OFF		16:26 16:29	Grid Nor S W or E		TB	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		BARGE crane goes back, TO impacting 30" fender piles in water.
E ON PRE/POST CON S M OR E OFF		16:30 17:00	Grid Nor S W or E		TB	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		Time ends work day, start post const. obs.
E ON PRE/POST CON S M OR E OFF		: 17:00	Grid Nor S W or E		TB	BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		All clear no sightings or observations observer effort off.
E ON PRE/POST CON S M OR E OFF		: :	Grid Nor S W or E			BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid Nor S W or E			BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid Nor S W or E			BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid Nor S W or E			BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		: :	Grid Nor S W or E			BL BO BR DP SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR 1 DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Redesign III and IV

Monitoring Location: UMC - CRANE Side

Date: 2/8/18

Time Effect Initiated: 10:15

Time Effect Completed: 1700

Page 1 of 2

Time	Visibility	Glass	26 Weather Conditions	Wave Height	MO	Wind	Swell
10:15	B-P-M-G-E	0 %	S-FC-C-R-F-OC-SN-IR	1/2 Mod/Hvy	0	N-SE-W	N-SE-W
12:00	B-P-M-G-E	0 %	S-FC-C-R-F-OC-SN-IR	1/2 Mod/Hvy	0	N-SE-W	N-SE-W
14:00	B-P-M-G-E	0 %	S-FC-C-R-F-OC-SN-IR	1/2 Mod/Hvy	0	N-SE-W	N-SE-W
15:00	B-P-M-G-E	0 %	S-FC-L-R-F-OC-SN-IR	1/2 Mod/Hvy	0	N-SE-W	N-SE-W
:	B-P-M-G-E	%	S-FC-L-R-F-OC-SN-IR	1/2 Mod/Hvy		N-SE-W	N-SE-W
:	B-P-M-G-E	%	S-FC-L-R-F-OC-SN-IR	1/2 Mod/Hvy		N-SE-W	N-SE-W

Event Code	Height (ft or 1.5 m)	Time/Dur (Start/End time if cont.)	WP/ Gold #/ DIR of animal	Zone/ Baseline/ Impact Pile #	Obs.	Sighting Obs	Species	Group Size	Behavior Code (see code sheet)	Consideration Type	Migrant sex / Age	Exposure (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/ Vessel # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		10:15	Gold Nor S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SEE V DE I DP ST OWC NOWC / NONE	SS/BC DE SD None		10:15 Level A-10m observation effort on.
E ON PRE/POST CON S M OR E OFF		10:15 10:45	Gold Nor S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SEE V DE I DP ST OWC NOWC / NONE	SS/BC DE SD None		St. Precon. obs. No Sighting's. All clear to TMC.
E ON PRE/POST CON S M OR E OFF		10:48 13:46	Gold Nor S W or E		TB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SEE V DE I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC. BARGE crane Starts Drilling 30" Fender Piles In water. Q-B Zone.
E ON PRE/POST CON S M OR E OFF		14:00	Gold Nor S W or E		TB CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SEE V DE I DP ST OWC NOWC / NONE	SS/BC DE SD None		Observer Rotation. CB - use crane Side y mobil. TB @ Useg. Dock.
E ON (VA) PRE/POST CON S M OR E OFF		14:36 15:02	Gold Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SEE V DE I DP ST OWC NOWC / NONE	SS/BC DE SD None		F/V Bannoff inbound harbor TR-N to LCD dock - no mma assoc.
E ON (VA) PRE/POST CON S M OR E OFF		15:25	Gold Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SEE V DE I DP ST OWC NOWC / NONE	SS/BC DE SD None		Vessel HOS MAX inbound harbor TR-NW to Resolve Maine. No mma assoc.
E ON PRE/POST CON S M OR E OFF		15:35 16:00	Gold Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SEE V DE I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC using barge crane to lift template out and overwater
E ON PRE/POST CON S M OR E OFF		16:04 16:05	Gold Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SEE V DE I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a soft start on impact hammer
E ON PRE/POST CON S M OR E OFF		16:05 16:13	Gold Nor S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SEE V DE I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacting 4th 30" Fender Pile @ See Radii Reference

④ 4-pile 30" Impact Radii → HSEA 185m/555' STSL/KLW 15m/45' HPBK 340m/1020' OTTR/Eider 300m/900'

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-Crane Side/

Date: 2-08-18 Roaming

Time Effort Initiated: 10:15 1000m

Time Effort Completed: 1700

Page 2 of 2

Time	Visibility	Glass	27 Weather Condition	Wave Height	SSS	Wind	Swell
17:00	B-P-M-G-E	0 %	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-IHR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight # (1 or 1.1 if re-sighted)	Time/Date (Start/End time if cont.)	WP/ Grid #/ DIB of transit	Zone/ Radius/ Impact File #?	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Mitigation Type	Response? (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:14 16:25	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacting in in upland - Radii changes again 35m/10m A zone
E ON PRE/POST CON S M OR E OFF		16:26 16:29	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacting in water again 30' feeders
E ON PRE/POST CON S M OR E OFF		16:30 17:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC done w/ mmo's for Today, called off. Start Post-Con Obs - No mammals Sighted
E ON PRE/POST CON S M OR E OFF		17:00	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		

MARINE MAMMAL OBSERVATION RECORD

Project Name: UMC Dock Positions III and IV

Monitoring Location: UMC-both sides

Date: 2-9-10

Time Effort Initiated: 16:30

Time Effort Completed: 17:40

Page 1 of 1

Time	Visibility	Glass	Weather Condition	Wave Height	BSE	Wind	Swell
16:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW
17:30	B-P-M-G-E	0%	S-PC-L-R-F-OC-SN-HR	Le/Mod/Hvy	0	NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW
:	B-P-M-G-E	%	S-PC-L-R-F-OC-SN-HR	Lt/Mod/Hvy		NSEW	NSEW

Event Code	Sight if (1 or 1.1 if no sight)	Time/Date (Start/End time if cont.)	WF/ Grid #/ DIR of travel	Zone/ Radius/ Impact Pile (#)	Obs.	Sighting Code	Species	Group Size	Behavior Code (see code sheet)	Construction Type	Impact Type	Response (Y/N)	Behavior Change/ Response to Activity/Comments/ Human Activity/Vessel Hull # or Name/ Visibility Notes
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Called out to clear area before before impacting Light pole in uplands
E ON PRE/POST CON S M OR E OFF		16:30	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs. Effort on
E ON PRE/POST CON S M OR E OFF		16:55	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Cleared zone - No mammals sighted called All clear to Chul S
E ON PRE/POST CON S M OR E OFF		16:56	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC performs mitigation by doing a SS w/ Impact hammer
E ON PRE/POST CON S M OR E OFF		16:57	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		
E ON PRE/POST CON S M OR E OFF		17:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		TMC impacts 30" pile (I think) into upland concrete area for light pole
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Airborne Radu in play 150m-HSEA 300m 50m-STSL OTIE/Edges
E ON PRE/POST CON S M OR E OFF		17:10	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Start Post-Con Obs No sightings
E ON PRE/POST CON S M OR E OFF		17:40	Grid N or S W or E		CB	BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		Obs Effort off
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		No other over water/ pile driving will be done today
E ON PRE/POST CON S M OR E OFF		:	Grid N or S W or E			BL BO BR DF SA OTHER		Min: Max: Best:	Beh code(s):	SSV SSI V DR I DP ST OWC NOWC / NONE	SS/BC DE SD None		1 mmo onsite