PUBLIC NOTICE

US Army Corps of Engineers ®
New England District
696 Virginia Road
Concord, MA 01742-2751

Comment Period Begins: December 23, 2022
Comment Period Ends: February 21, 2023
File Number: NAE-2022-01890
In Reply Refer To: Christine Jacek
Phone: (978) 318-8026
E-mail: Christine.M.Jacek@usace.army.mil

ANNOUNCEMENT OF PUBLIC MEETINGS AND REQUEST FOR PUBLIC COMMENT

The District Engineer has received a permit application to conduct work in waters of the United States, navigable waters, and the Outer Continental Shelf from Park City Wind LLC at 125 High Street, 6th Floor, Boston, Massachusetts 02110. The majority of the proposed work would be located in the Atlantic Ocean in the Bureau of Ocean Energy Management's (BOEM) Renewable Energy Lease Area OCS-A 0534, which is approximately 20 miles from the southwest corner of Martha's Vineyard and 24 miles from Nantucket. Work would also occur within Nantucket Sound, with landfall for the offshore export cables at the Dowses Beach Landfall Site in the Town of Barnstable, Massachusetts.

The overall proposal involves the construction, maintenance, and eventual decommissioning of Phase 2 of the overall New England Wind project. This work would include the installation of up to eighty-eight (88) wind turbine generators (WTGs or turbines) connected by a network of inter-array cables (IACs), and up to three electrical service platforms (ESPs) connected by inter-link cables within the lease area. In addition, up to three high-voltage alternating current offshore export cables each having a length of up to sixty seven (67) nautical miles would be installed within an offshore export cable corridor which would carry the power from the lease area to the landfall site. The offshore export cables would make landfall via horizontal directional drilling (HDD). The onshore export cables would cross under East Bay using trenchless installation methods as part of the route from the cable landfall at Dowses Beach to the onshore substation.

The New England Phase 2 export cables would extend approximately 67 nautical miles from the shoreline to the lease area. The cables are approximately 12 inches in diameter and would primarily be laid using industry standard subsea cable installation and burial methods to a target depth of 5 to 8 feet below the substrate. The temporary disturbance area associated with cable installation will primarily occur in the same offshore export cable corridor that contains the Vineyard Wind 1 export cables. The width of the existing corridor has been expanded by 984 feet along the entire western side and by 984 feet along the part of the eastern side within Muskeget Channel- for a total width of 3,100 to 5,500 feet- to accommodate additional cables. The area of impact associated with each export cable installation is anticipated to be 13 feet in width. In areas where burial could not occur, where sufficient burial depth could not be achieved due to seabed conditions, or where protection would be needed due to the cables crossing other cables or pipelines, cable protection in the form of hard armoring would be installed. This armoring would consist of rock berms, concrete mattresses, fronded mattresses, and/or rock bags. Hard armoring would be up to 30 feet wide where needed. Areas within the cable route may require the relocation of sand waves prior to cable installation of approximately 33 acres.

The work to be reviewed by the Corps under Section 404 of the Clean Water Act includes all activities that constitute the discharge of fill material within waters of the United States. As there are no non-tidal waters or wetlands to be impacted by the proposed work, the shoreward limit of waters of the United States in relation to this project is the high tide line of the Atlantic Ocean in the vicinity of Barnstable, Massachusetts. The seaward limit of Corps Section 404 jurisdiction is the limit of the territorial seas, which extends three nautical miles from the mean low water mark of the shoreline or any other further out base line permitted by law.

The proposed work within the limits of Section 404 jurisdiction is associated with the offshore export cable installation and includes backfilling of the trench during cable laying, backfilling of excavation pits associated with the HDD work, relocating of sand waves during cable laying, and placing hard armor as needed for cable protection.

The work to be reviewed under Section 10 of the Rivers and Harbors Act includes all proposed structures, dredging, and work in navigable waters from the mean high water line of the Atlantic Ocean out three nautical miles from the mean low water mark of the shoreline or any further out base line permitted by law. This would include the offshore export cables as well as the work associated with their installation, including the cable laying, the placement of hard armoring where needed, the relocation of sand waves, and the HDD work in the nearshore area. It would also include the installation of the onshore export cables under East Bay. This would include all of the proposed structures and cables within the part of BOEM Lease Area OCS-A 0534 associated with the New England Wind Phase 2 Project as well as the offshore export cables out past the three nautical mile navigable waters limit.

The three nautical mile limit that defines the extent of Section 404 and Section 10 jurisdiction is identified on the attached map entitled "Figure 2.3-1 New England Wind Offshore Export Cable Corridor (Phases 1 and 2)."

The jurisdictional impacts from the proposed project include the following:

Activity	Temporary/Installation	During Operations	Authority
Foundations (WTGs and ESPs)	74,873 acres (ac) subtidal	199 ac subtidal	Sec 10
Inter-array cable	381 ac subtidal	17 ac subtidal (armor)	Sec 10
Export Cables (beyond 3-mile limit)	242 ac subtidal	7.2 ac subtidal (armor)	Sec 10
Export Cables (within 3-mile limit)	110 ac subtidal	35.6 ac subtidal (armor)	Sec 10/404
Dredging – sand waves & HDD pit			
Within 3 nautical miles	33 ac subtidal	0 ac	Sec 10/404

The proposed work is shown on the plans entitled "PHASE 2 OF NEW ENGLAND WIND," on twenty-nine (29) sheets, with sheet 1 dated "JULY 28, 2022", sheets 2-14 and sheet 29 dated "JULY 29, 2022", sheets 15-24 dated "2022-09-29", sheets 25-27 undated, and sheet 28 dated "JULY 27, 2022." These plans can be accessed on our website by following this link: https://www.nae.usace.army.mil/Missions/PublicNotices/ and looking under "Regulatory/Permitting Public Notices".

Project Purpose: The applicant's stated purpose and need for the Project is to provide a commercially viable offshore wind energy project within Lease OCS-A 0534 to meet New England's need for clean energy.

The basic project purpose, as determined by the USACE for the Section 404(b)(1) guidelines evaluation, is offshore wind energy generation.

The overall Project purpose for the Section 404(b)(1) guidelines evaluation, as determined by the USACE, is the construction of a commercial-scale offshore wind energy project, including associated transmission lines, for renewable energy generation and distribution to the Massachusetts Energy Grid as well as potentially to other northeastern states.

Avoidance, Minimization and Compensatory Mitigation: The applicant has designed the New England Wind Phase 2 Project to avoid and minimize impacts to Waters of the United States. No impacts to onshore wetlands are proposed as part of the New England Wind Phase 2 Project. In offshore areas where impacts to marine resources are unavoidable, the applicant has avoided all USACE defined special aquatic sites (SAS) including eelgrass beds, intertidal mud flats, coral reef complexes, etc. Impacts are anticipated to consist of structures, fills, and temporary construction impacts with no permanent losses of Waters of the United States. Compensatory mitigation requirements are under consideration.

The United States Army Corps of Engineers neither favors nor opposes the proposed construction work.

BOEM is the lead federal agency for federal review of this project in relation to the National Environmental Policy Act (NEPA), Section 7 of the Endangered Species Act (16 U.S.C. 1531), the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1851) and Section 106 of the National Historical Preservation Act (NHPA). The project is identified as Docket No. BOEM-2022-0070. As the lead federal agency, BOEM has prepared a Draft Environmental Impact Assessment (DEIS) in accordance with NEPA. The DEIS includes an initial review of the project in relation to Section 7 of the Endangered Species Act and Section 106 of the NHPA, as well as other applicable Federal regulations. The DEIS will be issued and published in the federal register on December 23, 2022 and is available for review at https://www.boem.gov/renewable-energy/state-activities/new-england-wind-formerly-vineyard-wind-south.

Comments may be submitted directly to BOEM, as the lead federal agency, in one of three ways: 1) Orally or in written form at one of the public meetings referenced below. 2) In written form by mail or other delivery service, enclosed in an envelope labeled "New England Wind COP DEIS" and addressed to Program Manager, Office of Renewable Energy Programs, Bureau of Ocean Energy Management, 45600 Woodland Road, Sterling, VA 20166. 3) Through the regulations.gov web portal: Navigate to http://www.regulations.gov and search for Docket No. BOEM-2022-0070. Click on the "Comment" button below the document link. Enter your information and comment, then click "Submit Comment".

As the lead federal agency, BOEM will hold public comment meetings on the DEIS for the proposed New England Wind Phase 2 Project and USACE will participate in the meetings.

The dates and locations of the meetings are as follows:

Date	Location
Friday, January 27, 2023 1:00 pm ET (virtual)	Zoom Registration Link: https://us06web.zoom.us/webinar/register/WN_XVMu6G1US12Gx5CLtdw2uQ Dial in phone number: +1 253 205 0468 Meeting ID: 813 4910 7084 Password: 673644
Wednesday, February 1, 2023 5:00 pm ET (virtual)	Zoom Registration Link: https://us06web.zoom.us/webinar/register/WN__EAou83qRZak_Sm8Nmv4_g Dial in phone number: +1 253 215 8782 Meeting ID: 817 5695 6285 Password: 712304
Monday, February 6, 2023 5:00 pm ET (virtual)	Zoom Registration Link: https://us06web.zoom.us/webinar/register/WN_gClMuqkTQROjXtpmTfUy9A Dial in phone number: +1 253 205 0468 Meeting ID: 836 9914 4118 Password: 764365

*Note: Each virtual meeting has a unique registration link and registration will be required to receive the webinar information.

AUTHORITY
Permits are required pursuant to:
__X__ Section 10 of the Rivers and Harbors Act of 1899
__X__ Section 404 of the Clean Water Act
_____ Section 103 of the Marine Protection, Research and Sanctuaries Act.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties/cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers, New England District (USACE), is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. The USACE will consider all comments received to

determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments will be used in the USACE's reviews of the project, including the USACE-specific assessment of impacts to conservation, economics, aesthetics, general environmental concerns, water quality, and the other public interest factors listed above. Comments will also be used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

As the activity involves the discharge of dredged or fill material into waters of the United States, the evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act. Comments received in response to the public notice will also be used in determining compliance with these guidelines.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). Essential Fish Habitat describes waters and substrate necessary for fish for spawning, breeding, feeding or growth to maturity. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted by BOEM as the lead federal agency and will be concluded prior to the final decision.

NATIONAL HISTORIC PRESERVATION ACT

Based on their initial review as the lead federal agency, BOEM has determined that the proposed work may impact properties listed in, or eligible for listing in, the National Register of Historic Places. Additional review and consultation to fulfil requirements under Section 106 of the National Historic Preservation Act of 1966, as amended, will be ongoing as part of the permit review process.

ENDANGERED SPECIES CONSULTATION

As the lead federal agency, BOEM is reviewing the project for potential impacts on Federally-listed threatened or endangered species and their designated critical habitat pursuant to Section 7 of the Endangered Species Act as amended. BOEM is coordinating with the NMFS and/or U.S. Fish and Wildlife Service on listed species and the ESA consultation will be concluded prior to the final decision.

OTHER GOVERNMENT AUTHORIZATIONS

The applicant has stated that the proposed work will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management programs of Rhode Island and Massachusetts.

The following authorizations have been applied for, or have been, or will be obtained:

(X) Permit, license or assent from State.
(X) Permit from local wetland agency or conservation commission.
(X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

COMMENTS

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. Comments should be submitted in writing by the above date. If you have any questions, please contact Christine Jacek at (978) 318-8026 or (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The USACE holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.

Ruthann Brien

for
Paul Maniccia
Chief, Permits and Enforcement Branch
Regulatory Division

If you would prefer not to continue receiving Public Notices by email, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil.

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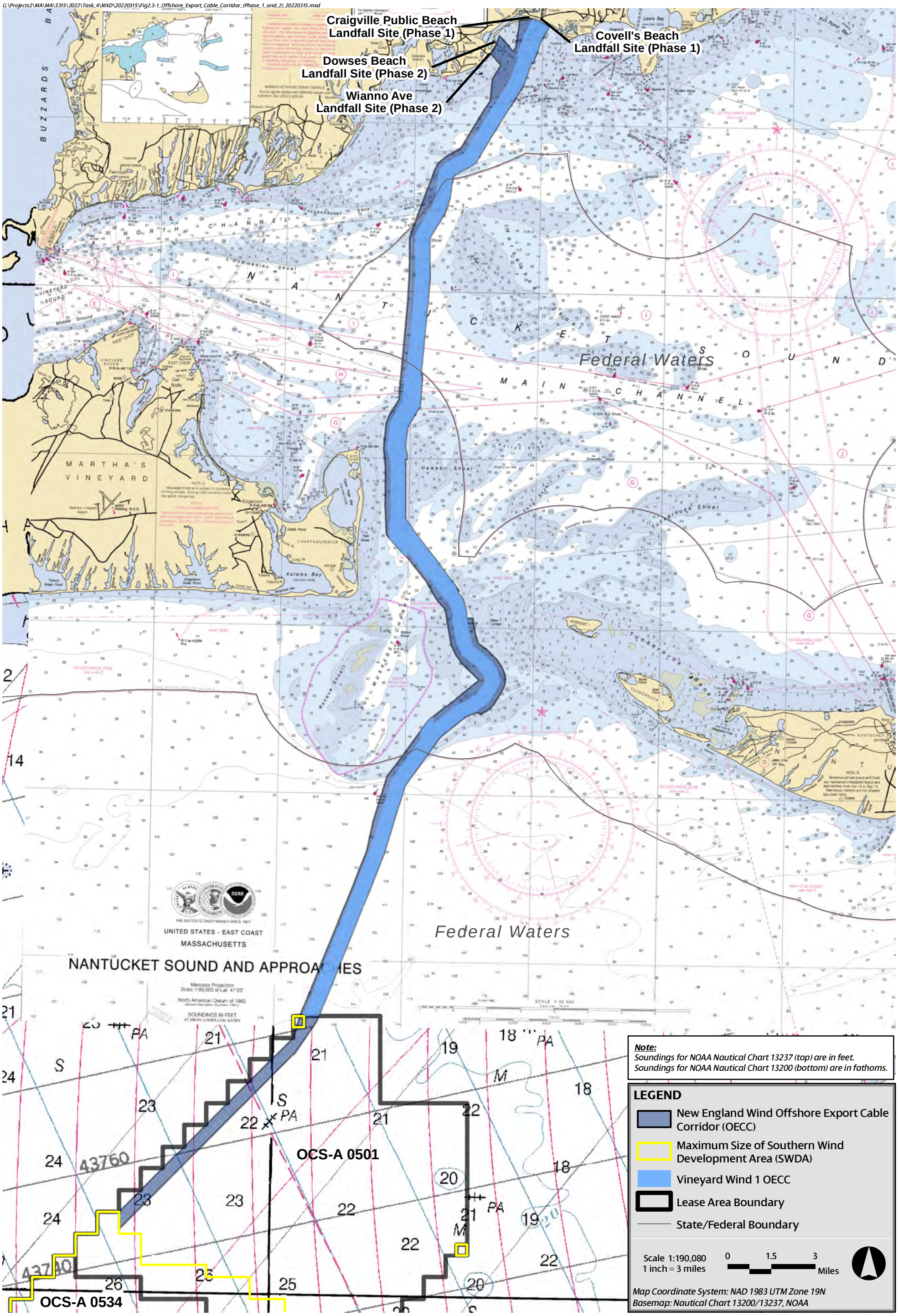
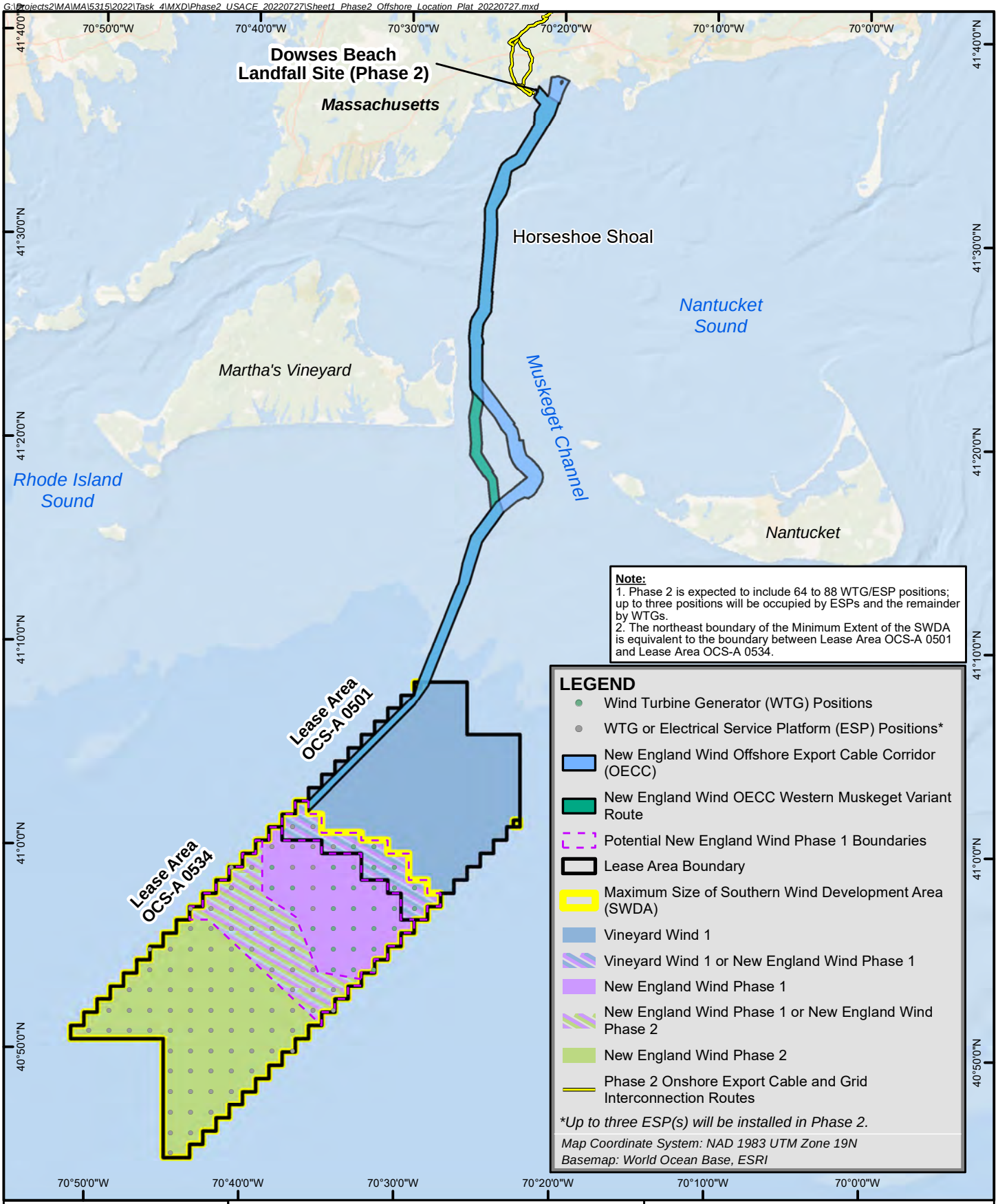


