



2377 Ferry Road
Virginia Beach, VA 23455
757.578.8689 Phone
757.578.8690 Fax

December 14, 2020

VIA EMAIL

Jolie Harrison, Division Chief
Permits and Conservation Division,
Office of Protected Resources,
1315 East-West Highway, F/PR1 Room 13805
Silver Spring, MD 20910

Dear Ms. Harrison:

Please find attached, an explanation for the Chesapeake Tunnel Joint Venture (CTJV)'s Renewal Request for the current March 10, 2020 issued Incidental Harassment Authorization (IHA) for the Parallel Thimble Shoal Tunnel (PTST) Project.

Following the guidance of the NOAA Incidental Harassment Authorization Renewal conditions and in accordance with section 101(a)(5) of the Marine Mammal Protection Act of 1972, this Renewal Request is for the CTJV's existing IHA that expires March 1, 2021. All construction methodology and mitigation practices remain identical to the previously reviewed and authorized activities in the IHA.

Due to unforeseen geotechnical and weather related delays on the project, only 76 of the 2019 application's anticipated 812 piles were installed.

The Renewal Request reflects adjusted pile quantities to account for those installed under the March 10, 2020 issued IHA, as well as the Annual Marine Mammal Monitoring Report. As of the submission of this Renewal Request, there have been no takes recorded by the marine mammal observers under the existing IHA.

The CTJV looks forward to working with you and your team to answer any questions regarding the IHA Renewal Request. Please feel free to contact Sarah Falin, Environmental Project Engineer, SFalin@dragados-usa.com (757) 334-9318 or Roger Escoda, Project Manager, REscoda@dragados-usa.com (206) 305-7270 with additional questions.

Sincerely,

Chesapeake Tunnel Joint Venture

A blue ink signature of John Hellman, written in a cursive style.

John Hellman
Project Executive
(757) 406-6389
JHellman@Dragados-USA.com

Chesapeake Tunnel Joint Venture 2021 IHA Renewal Request

Parallel Thimble Shoals Tunnel

December 5, 2020

Description of the Specified Activities and Anticipated Impacts:

Due to construction schedule delays, the Chesapeake Tunnel Joint Venture (CTJV) will be unable to complete all of the planned work in the 2020 IHA at the Parallel Thimble Shoals Tunnel Project before the expiration date of March 10, 2021 and, therefore, is requesting a Renewal IHA to authorize takes of marine mammals for the subset of the initially planned work that was not completed. The work would be identical to a subset of the activities analyzed in the 2020 IHA application. Specifically, the location, timing, and nature of the activities, including the types of equipment planned for use, are identical to those described in the 2020 authorized IHA. The CTJV installed a total of 76 36” in-water pipe piles and installed and removed 58 42” steel casings over approximately 64 construction days under the 2020 IHA. Additionally, 52 36” interlocking pipe piles have been eliminated from the Portal Island 1 Berm Support on the West side. This is due to a design change which increased the elevation of stone placement on the West berm on Portal Island 1, decreasing the number of piles being installed below Mean High Water (MHW). This leaves 684 piles remaining to be installed in the March 2021- March 2022 construction window.

Similarly, the mitigation and monitoring would be identical to that included in the 2020 IHA. All documents associated with the 2020 IHA can be found on NMFS's website or in the Federal Register.

Anticipated impacts, which would include both Level A and Level B harassment of marine mammals, would also be identical to those analyzed and authorized in the 2020 IHA (though fewer, since from a subset of activities). Species with the expected potential to be present during all or a portion of the in-water work window include five species of marine mammals (harbor seals, gray seals, humpback whale, harbor porpoise and bottlenose dolphin). Monitoring results of the 2020 construction activities covered in the IHA (Table 1) indicate that observed exposures of Level A and Level B harassment thresholds did not occur with the amount of work conducted; thus, the subset of Level A and Level B takes remaining from that authorized under the 2020 IHA will be sufficient to cover the 2021 pile installation and removal activities. The CTJV Annual Marine Monitoring Report further details the monitoring, mitigation and observations during this construction period.

Table 1- Takes Authorized in 2020 IHA and Take Documented by Species in the 2020 IHA Construction Window

Species	Stock	Authorized Level A Takes	Authorized Level B Takes	Documented # of Species Sighted (Mar. 20- Oct. 2, 2020)	Documented 2020 Level A Takes	Documented 2020 Level B Takes
Humpback whale	Gulf of Maine	0	12	0	0	0
Harbor porpoise	Gulf of Maine/Bay of Fundy	5	7	0	0	0
Bottlenose dolphin	WNA Coastal, Northern Migratory	142	14,095	100	0	0
	WNA Coastal, Southern Migratory	142	14,095			
	NNCES	2	198			
Harbor seal	Western North Atlantic	1,296	2,124	0	0	0
Gray seal	Western North Atlantic	1	3	0	0	0

The following documents are referenced in this notice and include important supporting information:

- 2020 Final IHA (85 FR 16061; March 20, 2020)
- 2019 CTJV IHA Proposal (84 FR 64847; November 25, 2019)
- 2018 Final IHA (83 FR 36522; July 30, 2018)
- Annual Marine Monitoring Report: Parallel Thimble Shoal Tunnel Project. December 2020.

Detailed Description of the Activity:

CTJV is proposing the construction of a new parallel two-lane tunnel 6,350 feet (ft.) in overall total length. The new parallel tunnel will be bored under the Thimble Shoal Channel. The tunnel construction is being supported by the construction of a temporary dock, two temporary omega trestles and the construction of two engineered berms.