New England Wind
AVANGRID RENEWABLES

Figure 2.3-1
New England Wind Offshore Export Cable Corridor (Phases 1 and 2)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70°50'0"W
70°40'0"W
70°30'0"W
70°20'0"W
70°10'0"W
70°0'0"W
41°40'0"N
41°30'0"N
41°20'0"N
41°10'0"N
41°0'0"N
40°50'0"N
Dowses Beach
Landfall Site (Phase 2)
Massachusetts
Horseshoe Shoal
Nantucket
Sound
Martha's Vineyard
Muskeget Channel
Rhode Island
Sound
Nantucket
Lease Area
OCS-A 0501
Lease Area
OCS-A 0534
Note:
1. Phase 2 is expected to include 64 to 88 WTG/ESP positions; up to three positions will be occupied by ESPs and the remainder by WTGs.
2. The northeast boundary of the Minimum Extent of the SWDA is equivalent to the boundary between Lease Area OCS-A 0501 and Lease Area OCS-A 0534.
LEGEND
Wind Turbine Generator (WTG) Positions
WTG or Electrical Service Platform (ESP) Positions*
New England Wind Offshore Export Cable Corridor (OECC)
New England Wind OECC Western Muskeget Variant Route
Potential New England Wind Phase 1 Boundaries
Lease Area Boundary
Maximum Size of Southern Wind Development Area (SWDA)
Vineyard Wind 1
Vineyard Wind 1 or New England Wind Phase 1
New England Wind Phase 1
New England Wind Phase 1 or New England Wind Phase 2
New England Wind Phase 2
Phase 2 Onshore Export Cable and Grid Interconnection Routes
*Up to three ESP(s) will be installed in Phase 2.
Map Coordinate System: NAD 1983 UTM Zone 19N
Basemap: World Ocean Base, ESRI
Scale 1:472,440
1 in = 12 kilometers
0 6 12 Kilometers
0 3 6 Nautical Miles
PHASE 2 OF NEW ENGLAND WIND
PHASE 2 OFFSHORE LOCATION PLAT
USACE PERMIT APPLICATION SHEET 1
IN: ATLANTIC OCEAN AND NANTUCKET SOUND
AT: SOUTHEAST MASSACHUSETTS
JULY 29, 2022
New England Wind
AVANGRID RENEWABLES

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LEGEND

- Potential Phase 2 Onshore Export Cable and Grid Interconnection Routes
- Trenchless Crossing
- Utility ROW (Approximate)
- Existing West Barnstable Substation
- Potential Northern Terminus for Phase 2 Grid Interconnection Cable Crossing*
- Proposed New Substation Site

**Note: Parcel #214-001 may be used for a segment of the Phase 1 grid interconnection cables and/or to house some Phase 1 onshore substation equipment.*

Scale 1:28,800
1 inch = 2,400 feet

0 1,200 2,400 Feet

Map Coordinate System: NAD 1983 UTM Zone 19N
Basemap: 2016 Orthophotography, Bing

Existing West Barnstable Substation
Proposed New Substation Site
ROW 342
182
Ivanough Road
6
Fire Tower Road
Shootflying Hill Road
Oak Street
ROW 343
ROW 381
Parcel #214-001
Old Falmouth Road
ROW 345
Lumbert Mill Road
Prospect Street
Cotuit Road
Barnstable
ROW 345
Falmouth Road
South County Road
Osterville West Barnstable Road
Five Corners Road
Old Mill Road
Main Street
Centerville Harbor
East Bay
East Bay Road
Wianno Avenue
Dowses Beach Landfall Site (Phase 2)
Dowses Beach Road
Nantucket Sound

PHASE 2 OF NEW ENGLAND WIND

PHASE 2 ONSHORE LOCATION PLAT
USACE PERMIT APPLICATION SHEET 2

IN: BARNSTABLE
AT: SOUTHEAST MASSACHUSETTS
JULY 28, 2022

New England Wind
AVANGRID RENEWABLES

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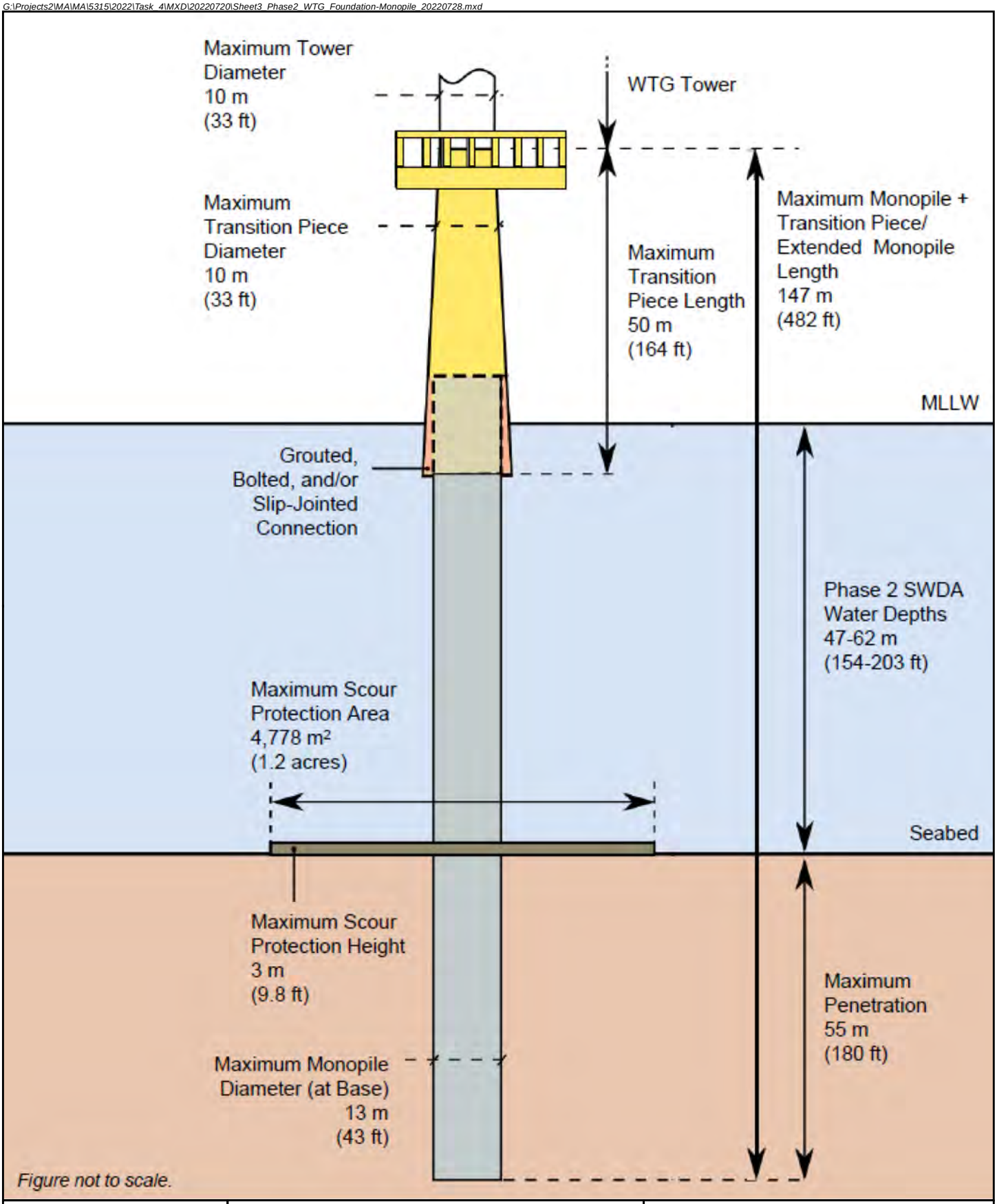

NOT TO SCALE	**PHASE 2 OF NEW ENGLAND WIND** PHASE 2 WTG FOUNDATION - MONOPILE USACE PERMIT APPLICATION SHEET 3	IN: ATLANTIC OCEAN AND NANTUCKET SOUND AT: SOUTHEAST MASSACHUSETTS JULY 28, 2022 New England Wind AVANGRID RENEWABLES

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3D Jacket Rendering

NOT TO SCALE

PHASE 2 OF NEW ENGLAND WIND

PHASE 2 WTG FOUNDATION - PILED JACKET
USACE PERMIT APPLICATION SHEET 4

IN: ATLANTIC OCEAN AND NANTUCKET SOUND
AT: SOUTHEAST MASSACHUSETTS
JULY 28, 2022

New England Wind
AVANGRID RENEWABLES

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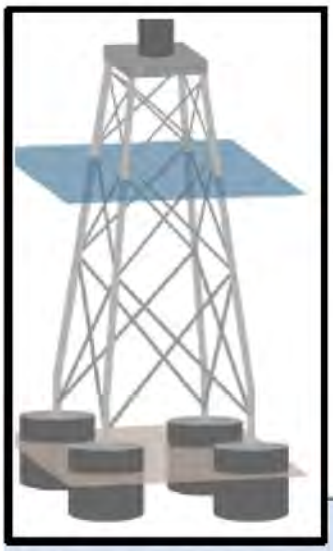

3D Jacket Rendering

NOT TO SCALE	**PHASE 2 OF NEW ENGLAND WIND** PHASE 2 WTG FOUNDATION - SUCTION BUCKET JACKET USACE PERMIT APPLICATION SHEET 5	IN: ATLANTIC OCEAN AND NANTUCKET SOUND AT: SOUTHEAST MASSACHUSETTS JULY 28, 2022 New England Wind AVANGRID RENEWABLES

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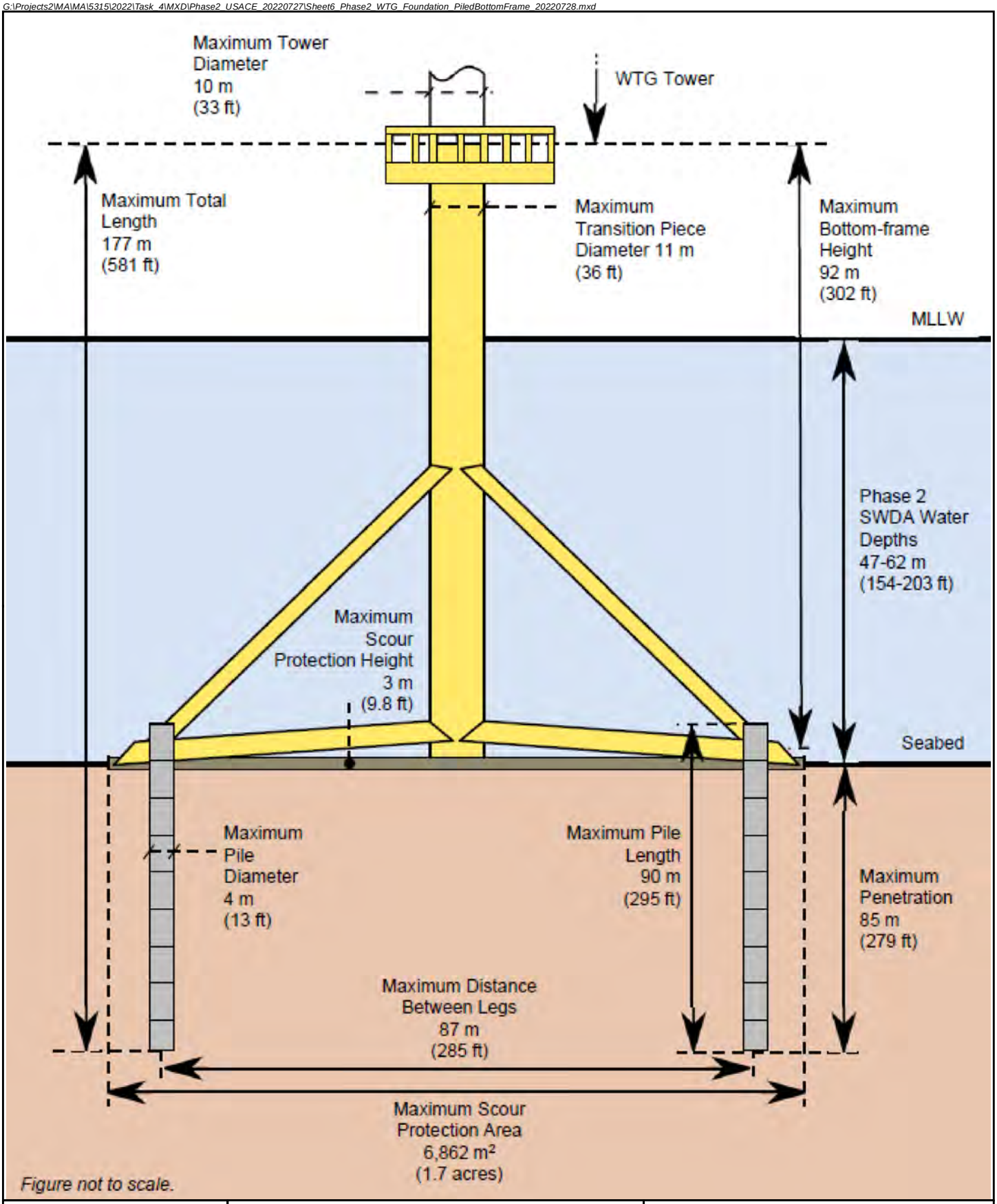

NOT TO SCALE	**PHASE 2 OF NEW ENGLAND WIND** PHASE 2 WTG FOUNDATION - PILED BOTTOM-FRAME USACE PERMIT APPLICATION SHEET 6	IN: ATLANTIC OCEAN AND NANTUCKET SOUND AT: SOUTHEAST MASSACHUSETTS JULY 28, 2022 New England Wind AVANGRID RENEWABLES

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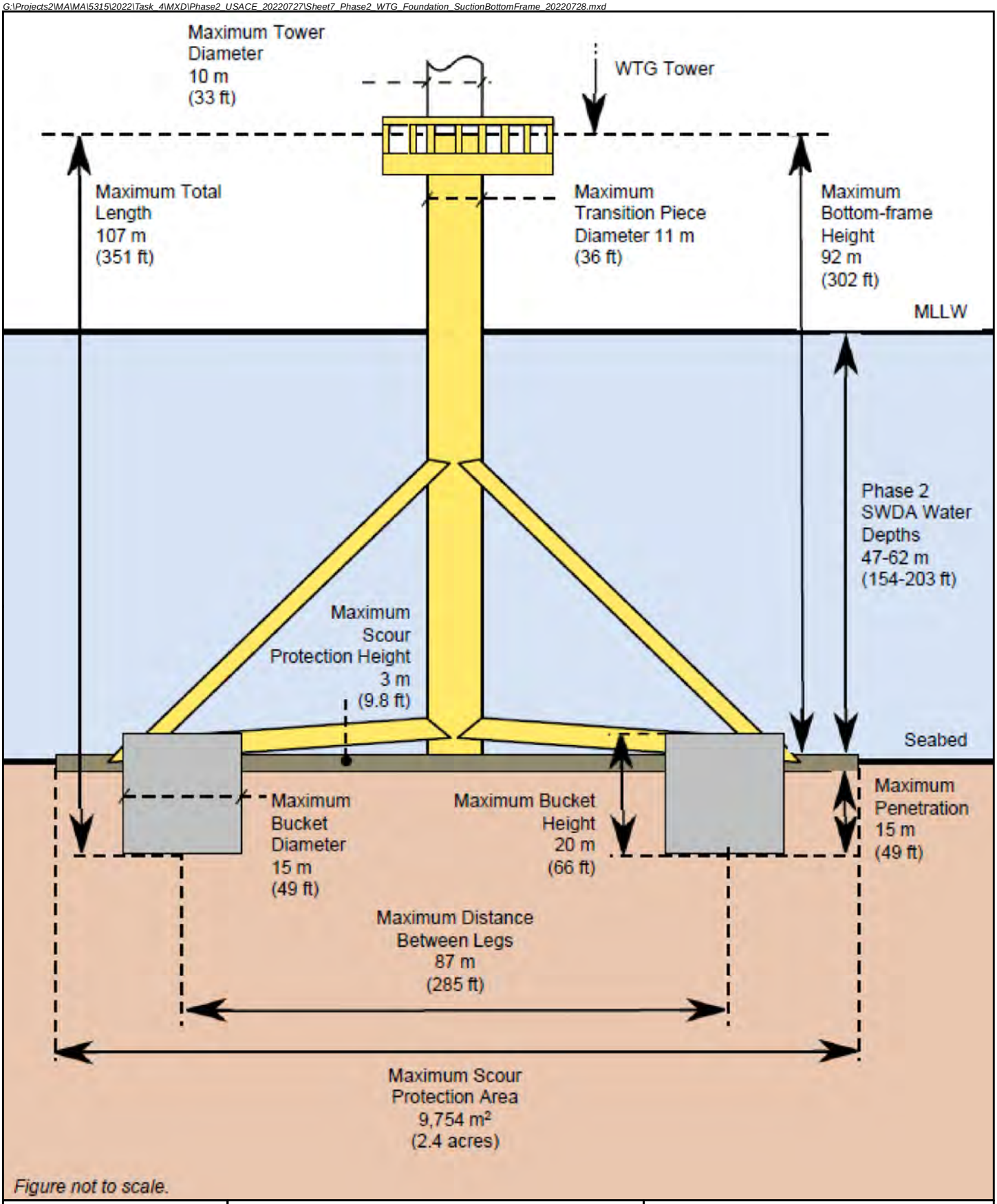

NOT TO SCALE	**PHASE 2 OF NEW ENGLAND WIND** PHASE 2 WTG FOUNDATION - SUCTION BUCKET BOTTOM-FRAME USACE PERMIT APPLICATION SHEET 7	IN: ATLANTIC OCEAN AND NANTUCKET SOUND AT: SOUTHEAST MASSACHUSETTS JULY 28, 2022 New England Wind AVANGRID RENEWABLES

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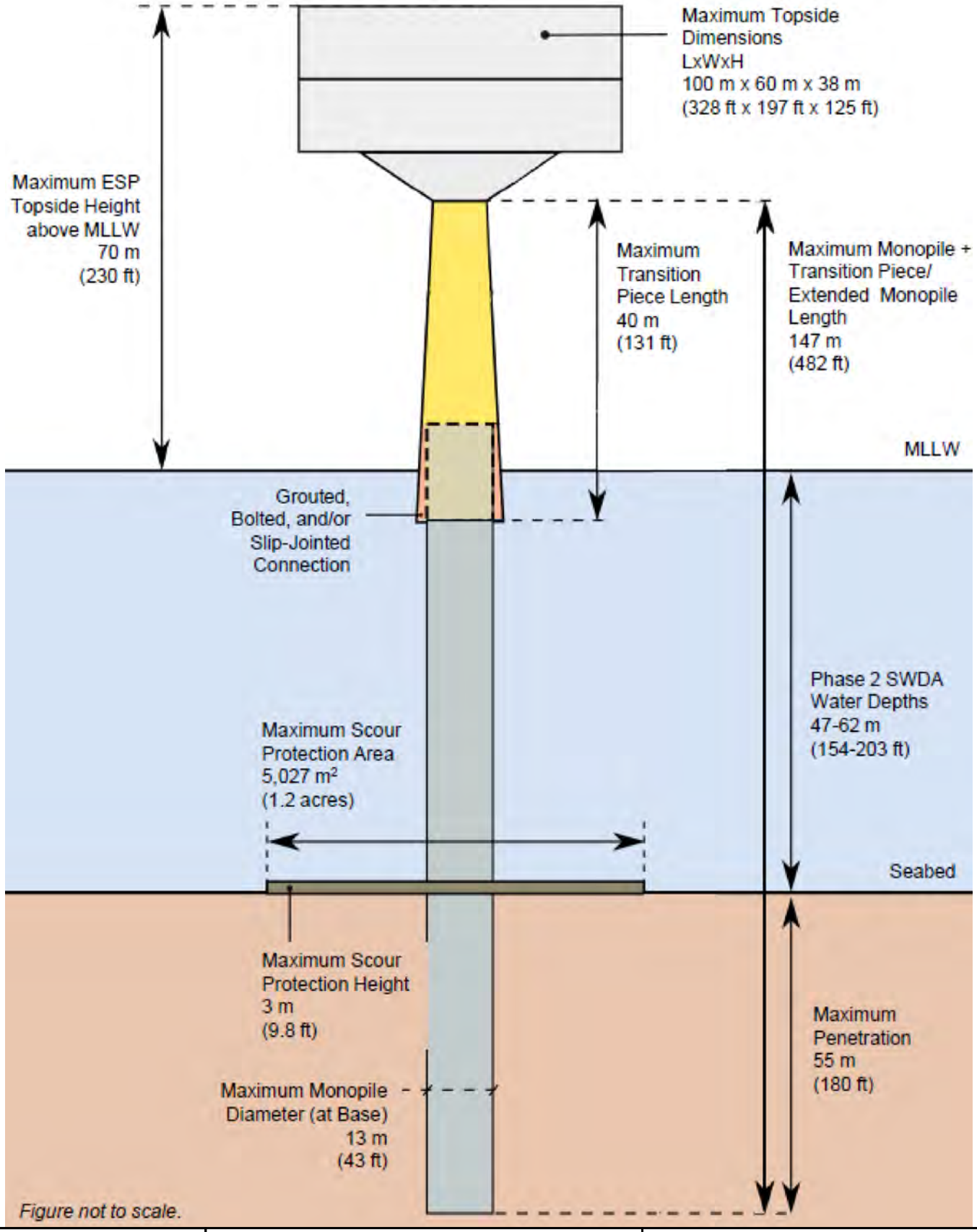

NOT TO SCALE	**PHASE 2 OF NEW ENGLAND WIND** PHASE 2 ESP TOPSIDE AND FOUNDATION - MONOPILE USACE PERMIT APPLICATION SHEET 8	IN: ATLANTIC OCEAN AND NANTUCKET SOUND AT: SOUTHEAST MASSACHUSETTS JULY 28, 2022 New England Wind AVANGRID RENEWABLES

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3D Jacket Rendering

Maximum Topside Dimensions
LxWxH
100 m x 60 m x 38 m
(328 ft x 197 ft x 125 ft)

Maximum ESP Topside Height above MLLW
70 m
(230 ft)

Maximum Jacket Height
92 m
(302 ft)

Maximum Total Length
177 m
(581 ft)

MLLW

Phase 2 SWDA Water Depths
47-62 m
(154-203 ft)

Maximum Scour Protection Height
3 m
(9.8 ft)

Seabed

Maximum Pile Length
90 m
(295 ft)

Maximum Scour Protection Area
9,953 m²
(2.5 acres)

Maximum Pile Diameter
4 m
(13 ft)

Maximum Penetration
85 m
(279 ft)

Maximum Distance Between Legs
100 m
(328 ft)

Figure not to scale.

NOT TO SCALE	**PHASE 2 OF NEW ENGLAND WIND** PHASE 2 ESP TOPSIDE AND FOUNDATION - PILED JACKET USACE PERMIT APPLICATION SHEET 9	IN: ATLANTIC OCEAN AND NANTUCKET SOUND AT: SOUTHEAST MASSACHUSETTS JULY 28, 2022 New England Wind AVANGRID RENEWABLES

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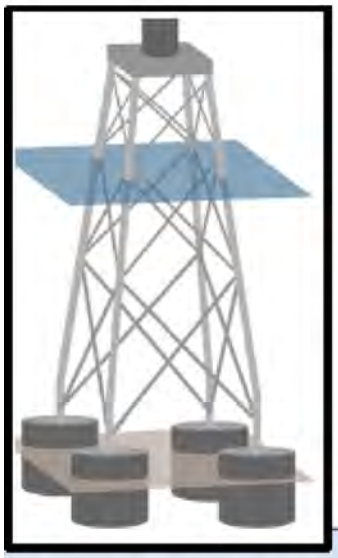


3D Jacket Rendering

Maximum Topside Dimensions
LxWxH
100 m x 60 m x 38 m
(328 ft x 197 ft x 125 ft)

Maximum ESP Topside Height above MLLW
70 m
(230 ft)

Maximum Jacket Height
92 m
(302 ft)

Maximum Total Length
107 m
(351 ft)

MLLW

Phase 2 SWDA Water Depths
47-62 m
(154-203 ft)

Maximum Scour Protection Height
3 m
(9.8 ft)

Seabed

Maximum Bucket Height
20 m
(66 ft)

Maximum Penetration
15 m
(49 ft)

Maximum Distance Between Legs
100 m
(328 ft)

Maximum Bucket Diameter
15 m
(49 ft)

Maximum Scour Protection Area
21,316 m²
(5.3 acres)

Figure not to scale.

NOT TO SCALE	**PHASE 2 OF NEW ENGLAND WIND** PHASE 2 ESP TOPSIDE AND FOUNDATION - SUCTION BUCKET JACKET USACE PERMIT APPLICATION SHEET 10	IN: ATLANTIC OCEAN AND NANTUCKET SOUND AT: SOUTHEAST MASSACHUSETTS JULY 28, 2022 New England Wind AVANGRID RENEWABLES

Dowses Beach Landfall Site

0
2.0 - 2.5
5
7.5 - 8.0
10
10.0 - 10.5
13.5 - 14.0
15
20
25
31.5 - 32.0
35
36.9 - 37.4
40
42.0 - 42.5
45
50
52.5 - 53.0
55
60
61.0 - 61.5
65
67.0 - 67.5
75
75.0 - 75.5

Western Muskeget Variant (Phase 2)

OCS-A 0501 Vineyard Wind 1

OCS-A 0534 New England Wind

Phase 1

Phase 2

Bishop and Clerks

Nantucket Sound Main Channel

Marstons Mills
Centerville
Osterville
Cotuit
North Falmouth
West Falmouth
East Falmouth
Falmouth
Woods Hole
Naushon Station
Vineyard Haven
North Tisbury
Edgartown
West Tisbury
Tississa
Menemsha
Gay Head
West Opening
Dennis Port
Trots Hills
Madaket
Cisco

16
20
10
46
48
53

70°52'0"W 70°48'0"W 70°44'0"W 70°40'0"W 70°36'0"W 70°32'0"W 70°28'0"W 70°24'0"W 70°20'0"W 70°16'0"W 70°12'0"W 70°8'0"W

41°24'0"N 41°22'0"N 41°20'0"N 41°18'0"N 41°16'0"N 41°14'0"N 41°12'0"N 41°10'0"N 41°8'0"N 41°6'0"N 41°4'0"N 41°2'0"N 41°0'0"N 40°58'0"N 40°56'0"N 40°54'0"N 40°52'0"N 40°50'0"N

70°50'0"W 70°46'0"W 70°42'0"W 70°38'0"W 70°34'0"W 70°30'0"W 70°26'0"W 70°22'0"W 70°18'0"W 70°14'0"W 70°10'0"W 70°6'0"W

Phase 2 Route Distance Interval (kilometers [km])
Phase 2 Profile Location (km)
Phase 2 Representative Export Cable
Offshore Export Cable Corridor (OECC)
State / Federal Boundary
Lease Area Boundary
Southern Wind Development Area (SWDA)