The temporary dock is a 32,832 sq. ft. working platform on the west side of Portal Island No. 1. This structure was completed in October 2020 under the currently valid IHA.

Construction of the temporary omega trestles on both Island 1 and 2 will consist of:

- Island 1: 18 in-water 36” diameter steel pipe piles (completed in 2020)
- Island 2: 28 in-water 36” diameter steel pipe piles

The installation of the 36” diameter hollow steel pipe piles are done using a Down The Hole Hammer (DTH) initially to get through armor stone, then will be completed with an impact hammer. A bubble curtain will be used during impact driving of each 36” pile in water depths greater than 10 feet.

Construction of two engineered berms, approximately 1,395 ft. in length for Portal Island No. 1 (435 ft. above MHW and 960 ft. below MHW), and approximately 1,354 ft. in length for Portal Island No. 2 (446 ft. above MHW and 908 ft. below MHW) will also take place. Both berms will extend channelward from each portal island. Construction methods will include: dredging; stone placement (core, bedding, filter, and armor stone); impact and vibratory pile driving; casing advancement (Down the Hole (DTH) hammer); installation of horizontal and vertical inclinometers, piezometers and survey points; excavation between SOE walls; and placement of engineered and flowable fill. There will be 81 36” interlocked pipe

piles installed on Portal Island No. 1 West Side and 121 on the East side, while Portal Island No. 2 will have 124 36” interlocked pipe piles on the West side and 122 on the East. These are installed through the use of DTH and impact drilling equipment.

Table 2 shows the work completed under the 2020 IHA and the remaining work to be covered under this IHA Renewal Request.

Table 2- Pile Installations Completed Under 2020 IHA and Remaining Subset Planned for the 2022 Construction Window

Pile Location	Pile Function	Pile Type	Installation/ Removal Method	Bubble Curtain Yes/No	Number of Piles Below MHW in 2020 IHA	Number of Piles Completed in 2020 IHA	Number of Piles Requested in 2021 Renewal Application	Number of Driving Days in 2021 Renewal Application	Number of Days per Hammer Type
Portal Island No. 1	Mooring dolphins	12-inch Timber piles	Vibratory (Install)	No	120	0	120	18	18 Days (7 Piles/Day)
			Impact (if needed)	No					14 Days (9 Piles/Day)
Portal Island No. 1	Temporary Dock	42-inch Diameter Steel Pipe Casing	DTH (install)	No	58	58	0	0	N/A
			Vibratory (removal)	No		58			
		36-inch Diameter Steel Pipe Pile	Impact	Yes		58			
Portal Island No. 1	Omega Trestle	36-inch Diameter Steel Pipe Piles	DTH (Install)	No	18	18	0	0	N/A
			Impact	Yes					
Portal Island No. 1	Berm Support of Excavation Wall - West Side	36-inch Diameter Steel Interlocked Pipe Piles	DTH (install)	No	81	0	81	18	18 Days (5 Piles/Day)
			Impact	Yes					9 Days (10 Piles/Day)
Portal Island No. 1	Berm Support of Excavation Wall - East Side	36-inch Diameter Steel Interlocked Pipe Piles	DTH (Install)	No	121	0	121	25	25 Days (5 Piles/Day)
			Impact	Yes					11 Days (10 Piles/Day)
Portal Island No. 1	Mooring Piles and Templates	36-inch Diameter Steel Pipe Piles	Vibratory (Install & Removal)	No	12	0	12	3	3 Days (5 Piles/Day)
Portal Island No. 2	Mooring Dolphins	12-inch Timber Piles	Vibratory (Install)	No	60	0	60	9	9 Days (7 Piles/Day)
			Vibratory (Removal)	No					7 Days (9 Piles/Day)
				No					4 Days (20 Piles/Day)
Portal Island No. 2	Omega Trestle	36-inch Diameter Steel Pipe Piles	DTH (Install)	No	28	0	28	14	14 Days (2 Piles/Day)
			Impact	Yes					12 Days (3 Piles/Day)
Portal Island No. 2	Berm Support of Excavation Wall - West Side	36-inch Diameter Steel Interlocked Pipe Piles	DTH (Install)	No	124	0	124	25	25 Days (5 Piles/Day)
			Impact	Yes					13 Days (10 Piles/Day)
Portal Island No. 2	Berm Support of Excavation Wall - East Side	36-inch Diameter Steel Interlocked Pipe Piles	DTH (Install)	No	122	0	122	25	25 Days (5 Piles/Day)
			Impact	Yes					13 Days (10 Piles/Day)
Portal Island No. 2	Mooring Piles and Templates	36-inch Diameter Steel Pipe Piles	Vibratory (Install & Removal)	No	16	0	16	3	3 Days (6 Piles/Day)
36" PILE INSTALLATION TOTALS:					760	76	684	140	
42" CASING INSTALLATION TOTALS:						58			
42" CASING REMOVAL TOTALS:						58			

A detailed description of the construction activities for which take is proposed here may be found in the Federal Register notice of proposed IHA for the 2020 authorization (84 FR 64848; November 25, 2019). As stated above, location, timing (e.g., seasonality), and nature of the pile driving operations, including the type and size of piles and the methods of pile driving, are identical to those analyzed and authorized in the March 10, 2020 IHA.