Map Coordinate System: NAD 1983 UTM Zone 19N
Basemap: World Ocean Base, ESRI

N

1 in = 6 kilometers

1:250,000

0 2 4 6 km

Nautical Miles
0 1 2

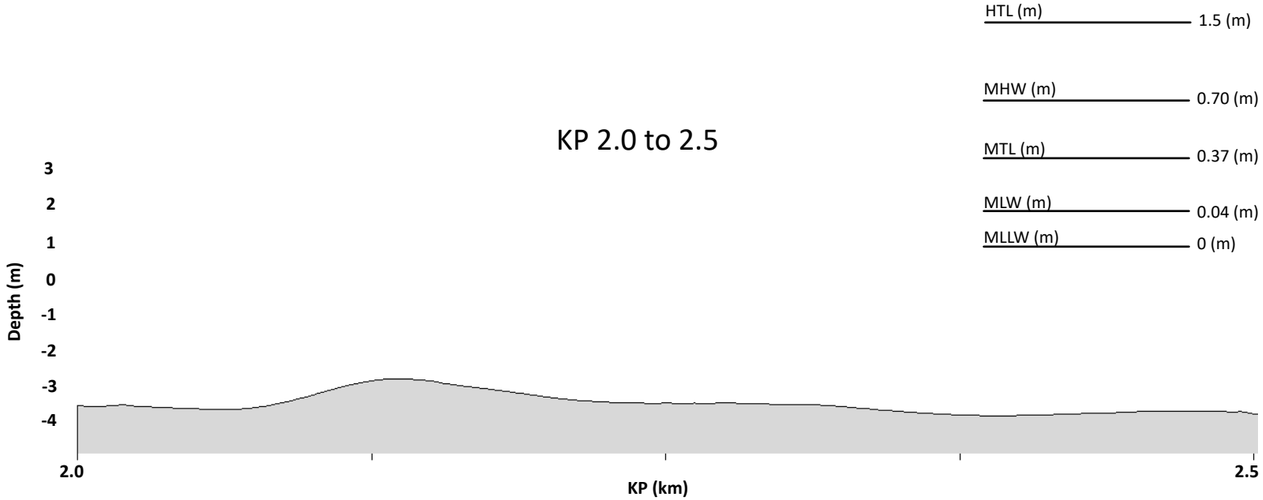
PHASE 2 OF NEW ENGLAND WIND

OECC OVERVIEW PLAN
USACE PERMIT APPLICATION SHEET 11

IN: ATLANTIC OCEAN AND NANTUCKET SOUND
AT: SOUTHEAST MASSACHUSETTS
JULY 28, 2022

New England Wind
AVANGRID RENEWABLES

KP 2.0 to 2.5



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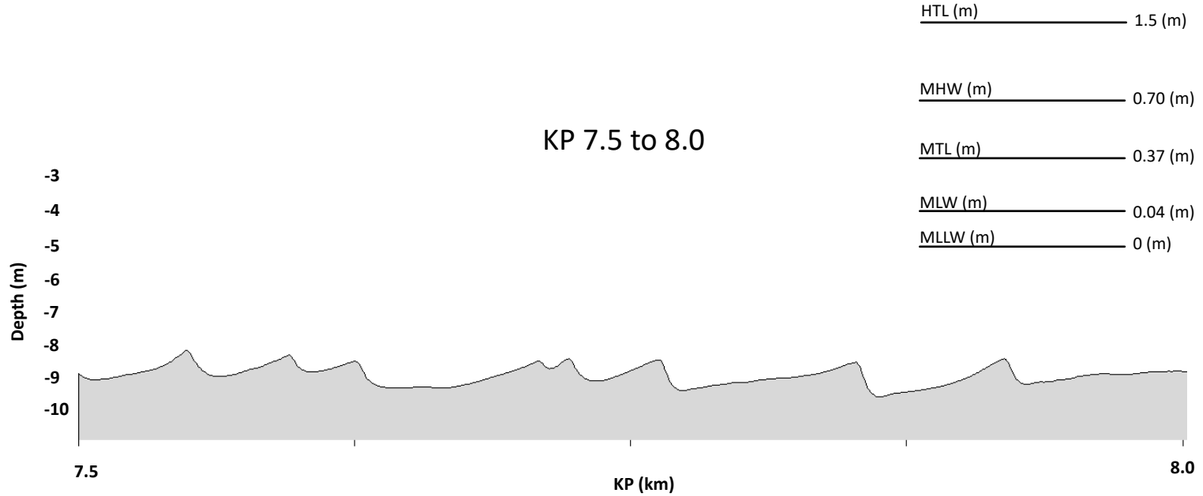

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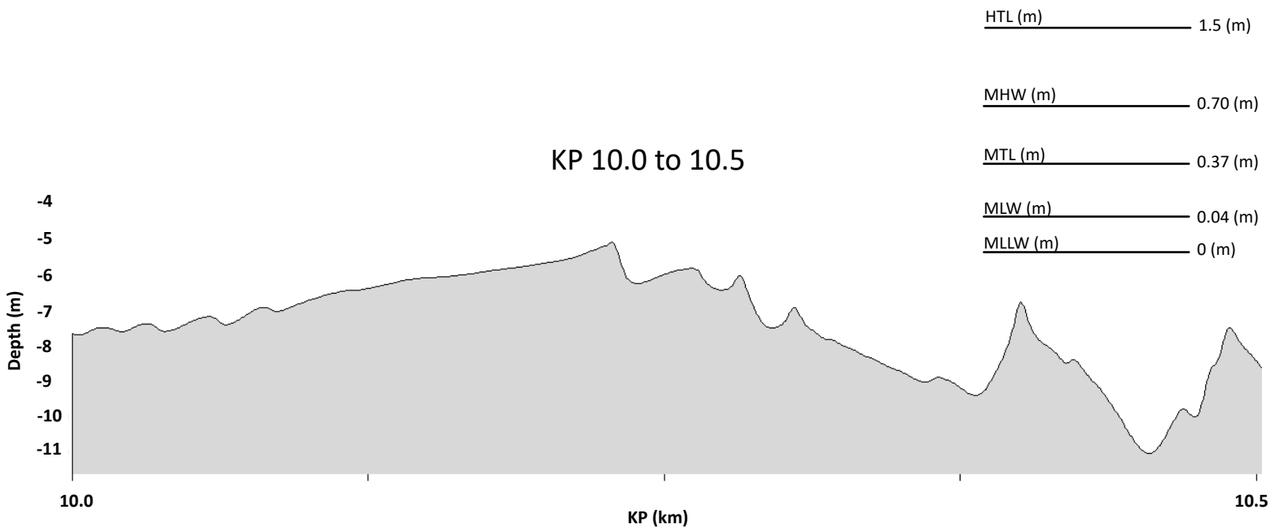
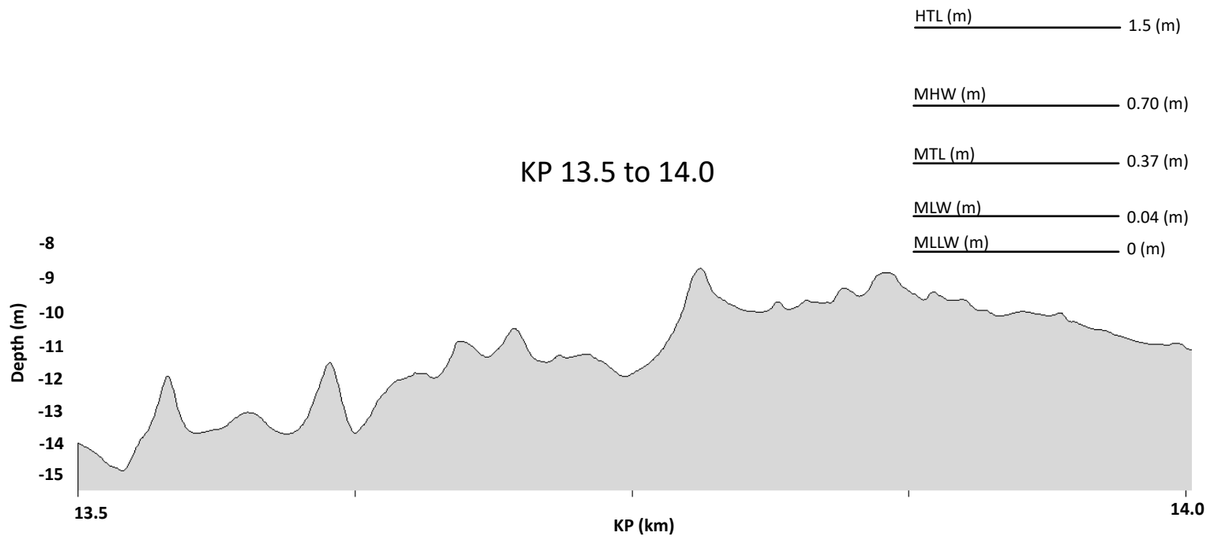


KP 13.5 to 14.0



Above vertical information are averages along the entire OECC path & were calculated using NOAAs Vertical Datum Transformer.
HTL as per NOAA station: Hyannisport

Datum: Mean Lower Low Water (MLLW)

Bathymetry Source: NEWIND_BATHY_UNIFIED_2020
(MBES data collected between 2018 and 2020 in the OECC)

Profiles: Not To Scale

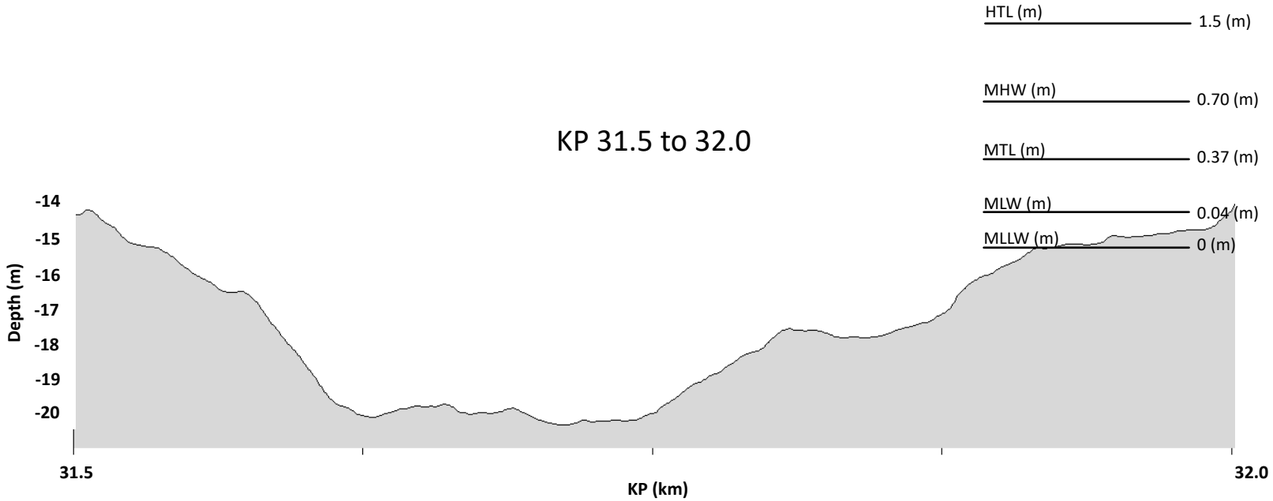
Sheet: 1 of 3

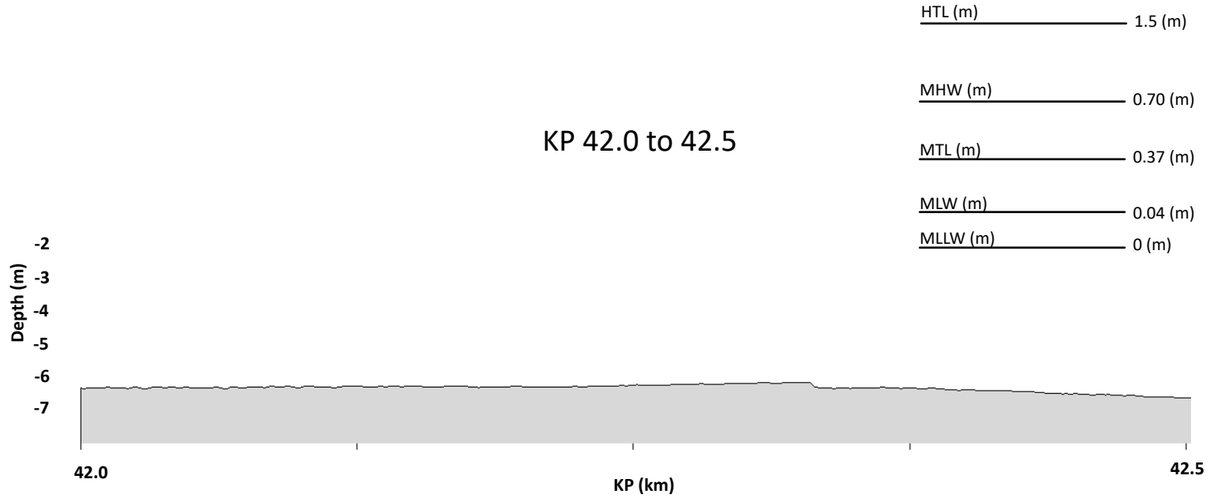
PHASE 2 OF NEW ENGLAND WIND

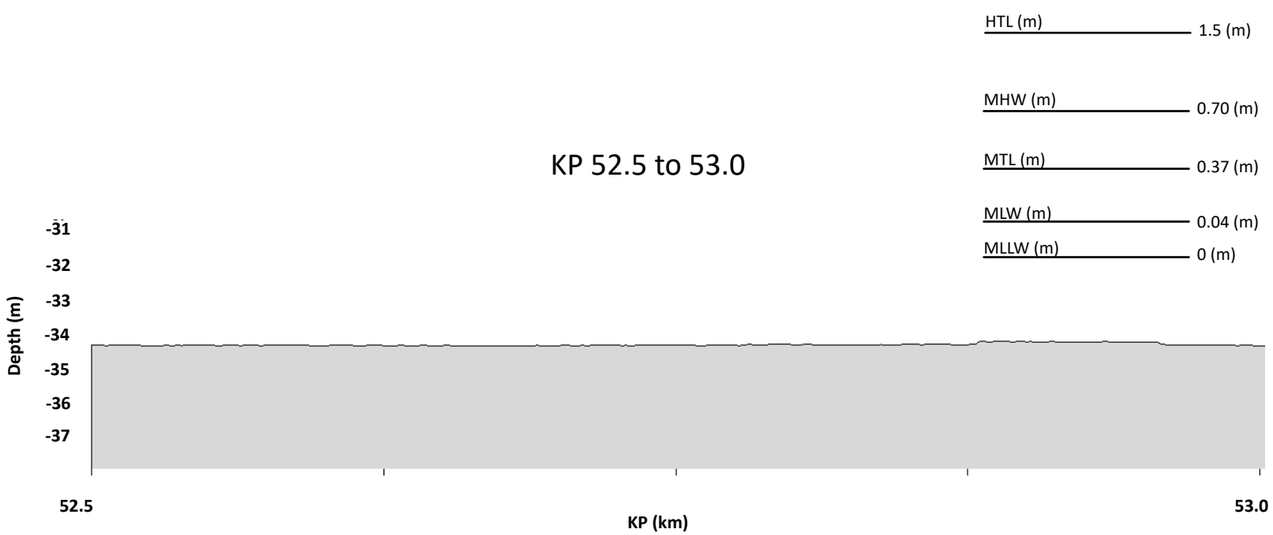
OECC PROFILES
USACE PERMIT APPLICATION SHEET 12-1

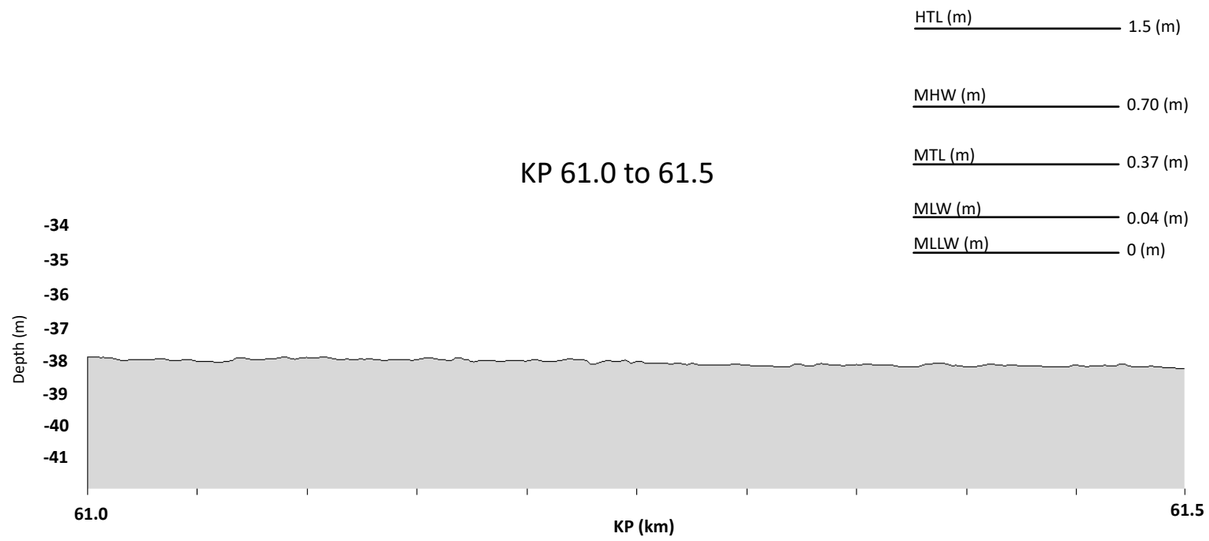
IN: ATLANTIC OCEAN AND NANTUCKET SOUND
AT: SOUTHEAST MASSACHUSETTS
JULY 28, 2022

New England Wind
AVANGRID RENEWABLES









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HTL as per NOAA station: Hyannisport

Datum: Mean Lower Low Water (MLLW)

Bathymetry Source: NEWIND_BATHY_UNIFIED_2020
(MBES data collected between 2018 and 2020 in the OECC)

Profiles: Not To Scale

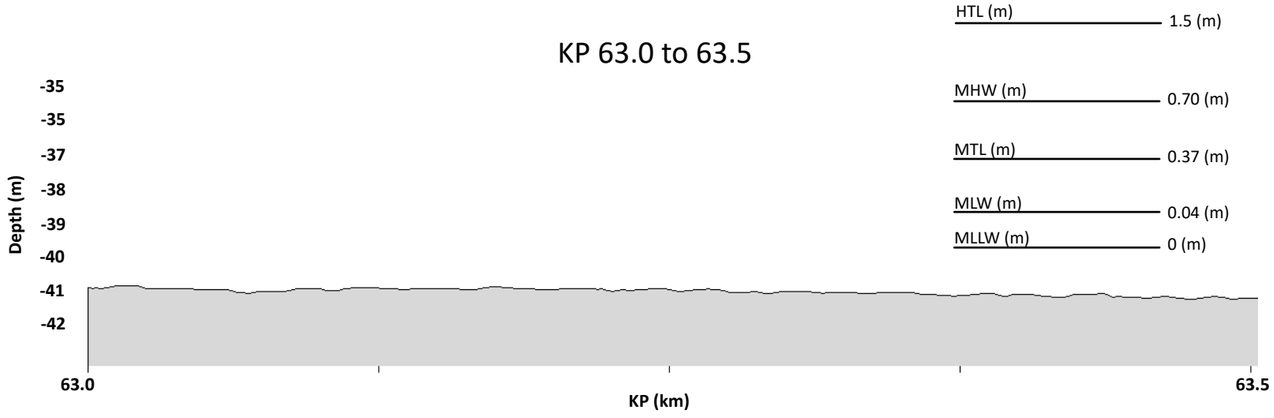
Sheet: 1 of 3

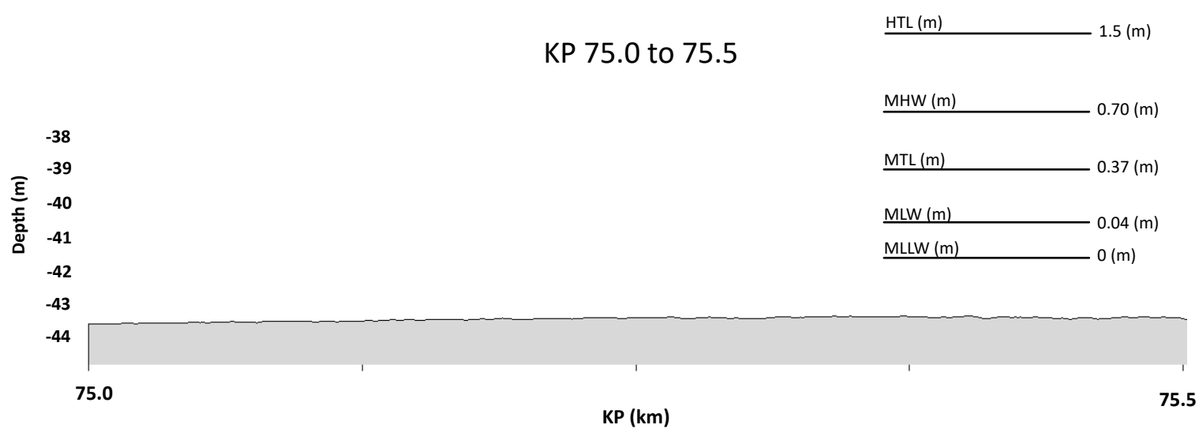
PHASE 2 OF NEW ENGLAND WIND

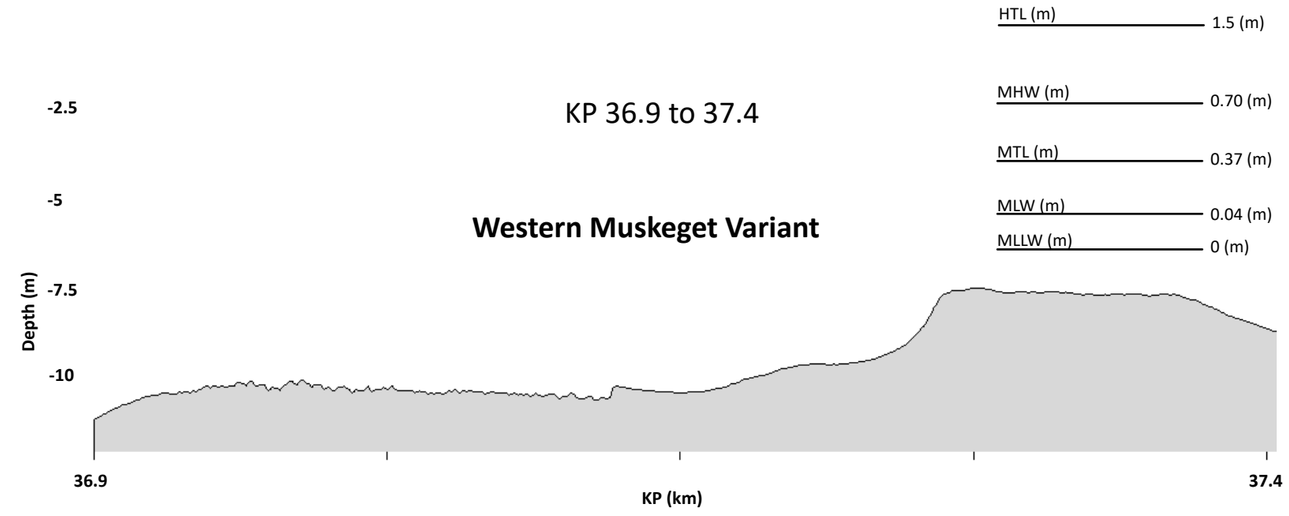
OECC PROFILES
USACE PERMIT APPLICATION SHEET 12-2

IN: ATLANTIC OCEAN AND NANTUCKET SOUND
AT: SOUTHEAST MASSACHUSETTS
JULY 28, 2022

New England Wind
AVANGRID RENEWABLES







Above vertical information are averages along the entire OECC path & were calculated using NOAAs Vertical Datum Transformer.
HTL as per NOAA station: Hyannisport

Datum: Mean Lower Low Water (MLLW)

Bathymetry Source: NEWIND_BATHY_UNIFIED_2020
(MBES data collected between 2018 and 2020 in the OECC)

Profiles: Not To Scale

Sheet: 1 of 3

PHASE 2 OF NEW ENGLAND WIND

OECC PROFILES
USACE PERMIT APPLICATION SHEET 12-3

IN: ATLANTIC OCEAN AND NANTUCKET SOUND
AT: SOUTHEAST MASSACHUSETTS
JULY 28, 2022

New England Wind
AVANGRID RENEWABLES

NEW ENGLAND WIND PHASE 2
DOWSES BEACH LANDING
HDD LANDFALL DRILL PATHS

INDEX OF SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	GENERAL NOTES
3	HDD OVERALL PLAN
4	HDD 1 PLAN AND PROFILE
5	HDD 2 PLAN AND PROFILE
6	HDD 3 PLAN AND PROFILE
7	HDD 1 CONSTRUCTION STAGING
8	HDD 2 CONSTRUCTION STAGING
9	HDD 3 CONSTRUCTION STAGING
10	EAST BAY CULVERT CROSSING

LOCATION MAP
SCALE: 1" = 10,000'

ALL UNITS SHOWN ARE 'ENGLISH UNITS' (FEET AND INCHES)

THIS PLAN SET IS PRELIMINARY AND HAS BEEN ISSUED FOR PERMITTING PURPOSES ONLY; AND, IS NOT INTENDED FOR CONSTRUCTION PURPOSES.

REV.	DATE	REVISION DESCRIPTION	STATUS	DRAWN	CHKD	APPRVD
B	2022-09-29	ISSUED FOR USACE PERMIT	IFI	RN	MD/EA	KEF
A	2022-08-19	ISSUED FOR CLIENT REVIEW	IFCR	RN	MD/EA	KEF

CONTRACTOR:

Stantec Consulting Services Inc.
400 Crown Colony Drive Suite 200
Quincy, MA U.S.A. 02169-0982

CLIENT:

125 High Street
Boston, MA 02110

PROJECT
NEW ENGLAND WIND PHASE 2
DOWSES BEACH LANDFALL SITE

TITLE:
HDD PLANS
USACE PERMIT APPLICATION SHEET 13-1

DOC ID:
CWW-HDD-STC-DW-0004-FED

SHEET 1 OF 10	DWG. NO.	SCALE	FORMAT/SIZE	REV:
		AS SHOWN	ANSI D	B

GENERAL NOTES

1. UNLESS OTHERWISE NOTED:
   1.1. DIMENSIONS ARE IN FEET.
   1.2. CHAINAGES ARE MEASURED ALONG A LEVEL PLAN OF DRILL PATH.
   1.3. ELEVATIONS OVER WATER ARE BASED ON MEAN LOWER LOW WATER (MLLW) DATUM FOR DOWSES BEACH (LONGITUDE −70.361478, LATITUDE 41.624038). DATUM WAS CONVERTED FROM NAVD88 TO MLLW WITH A CONVERSION OF 2.14 FEET AT DOWSES BEACH.
   1.4. DATUM FOR ALL LAND BASED ELEVATIONS IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), FROM DAWOOD SURVEY.
   1.5. INTERPOLATED SURFACE BETWEEN LAND SURVEY SURFACE AND MUDLINE SURFACE AS SHOWN ON PLANS IS BASED ON MLLW DATUM.
   1.6. DIMENSIONS ARE TO THE DRILL PATH CENTERLINE.
   1.7. ANGLES ARE ROUNDED TO THE NEAREST DEGREE.
2. THE HORIZONTAL REFERENCE DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD83).
3. BORING LOCATIONS SHOWN WERE PROVIDED BY AVANGRID, BORINGS WERE PERFORMED BY OTHERS
4. UNLESS OTHERWISE NOTED, THE DESIGN CONFORMS TO THE LATEST VERSION OF REFERENCED CODES AND STANDARDS IN EFFECT AT THE TIME OF DESIGN (AUGUST 12, 2022).
5. PIPELINE CONSTRUCTION TO COMPLY WITH THE PROJECT'S APPLICABLE HDD SPECIFICATIONS, CROSSING AGREEMENTS, PROJECT CONSTRUCTION SPECIFICATIONS AND FEDERAL, STATE AND MUNICIPAL REGULATIONS. REQUIREMENTS THAT THE CONTRACTOR CONSIDERS TO BE CONFLICTING SHALL BE REVIEWED BY THE PROJECT'S AUTHORIZED REPRESENTATIVE. HARD COPIES OF CROSSING AGREEMENT AND CONTRACT DOCUMENTS SHALL BE ON SITE DURING CONSTRUCTION.
6. BEFORE INITIATING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CALL DIGSAFE AT 811 AND ALSO VERIFY THE FIELD SURVEY DATA, TOPOGRAPHY AND LOCATION OF ALL EXISTING UTILITIES.
7. CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH CONTRACT DOCUMENTS AND HDD EXECUTION PLAN.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING DAMAGE TO ADJACENT STRUCTURES OR FACILITIES (ABOVE OR BELOW GROUND) DUE TO HDD OPERATIONS.
9. THE PILOT DRILL SHALL FOLLOW THE PATH SHOWN ON THE DRAWINGS WITH THE FOLLOWING REQUIREMENTS AND TOLERANCES IN ORDER OF PRECEDENCE:
   9.1. THE FINAL INSTALLATION SHALL BE CONSISTENT WITH OWNERS OFFSHORE EXPORT CABLE CORRIDOR (OECC).
   9.2. UNDERGROUND FACILITIES ARE PROTECTED AT ALL STAGES OF INSTALLATION, AND THE FINAL INSTALLATION IS WITHIN THE PERMISSIBLE DRILL ZONE AS DETERMINED BY THE GEOTECHNICAL SUB-SURFACE INVESTIGATIONS.
   9.3. ENTRY, EXIT, DEPTH AND ALIGNMENT TOLERANCES LISTED BELOW:
      9.3.1. ENTRY POINT: UP TO 3.0 FEET FORWARD OR BACK FROM THE DESIGNED ENTRY POINT; UP TO 3.0 FEET RIGHT OR LEFT OF THE DESIGNED ALIGNMENT.
      9.3.2. EXIT POINT: UP TO 10.0 FEET SHORT OR 15.0 FEET LONG RELATIVE TO THE DESIGNED EXIT POINT; UP TO 6.0 FEET RIGHT OR LEFT OF THE DESIGNED ALIGNMENTS.
      9.3.3. ELEVATION: UP TO 6.0 FEET ABOVE OR BELOW THE DESIGNED ALIGNMENT.
      9.3.4. ALIGNMENT: UP TO 6.0 FEET RIGHT OF LEFT OF THE DESIGNED ALIGNMENT.
10. FOR PRELIMINARY ESTIMATING PURPOSES ONLY, DRILL RIG SHALL BE SIZED BASED ON A MINIMUM PUSH/PULL FORCE OF 500,000 LBS.
11. EQUIPMENT FOR SOLIDS CONTROL SUCH AS SHAKERS AND CENTRIFUGES SHALL BE BASED ON MAINTENANCE OF DRILLING FLUID WITH MAXIMUM DENSITY AND MAXIMUM SAND CONTENT WITHIN LEVELS DETAILED IN CONTRACTOR DRILLING PLAN.
12. SURFACE CASING DIAMETER SHALL BE SIZED FOR THE FINAL REAM PASS.
13. INADVERTENT RELEASE PLAN AS IT PERTAINS TO FLUID RELEASE SHALL BE REVIEWED AND APPROVED BY ENGINEER AND ALL REQUIRED RESPONSE EQUIPMENT SHALL BE ON SITE PRIOR TO DRILLING.
14. BOREHOLE PRESSURE AND WATER SURFACE MUST BE MONITORED REGULARLY DURING ACTIVE DRILLING ACTIVITIES FOR A POTENTIAL RELEASE OF DRILLING FLUIDS. IF A FLUID RELEASE OCCURS, THE APPROVED INADVERTENT RELEASE PLAN SHALL BE IMPLEMENTED AND THE EFFECTS OF THE WORK ON THE AQUATIC ENVIRONMENT SHALL BE ASSESSED IN ACCORDANCE WITH RELEVANT FEDERAL, STATE AND LOCAL REGULATIONS.
15. TURBIDITY MEASUREMENTS AND ACTIVE MONITORING OF THE DRILL PATH SHALL BE CARRIED OUT DURING CONSTRUCTION AND IMMEDIATELY FOLLOWING A LOSS OF CIRCULATION EVENT.
16. DISPOSAL METHODS AND LOCATION OF DRILLING FLUID WASTE AND CUTTINGS SHALL COMPLY WITH ALL STATE AND LOCAL REGULATIONS AND GUIDELINES.
17. ENGINEERED DRILLING FLUID PLAN MUST BE IMPLEMENTED IN THE FIELD WITH PROPOSED EQUIPMENT.
18. ENGINEERED DRILLING FLUID PLAN MUST BE APPROVED AND ACCEPTED PRIOR TO COMMENCING DRILLING.
19. SPECIFICATIONS OF PROPOSED EQUIPMENT FOR ANNULAR PRESSURE MONITORING, DOWNHOLE SURVEY, SURFACE TRACKING AND ELECTRONIC DRILL RECORDING SHALL BE REVIEWED AND APPROVED BY THE PROJECT'S AUTHORIZED REPRESENTATIVE AND INSPECTED BEFORE DRILLING ACTIVITIES COMMENCE.
20. CONTRACTOR SHALL SERVE AS ENGINEER OF RECORD FOR THE HDD. ENGINEERING AND DESIGN PRODUCTS, AS WELL AS AS-BUILT DATA, SHALL BE SEALED BY CONTRACTOR'S PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS.
21. DEWATERING ACTIVITIES SHALL BE CONDUCTED IN A MANNER SO AS TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OPERATIONS. DEWATERING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH PROJECT PERMITS AND APPROVALS INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION GENERAL PERMIT (CGP) FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES.

DOWSES BEACH HDD LANDING SHEET INDEX

SCALE: 1" = 200'

0 200 400 600 800

SCALE: 1" = 200'

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B	2022-09-29	ISSUED FOR USACE PERMIT	IFI	RN	MD/EA	KEF
A	2022-08-19	ISSUED FOR CLIENT REVIEW	IFCR	RN	MD/EA	KEF

CONTRACTOR: Stantec
Stantec Consulting Services Inc.
400 Crown Colony Drive Suite 200
Quincy, MA U.S.A. 02169-0982

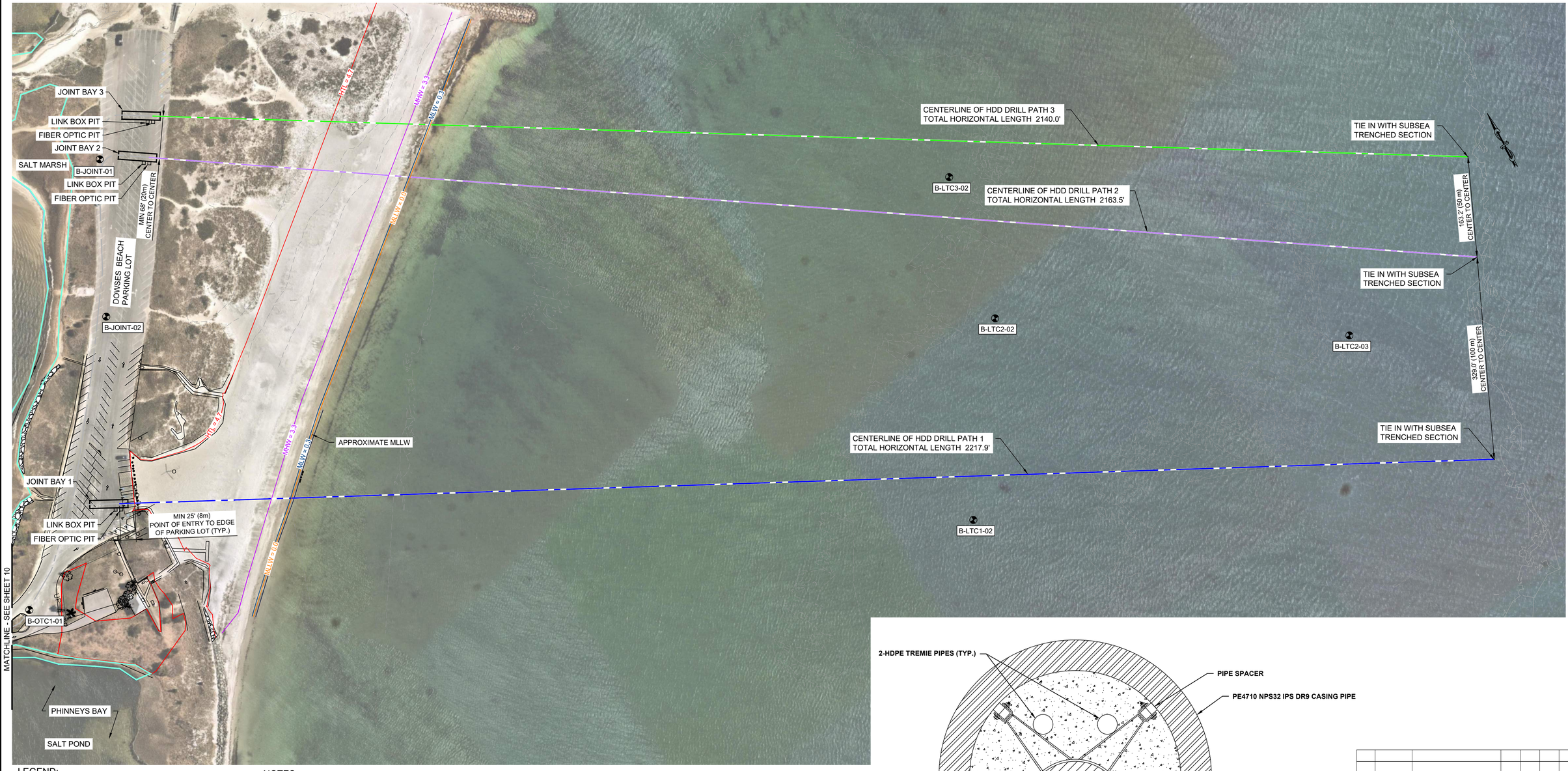
CLIENT: New England Wind, AVANGRID RENEWABLES
125 High Street
Boston, MA 02110

PROJECT: NEW ENGLAND WIND PHASE 2
DOWSES BEACH LANDFALL SITE

TITLE: HDD PLANS
USACE PERMIT APPLICATION SHEET 13-2

DOC ID: CWW-HDD-STC-DW-0004-FED

SHEET 2 OF 10 | DWG. NO. | SCALE: AS SHOWN | FORMAT/SIZE: ANSI D | REV: B



LEGEND:

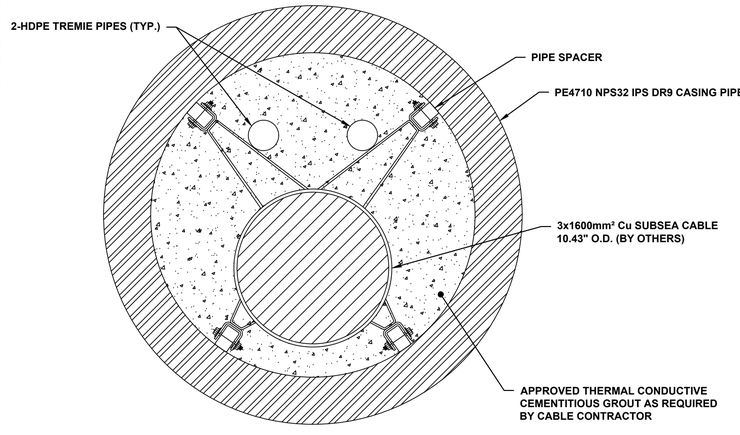
- CENTERLINE OF DRILL PATH 1
- CENTERLINE OF DRILL PATH 2
- CENTERLINE OF DRILL PATH 3
- CONSTRUCTION FENCE
- HTL — HIGH TIDE LINE
- MHW — MEAN HIGH WATER LINE
- MLW — MEAN LOW WATER LINE
- MLLW — MEAN LOWER LOW WATER LINE
- EXPORT POWER CABLE PATH
- BORING

NOTES:

1. REFER TO GENERAL NOTES ON SHEET 2.
2. THESE SKETCHES ARE CONCEPTUAL IN NATURE AND ARE NOT FOR CONSTRUCTION. ONLY MAJOR PIECES OF EQUIPMENT ARE SHOWN AND ALL FEATURES SHOWN ARE APPROXIMATE. THE ACTUAL SITE ARRANGEMENT WILL BE DETERMINED BY THE HDD CONTRACTOR.
3. UTILITIES LOCATIONS ARE UNKNOWN. ANY EXISTING UTILITIES MUST BE LOCATED PRIOR TO CONSTRUCTION BY CALLING DIG SAFE PRIOR TO EXCAVATION AND EXPOSING ANY EXISTING UTILITIES AS NEEDED. REQUIRED CLEARANCES SHALL BE PROVIDED FOR ANY EXISTING OVERHEAD UTILITIES.
4. THIS LAYOUT HAS BEEN BASED ON ANTICIPATED MINIMUM SEPARATION DISTANCES OF ADJACENT HDD BORES AT THE ENTRY PITS AND AT THE MHW MARK. INTENDED MINIMUM SEPARATION AT THE EXIT POINT IS AS SHOWN ON PLAN. FINAL DESIGN OF ALL HDD DRILLPATHS WILL BE COMPLETED BY THE HDD CONTRACTOR FOR REVIEW BY AVANGRID.
5. BORING LOCATIONS SHOWN WERE PROVIDED BY AVANGRID, BORINGS WERE PERFORMED BY OTHERS.
6. TIDAL DATA INTERPOLATED FROM DAWOOD SURVEY OUTSIDE OF DAWOOD SURVEY LIMITS.
7. REFER TO DRAWING SET CWW-OCP-STC-DW-0001 FOR DETAILS OF INTERFACING 275 kV DUCT BANK.

0 80 200 300

SCALE: 1" = 80'



TYPICAL CROSS SECTION

0 5 10 15 20

SCALE: 1" = 5"

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400 Crown Colony Drive Suite 200
Quincy, MA U.S.A. 02169-0982

CLIENT:
New England Wind
AVANGRID RENEWABLES
125 High Street
Boston, MA 02110

PROJECT
NEW ENGLAND WIND PHASE 2
DOWSES BEACH LANDFALL SITE

TITLE:
HDD PLANS
USACE PERMIT APPLICATION SHEET 13-3

DOC ID:
CWW-HDD-STC-DW-0004-FED

SHEET	DWG. NO.	SCALE	FORMAT/SIZE	REV:
3 OF 10		AS SHOWN	ANSI D	B

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by: rothnagle, robert

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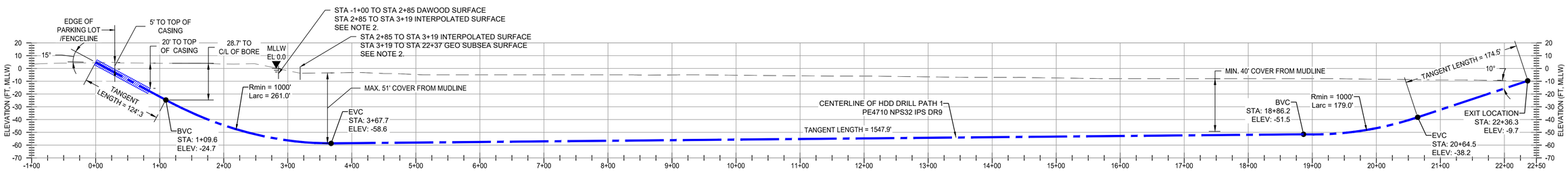

PROFILE

HOR. 1" = 80'
80 0 80 160
40 0 40 80
VER. 1" = 40'

NOTES:

1. REFER TO GENERAL NOTES ON SHEET 2.
2. GEO SUBSEA SURFACE PROVIDED IN NOAA MLLW DAWOOD SURVEY SURFACE PROVIDED IN NAVD88 DATUM. DAWOOD SURVEY CONVERTED FROM NAVD88 TO NOAA MLLW WITH A CONVERSION OF 2.14 FEET AT CRAIGVILLE BEACH. INTERPOLATED SURFACE SHOWN IN NOAA MLLW.
3. CONTRACTOR TO CONSTRUCT APPROPRIATE CONTAINMENT FOR DRILLING MUD.
4. THIS LAYOUT HAS BEEN BASED ON ANTICIPATED MINIMUM SEPARATION DISTANCES OF ADJACENT HDD BORES AT THE ENTRY PITS AND AT THE MHW MARK. INTENDED MINIMUM SEPARATION AT THE EXIT POINT IS AS SHOWN ON PLAN. FINAL DESIGN OF ALL HDD DRILLPATHS WILL BE COMPLETED BY THE HDD CONTRACTOR FOR REVIEW BY AVANGRID.
5. PROFILE AND CASING DEPTH SHALL BE REFINED AFTER COMPLETION OF OFFSHORE GEOTECHNICAL INVESTIGATION BY AVANGRID.
6. OFFSHORE BOREHOLE LOCATIONS INDICATED ON PLAN ARE PROPOSED AND HAVE NOT BEEN DRILLED.
7. PIPE SPECIFICATIONS ARE FOR REFERENCE ONLY. FINAL PIPE SPECIFICATIONS WILL BE DETERMINED AFTER COMPLETION OF A STRESS ANALYSIS.

LEGEND:

- CENTERLINE OF DRILL PATH 1
- CONSTRUCTION FENCE
- HTL — HIGH TIDE LINE
- MHW — MEAN HIGH WATER LINE
- MLW — MEAN LOW WATER LINE
- MLLW — MEAN LOWER LOW WATER LINE
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CLIENT:
New England Wind
AVANGRID RENEWABLES
125 High Street
Boston, MA 02110

PROJECT
NEW ENGLAND WIND PHASE 2
DOWSES BEACH LANDFALL SITE

TITLE:
HDD PLANS
USACE PERMIT APPLICATION SHEET 13-4

DOC ID:
CWW-HDD-STC-DW-0004-FED

SHEET	DWG. NO.	SCALE	FORMAT/SIZE	REV:
4 OF 10		AS SHOWN	ANSI D	B

ORIGINAL SHEET - ANSI D

by: rothnagle, robert
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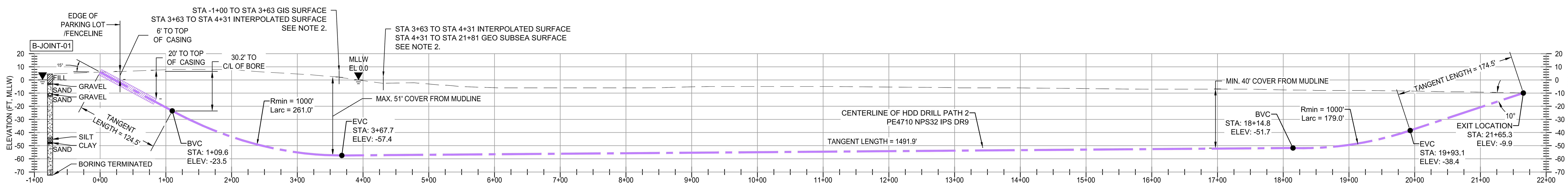
0 80 200 300

SCALE: 1" = 80'



PROFILE

HOR. 1" = 80'

VER. 1" = 40'

NOTES:

1. REFER TO GENERAL NOTES ON SHEET 2.
2. GEO SUBSEA SURFACE PROVIDED IN NOAA MLLW DAWOOD SURVEY SURFACE PROVIDED IN NAVD88 DATUM. DAWOOD SURVEY CONVERTED FROM NAVD88 TO NOAA MLLW WITH A CONVERSION OF 2.14 FEET AT CRAIGVILLE BEACH. INTERPOLATED SURFACE SHOWN IN NOAA MLLW.
3. CONTRACTOR TO CONSTRUCT APPROPRIATE CONTAINMENT FOR DRILLING MUD.
4. THIS LAYOUT HAS BEEN BASED ON ANTICIPATED MINIMUM SEPARATION DISTANCES OF ADJACENT HDD BORES AT THE ENTRY PITS AND AT THE MHW MARK. INTENDED MINIMUM SEPARATION AT THE EXIT POINT IS AS SHOWN ON PLAN. FINAL DESIGN OF ALL HDD DRILLPATHS WILL BE COMPLETED BY THE HDD CONTRACTOR FOR REVIEW BY AVANGRID.
5. PROFILE AND CASING DEPTH SHALL BE REFINED AFTER COMPLETION OF OFFSHORE GEOTECHNICAL INVESTIGATION BY AVANGRID.
6. OFFSHORE BOREHOLE LOCATIONS INDICATED ON PLAN ARE PROPOSED AND HAVE NOT BEEN DRILLED.
7. PIPE SPECIFICATIONS ARE FOR REFERENCE ONLY. FINAL PIPE SPECIFICATIONS WILL BE DETERMINED AFTER COMPLETION OF A STRESS ANALYSIS.
8. TIDAL DATA INTERPOLATED FROM DAWOOD SURVEY OUTSIDE OF DAWOOD SURVEY LIMITS.

LEGEND:

- CENTERLINE OF DRILL PATH 2
- CENTERLINE OF DRILL PATH 3
- CONSTRUCTION FENCE
- HTL — HIGH TIDE LINE
- MHW — MEAN HIGH WATER LINE
- MLW — MEAN LOW WATER LINE
- MLLW — MEAN LOWER LOW WATER LINE
- BORING

ALL UNITS SHOWN ARE 'ENGLISH UNITS' (FEET AND INCHES)

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REV.	DATE	REVISION DESCRIPTION	STATUS	DRAWN	CHKD	APPRVD
B	2022-09-29	ISSUED FOR USACE PERMIT	IFI	RN	MD/EA	KEF
A	2022-08-19	ISSUED FOR CLIENT REVIEW	IFCR	RN	MD/EA	KEF

CONTRACTOR:

Stantec
Stantec Consulting Services Inc.
400 Crown Colony Drive Suite 200
Quincy, MA U.S.A. 02169-0982

CLIENT:

New England Wind
125 High Street
Boston, MA 02110

PROJECT: NEW ENGLAND WIND PHASE 2 DOWSES BEACH LANDFALL SITE

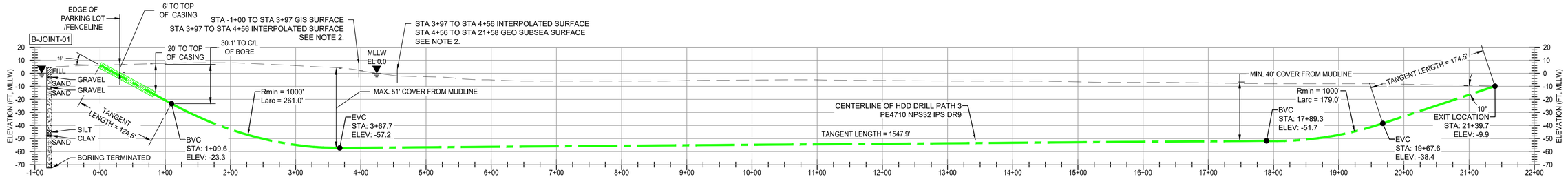
TITLE: HDD PLANS USACE PERMIT APPLICATION SHEET 13-5

DOC ID: CWW-HDD-STC-DW-0004-FED

SHEET	DWG. NO.	SCALE	FORMAT/SIZE	REV:
5 OF 10		AS SHOWN	ANSI D	B

0 80 200 300

SCALE: 1" = 80'



PROFILE

HOR. 1" = 80'

80 0 80 160

40 0 40 80

VER. 1" = 40'

LEGEND:

- CENTERLINE OF DRILL PATH 2
- CENTERLINE OF DRILL PATH 3
- CONSTRUCTION FENCE
- HTL — HIGH TIDE LINE
- MHW — MEAN HIGH WATER LINE
- MLW — MEAN LOW WATER LINE
- MLLW — MEAN LOWER LOW WATER LINE
- BORING

NOTES:

1. REFER TO GENERAL NOTES ON SHEET 2.
2. GEO SUBSEA SURFACE PROVIDED IN NOAA MLLW DAWOOD SURVEY SURFACE PROVIDED IN NAVD88 DATUM. DAWOOD SURVEY CONVERTED FROM NAVD88 TO NOAA MLLW WITH A CONVERSION OF 2.14 FEET AT CRAIGVILLE BEACH. INTERPOLATED SURFACE SHOWN IN NOAA MLLW.
3. CONTRACTOR TO CONSTRUCT APPROPRIATE CONTAINMENT FOR DRILLING MUD.
4. THIS LAYOUT HAS BEEN BASED ON ANTICIPATED MINIMUM SEPARATION DISTANCES OF ADJACENT HDD BORES AT THE ENTRY PITS AND AT THE MHW MARK. INTENDED MINIMUM SEPARATION AT THE EXIT POINT IS AS SHOWN ON PLAN. FINAL DESIGN OF ALL HDD DRILLPATHS WILL BE COMPLETED BY THE HDD CONTRACTOR FOR REVIEW BY AVANGRID.
5. PROFILE AND CASING DEPTH SHALL BE REFINED AFTER COMPLETION OF OFFSHORE GEOTECHNICAL INVESTIGATION BY AVANGRID.
6. OFFSHORE BOREHOLE LOCATIONS INDICATED ON PLAN ARE PROPOSED AND HAVE NOT BEEN DRILLED.
7. PIPE SPECIFICATIONS ARE FOR REFERENCE ONLY. FINAL PIPE SPECIFICATIONS WILL BE DETERMINED AFTER COMPLETION OF A STRESS ANALYSIS.
6. TIDAL DATA INTERPOLATED FROM DAWOOD SURVEY OUTSIDE OF DAWOOD SURVEY LIMITS.

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400 Crown Colony Drive Suite 200
Quincy, MA U.S.A. 02169-0982

CLIENT:
New England Wind
AVANGRID RENEWABLES
125 High Street
Boston, MA 02110

PROJECT
NEW ENGLAND WIND PHASE 2
DOWSES BEACH LANDFALL SITE

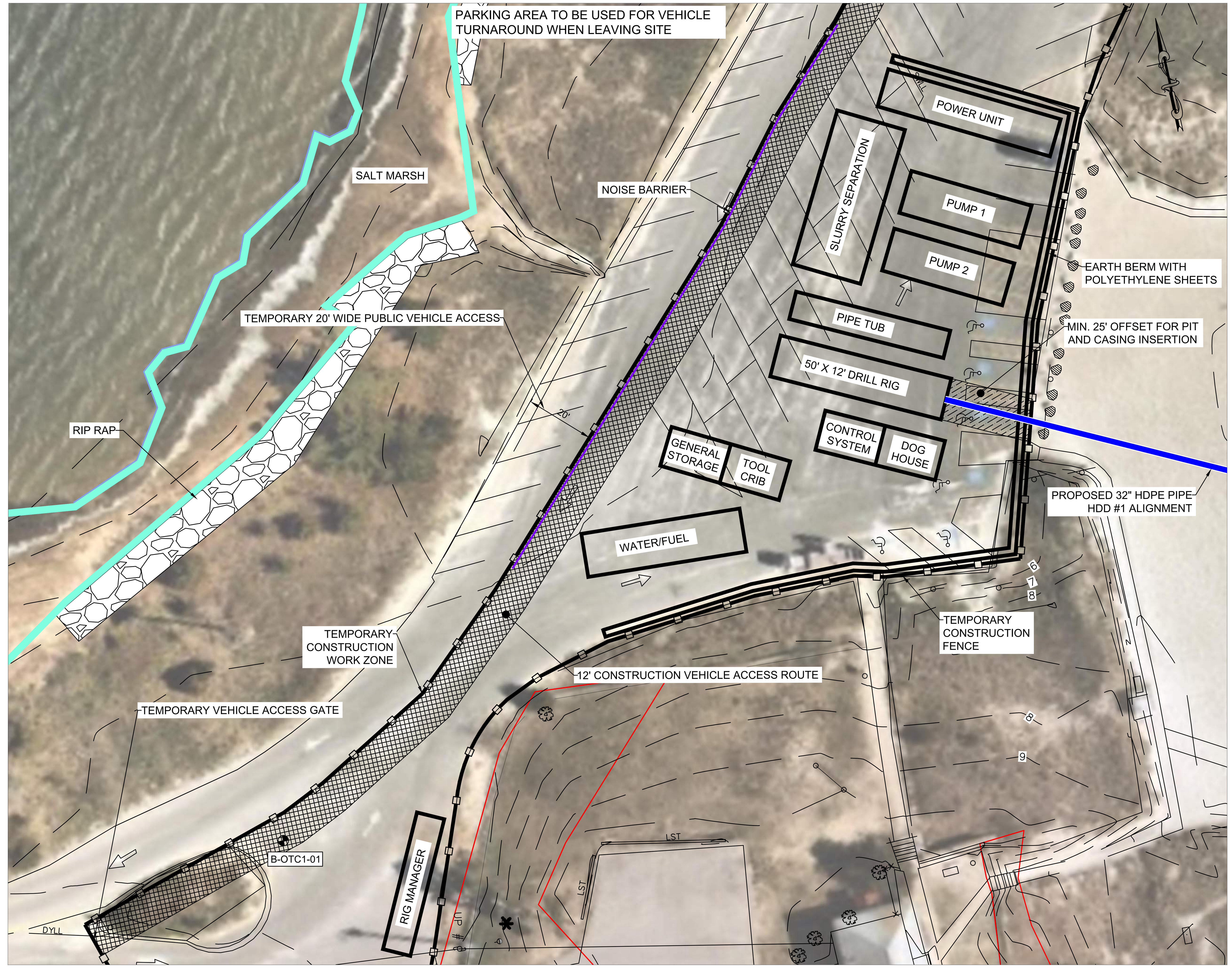
TITLE:
HDD PLANS
USACE PERMIT APPLICATION SHEET 13-6

DOC ID:
CWW-HDD-STC-DW-0004-FED

SHEET	DWG. NO.	SCALE	FORMAT/SIZE	REV:
6 OF 10		AS SHOWN	ANSI D	B

NOTES:

1. REFER TO GENERAL NOTES ON SHEET 2



0 20 50 100

SCALE: 1" = 20'

TEMPORARY CONSTRUCTION WORK ZONE

0 100 200 300 400

SCALE: 1" = 100'

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400 Crown Colony Drive Suite 200
Quincy, MA U.S.A. 02169-0982

CLIENT:

New England Wind
125 High Street
Boston, MA 02110

PROJECT

NEW ENGLAND WIND PHASE 2
DOWSES BEACH LANDFALL SITE

TITLE:

HDD PLANS
USACE PERMIT APPLICATION SHEET 13-7

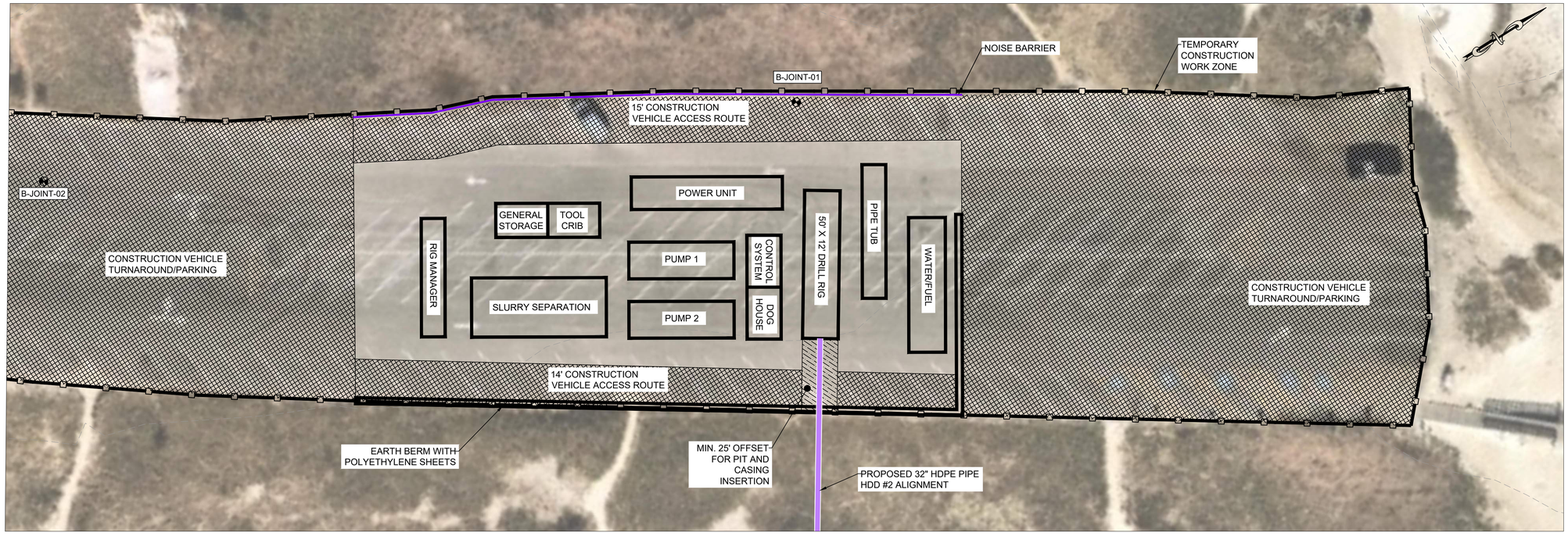
DOC ID: CWW-HDD-STC-DW-0004-FED

SHEET	DWG. NO.	SCALE	FORMAT/SIZE	REV:
7 OF 10		AS SHOWN	ANSI D	B

ORIGINAL SHEET - ANSI D

NOTES:

1. REFER TO GENERAL NOTES ON SHEET 2



0 20 50 100

SCALE: 1" = 20'

0 100 200 300 400

SCALE: 1" = 100'

ALL UNITS SHOWN ARE 'ENGLISH UNITS' (FEET AND INCHES)

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CONTRACTOR:

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Quincy, MA U.S.A. 02169-0982

CLIENT:

New England Wind

125 High Street
Boston, MA 02110

PROJECT

NEW ENGLAND WIND PHASE 2
DOWSES BEACH LANDFALL SITE

TITLE:

HDD PLANS
USACE PERMIT APPLICATION SHEET 13-8

DOC ID: CWW-HDD-STC-DW-0004-FED

SHEET	DWG. NO.	SCALE	FORMAT/SIZE	REV:
8 OF 10		AS SHOWN	ANSI D	B

ORIGINAL SHEET - ANSI D

C:\pw\work\d\d0441483\cww-hdd-stc-dw-0004 2022.09.29 7:32:24 AM by: rothnoglr, robert

0 20 50 100

SCALE: 1" = 20'

0 100 200 300 400

SCALE: 1" = 100'

NOTES:

1. REFER TO GENERAL NOTES ON SHEET 2

ALL UNITS SHOWN ARE 'ENGLISH UNITS' (FEET AND INCHES)

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CLIENT:
New England Wind
125 High Street
Boston, MA 02110

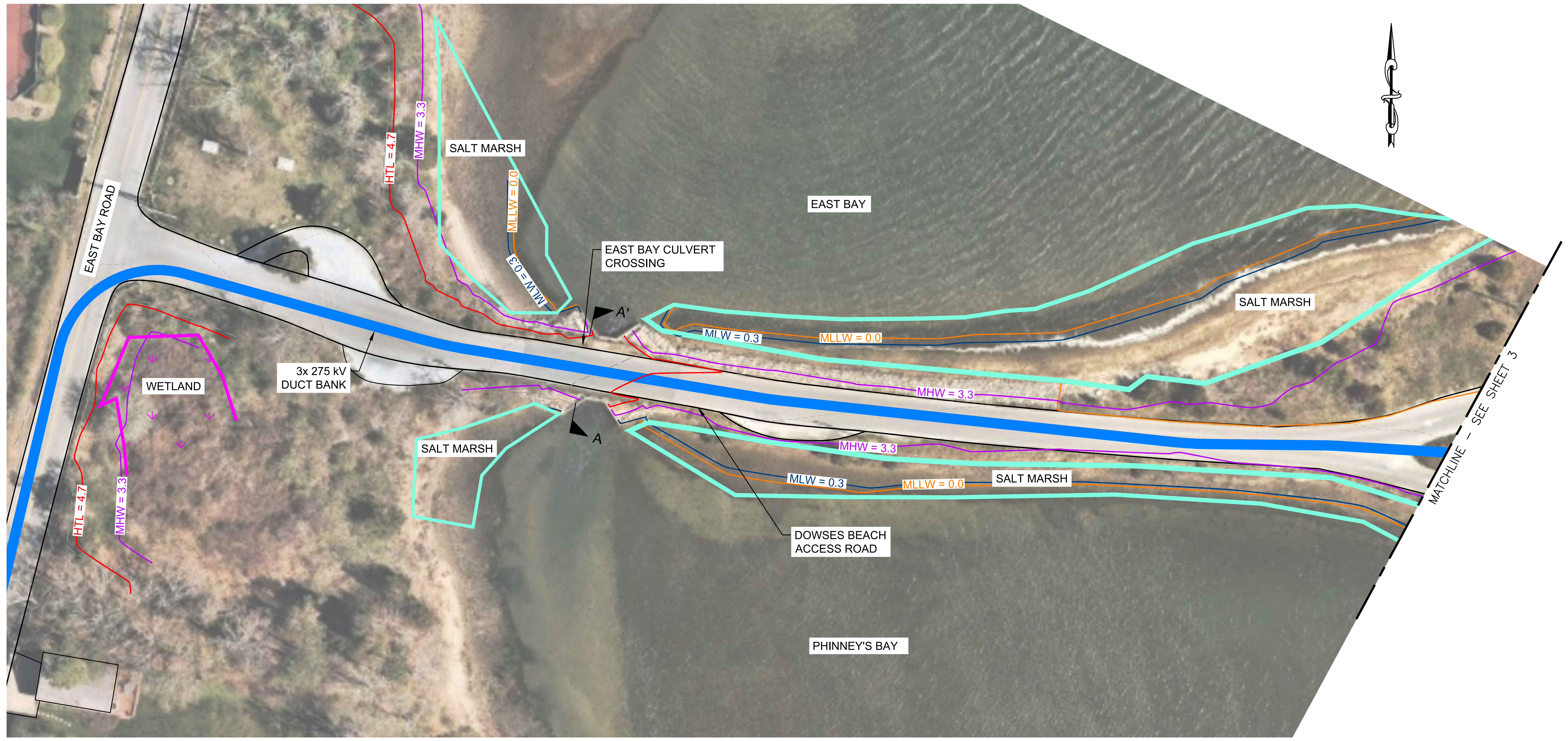
PROJECT
NEW ENGLAND WIND PHASE 2
DOWSES BEACH LANDFALL SITE

TITLE:
HDD PLANS
USACE PERMIT APPLICATION SHEET 13-9

DOC ID:
CWW-HDD-STC-DW-0004-FED

SHEET	DWG. NO.	SCALE	FORMAT/SIZE	REV:
9 OF 10		AS SHOWN	ANSI D	B

ORIGINAL SHEET - ANSI D

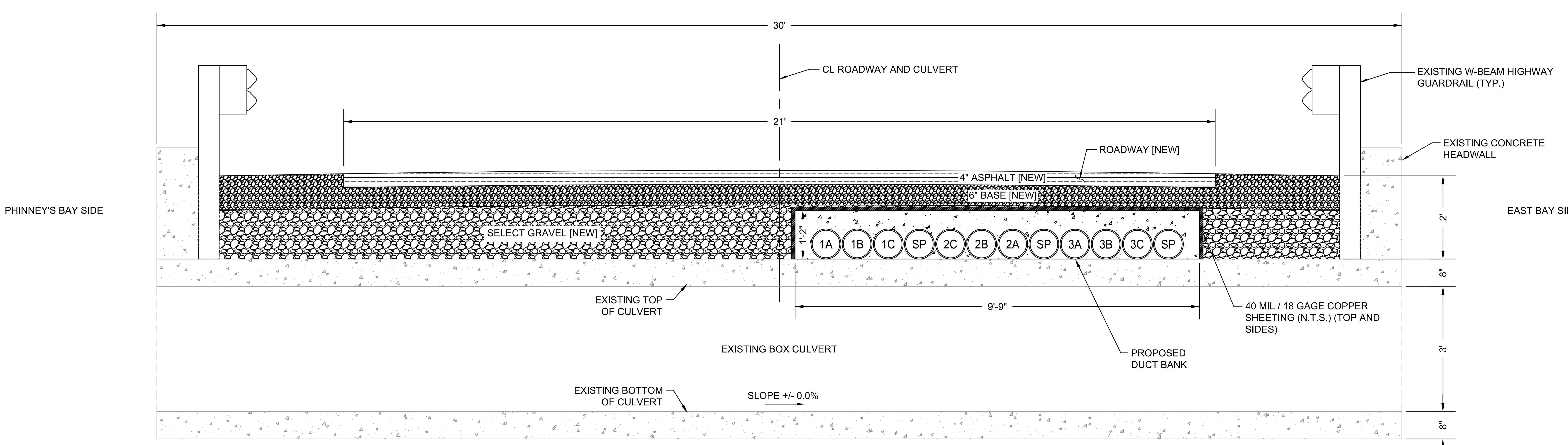


EAST BAY CULVERT CROSSING

SCALE: 1" = 40'

0 40 100 160

SCALE: 1" = 40'



SECTION A–A'

ALL UNITS SHOWN ARE 'ENGLISH UNITS' (FEET AND INCHES)

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CONTRACTOR:

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Quincy, MA U.S.A. 02169–0982

CLIENT:

New England Wind

125 High Street
Boston, MA 02110

PROJECT

NEW ENGLAND WIND PHASE 2
DOWSES BEACH LANDFALL SITE

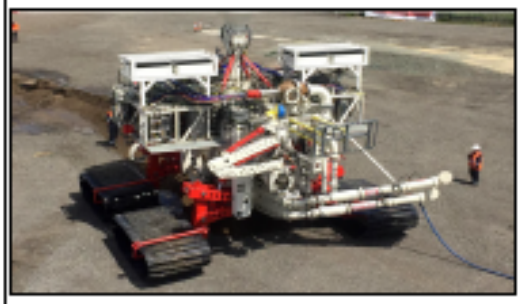
TITLE:

HDD PLANS
USACE PERMIT APPLICATION SHEET 13-10

DOC ID: CWW-HDD-STC-DW-0004-FED

SHEET 10 OF 10	DWG. NO.	SCALE	FORMAT/SIZE	REV:
		AS SHOWN	ANSI D	B

ORIGINAL SHEET - ANSI D

Burial tool category	Description	Example (Tool name, Contractor)	Photography
Jetting tool	A Jetting tool works by fluidising the seabed using a combination of high flow low pressure and low flow high pressure water jets to 'cut' the soil. These tools can generally be used in tracked or free-swimming mode. This type of tool typically provide a nominal cable burial depth of up to 3 m.	T1200, HELIX	
Hybrid (jet trencher and mechanical trencher)	A hybrid trencher comprises both jetting and cutting systems (wheel cutter or chain cutter). This burial tool is tracked and can generally provide a nominal cable burial depth of up to 3.5 m. It has the advantage of being able to handle "rocky" and hard seabed conditions.	Hi-Track, Royal IHC	
Jet plough	A jet plough is the same tool as a standard cable plough but with an additional jetting function. The high flow/low pressure water jets fluidise the sand directly in front of the plough share which allows the plough to move through the sand with much less resistance. Subject to prevailing conditions, jet ploughs can generally provide a nominal cable burial depth of up to 3.5 m.	HD3 Plough, Prysmian	
Jetting tool - Vertical Injector	The Jetting tool (Vertical Injector) is a vessel or barge mounted sub-sea jetting tool capable of burial depths up to 10 m depending on conditions. Vis are generally considered to be a 'shallow water' tool and can operate in water depths up to 40 m using pressurized water to trench trough sand and clay while simultaneously laying the cable.	VI, Boskalis	

Source: COP Vol. III, Appendix III-P (Table 5-2)

Figure 1.3-1
Export Cable Burial Equipment

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Craigville Public Beach Landfall Site (Phase 1)

Dowses Beach Landfall Site (Phase 2)

Federal Waters

Federal Waters

OCS-A 0501

NANTUCKET SOUND AND APPROACHES

UNITED STATES - EAST COAST
MASSACHUSETTS

Note:
Soundings for NOAA Nautical Chart 13237 (top) are in feet.
Soundings for NOAA Nautical Chart 13200 (bottom) are in fathoms.

LEGEND

- Complex Seafloor Where Dredged Material May Be Deposited*
- New England Wind Offshore Export Cable Corridor (OECC)
- Maximum Size of Southern Wind Development Area (SWDA)
- Lease Area Boundary
- State/Federal Boundary

**This figure shows the locations in the OECC where sand waves and sand bedforms greater than 0.3 m (0.98 ft) relief were present at the time of the survey. Sand wave and sand bedform locations are subject to change over time.*

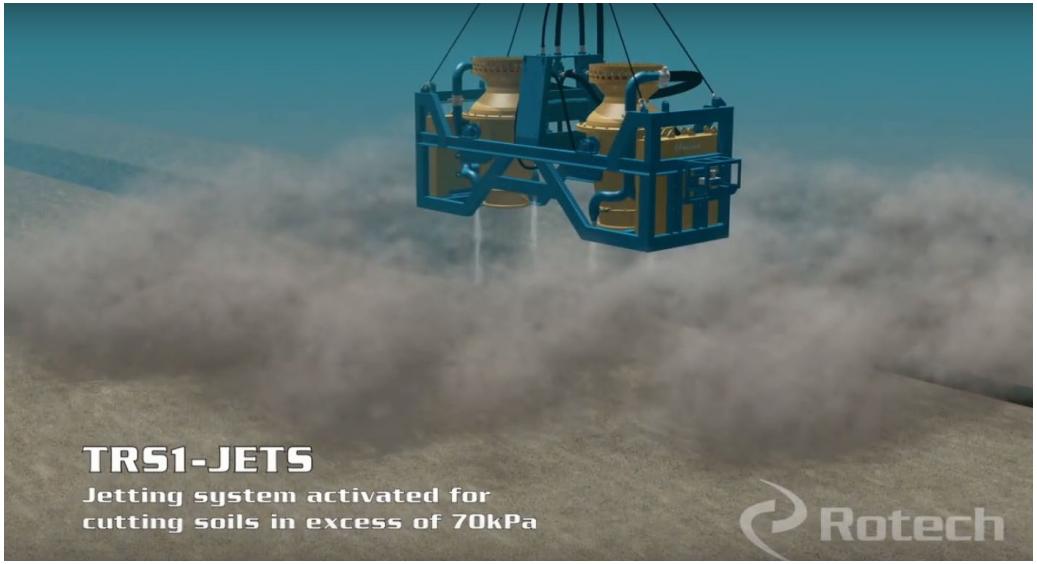
Scale 1:190,080
1 inch = 3 miles

0 1.5 3 Miles

Map Coordinate System: NAD 1983 UTM Zone 19N
Basemap: Nautical Chart 13200/13237, NOAA

New England Wind
AVANGRID RENEWABLES

Figure 1.3-2
Location of Potential Sand Wave Dredging and Dredged Material Deposition



Source: http://www.rotech.co.uk/subsea-video-gallery.html

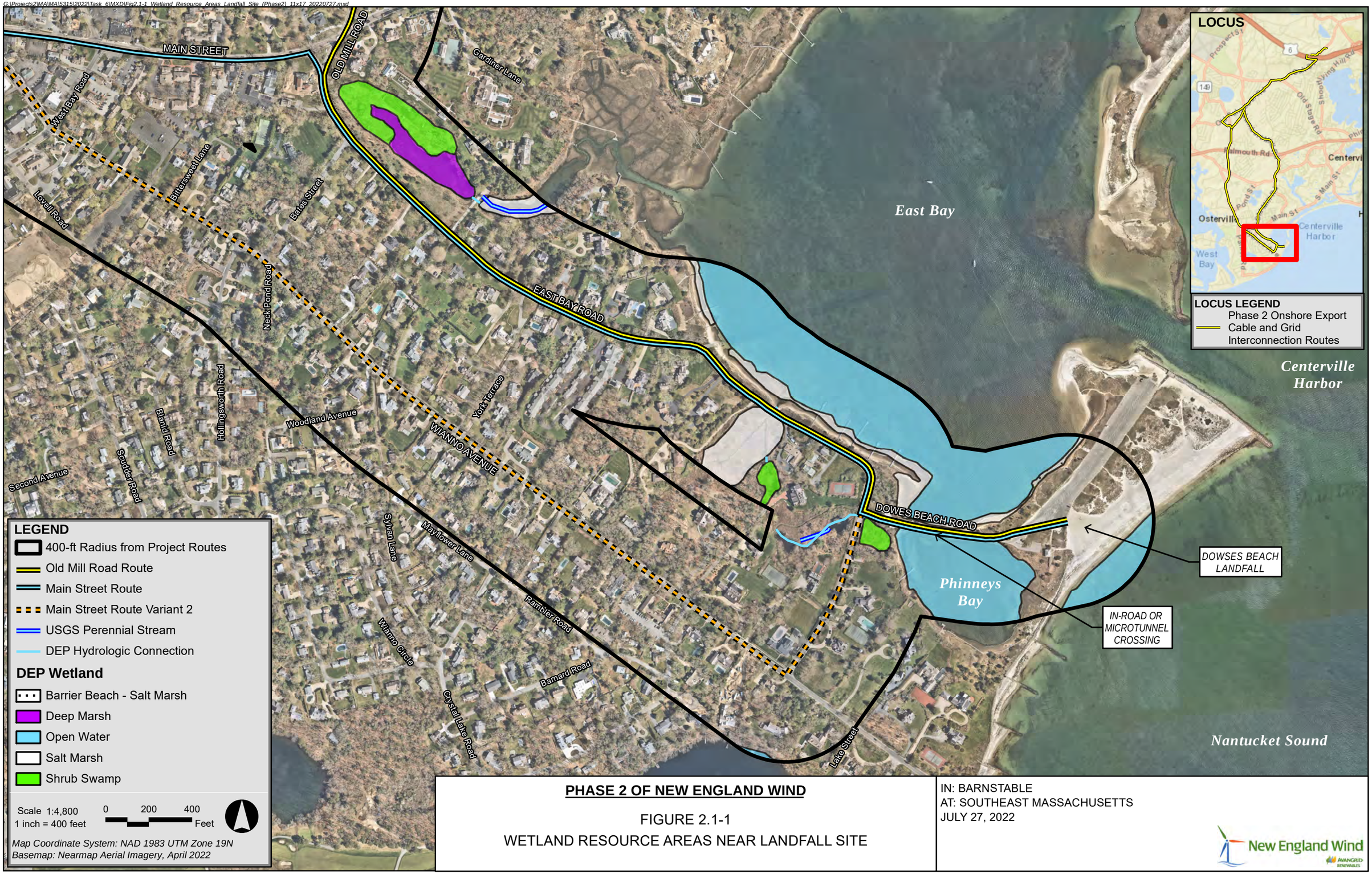
Source: https://www.flickr.com/photos/jaxstrong/albums/72157637944233765

Jetting

Trailing Suction Hopper Dredge

Figure 1.3-3
Types of Dredging Equipment

G:\Projects2\MA\MA\5315\2022\Task_6\MXD\Fig2.1-1_Wetland_Resource_Areas_Landfall_Site_(Phase2)_11x17_20220727.mxd



PHASE 2 OF NEW ENGLAND WIND

FIGURE 2.1-1

WETLAND RESOURCE AREAS NEAR LANDFALL SITE

IN: BARNSTABLE
AT: SOUTHEAST MASSACHUSETTS
JULY 27, 2022

New England Wind
AVANGRID RENEWABLES

G:\Projects2\MA\MA\5315\2022\Task_6\MXD\Fig2.2-1_OECC_(Phase2)_11x17_20220727.mxd

Craigville Public Beach Landfall Site (Phase 1)

Dowses Beach Landfall Site (Phase 2)

INSET

Federal Waters

Federal Waters

UNITED STATES - EAST COAST
MASSACHUSETTS

NANTUCKET SOUND AND APPROACHES

Mercator Projection
Scale 1:80,000 at Lat. 41°25'
North American Datum of 1963
SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

SOUNDIN

INSET LEGEND
- Possible Edge of Eelgrass Bed at Dowses Beach
- Offshore Export Cable Corridor (OECC)

Note:
Soundings for NOAA Nautical Chart 13237 (top) are in feet.
Soundings for NOAA Nautical Chart 13200 (bottom) are in fathoms.

LEGEND
- New England Wind Offshore Export Cable Corridor (OECC)
- New England Wind OECC Western Muskeget Variant Route
- Maximum Size of Southern Wind Development Area (SWDA)
- Lease Area Boundary
- Right Whale Core Habitat
- Extent of Eelgrass

Scale 1:190,800
1 inch = 3 miles

0 1.5 3 Miles

Map Coordinate System: NAD 1983 UTM Zone 19N
Basemap: Nautical Chart 13200/13237, NOAA

PHASE 2 OF NEW ENGLAND WIND

FIGURE 2.2-1
EELGRASS - OFFSHORE EXPORT CABLE CORRIDOR (PHASE 2)

IN: ATLANTIC OCEAN AND NANTUCKET SOUND
AT: SOUTHEAST MASSACHUSETTS
JULY 29, 2022

New England Wind
AVANGRID RENEWABLES