



# **New England Wind 2 Connector**

## **Analysis to Support Petition Before the Energy Facilities Siting Board**

**Docket #EFSB 22-06**

**Volume II: Attachments**

**November 1, 2022**

**Submitted by**  
Commonwealth Wind, LLC  
125 High Street, 6<sup>th</sup> Floor  
Boston, MA 02110

**Submitted to**  
Energy Facilities Siting Board  
One South Station  
Boston, MA 02114

**Prepared by**  
Epsilon Associates, Inc.  
3 Mill & Main Place  
Suite 250  
Maynard, MA 01754

**In Association with**  
Foley Hoag LLP  
Stantec, Inc.  
Geo SubSea LLC  
Public Archaeology Laboratory

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**Attachment A**

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Detailed Scoring Spreadsheets

New England Wind 2 Connector  
Onshore Export Cable Routing Analysis

						DEVELOPED ENVIRONMENT CRITERIA										NATURAL ENVIRONMENT CRITERIA												
ROUTE	Route ID	Route Segment	From	To	Length (mi)	RESIDENTIAL UNITS # abutting each route (ROW limits)	COMMERCIAL / INDUSTRIAL UNITS # abutting each route (ROW limits)	SENSITIVE RECEPTORS # abutting each route (ROW limits)	POTENTIAL FOR TRAFFIC CONGESTION scored 1-3 from lowest to highest for traffic impact (roadway layout)	Length (mi)	Segment by % of overall route	Surface Width (ft)	Lanes	MassDOT Classification	Base Score	Detour Adjust	Signal Adjust	HISTORIC RESOURCES # of historic resources abutting routes (ROW limits)	ARCHAEOLOGICAL RESOURCES # miles of "moderate" and "high" sensitivity areas crossed by each route (ROW limits)	POTENTIAL TO ENCOUNTER SUBSURFACE CONTAMINATION # BWS sites within 300' of route (ROW limits)	WETLAND RESOURCE AREAS # miles of mapped resource areas (ROW limits) including 200' RFA and 100-yr floodplain (but excluding buffer zones) crossed	RARE SPECIES HABITAT # miles of mapped Priority or Estimated Habitats crossed (ROW limits)	PUBLIC WATER SUPPLIES # miles in Zone I or II crossed by each route (ROW limits)	ARTICLE 97- JURISDICTIONAL AREAS # of Article 97- jurisdictional areas crossed outside the roadway layout (ROW limits)	TREE CLEARING # miles requiring clearing of forested habitat (Utility ROW limits and R6 Crossing Staging Area)			
ONSHORE EXPORT CABLE ROUTING																												
Candidate Route T1 (East Bay Rd and Old Mill Rd)	Dowdes Beach Road	Landfall Site	East Bay Road	0.2					1	0.7	10.9%	22	2	Local	1	0	0											
	East Bay Road	Dowdes Beach Road	Old Mill Road	0.7					2.2	1.3	20.3%	22	2	Minor Arterial	2	0.2	0											
	Old Mill Road	East Bay Road	Bumps River Road	1.3					2.2	0.1	1.6%	22	2	Minor Arterial	2	0.2	0											
	Bumps River Road	Old Mill Road	Five Corners Road	0.1					3	0.3	4.7%	22	2	Minor Arterial	3	0	0											
	Five Corners Road	Bumps River Road	Lumbert Mill Road	0.3					2.7	1.5	23.4%	22	2	Minor Arterial	2	0.5	0.2											
	Lumbert Mill Road	Five Corners Road	Osterville-West Barnstable Rd	1.5					2.5	0.1	1.6%	22	2	Minor Arterial	2	0.5	0											
	Osterville-West Barnstable Rd	Lumbert Mill Road	Old Falmouth Road	0.1		314	6	3	1.1	0.9	14.1%	24	2	Minor Arterial	1	0.1	0		126		5.7	0	1.0	0.2	1.9	0	0.3	
	Old Falmouth Road	Osterville-West Barnstable Rd	Old Stage Road	0.9					1.6	0.2	3.1%	26	2	Minor Arterial	1	0.5	0.1											
	Old Stage Road	Old Falmouth Road	Oak Street	0.2					2.4	1.0	15.6%	24	2	Minor Arterial	2	0.4	0											
	Oak Street	Old Stage Road	Service Road	1.0					1.5	0.2	3.1%	22	2	Urban Collector	1	0.5	0											
	Service Road	Oak Street	Staging Area	0.2					0	0.1	1.6%			Trenchless Construction														
	Route 6 Crossing	Staging Area	Substation Site	0.1					1.9	6.4	100%																	
	FULL ROUTE SCORE (or AVERAGE, where applicable)																											
Candidate Route T2 (Old Mill Rd and Eversource ROW #345)	Dowdes Beach Road	Landfall Site	East Bay Road	0.2					1	0.7	10.8%	22	2	Local	1	0	0											
	East Bay Road	Dowdes Beach Road	Old Mill Road	0.7					2.2	1.3	20.0%	22	2	Minor Arterial	2	0.2	0											
	Old Mill Road	East Bay Road	Bumps River Road	1.3					2.2	0.1	1.5%	22	2	Minor Arterial	2	0.2	0											
	Bumps River Road	Old Mill Road	Five Corners Road	0.1					3	0.3	4.6%	22	2	Minor Arterial	3	0	0											
	Five Corners Road	Bumps River Road	Lumbert Mill Road	0.3					0	2.4	36.9%			Off-Road Construction														
	Lumbert Mill Road	Five Corners Road	Utility ROW 345	1.0		363	4	2	0	0.1	1.5%			Off-Road Construction														
	Utility ROW 345	Lumbert Mill Road	Utility ROW 381	2.4					1.5	0.5	7.7%	22	2	Urban Collector	1	0.5	0		108		6.0	0	0.8	0.2	2.2	1	2.2	
	Utility ROW 381	Utility ROW 345	Service Road	0.1					0	0.1	1.5%			Off-Road Construction														
	Service Road	Utility ROW 381	Staging Area	0.5					1.3	6.5	100%																	
	Route 6 Crossing	Staging Area	Substation Site	0.1					0	0.1	1.5%			Trenchless Construction														
	FULL ROUTE SCORE (or AVERAGE, where applicable)																											
	Candidate Route T3 (East Bay Rd and Main St)	Dowdes Beach Road	Landfall Site	East Bay Road	0.2					1	0.7	10.9%	22	2	Local	1	0	0										
		East Bay Road	Dowdes Beach Road	Main Street	0.7					1.7	1.4	21.9%	22	2	Minor Arterial	1.5	0.2	0										
Main Street		East Bay Road	Osterville-West Barnstable Rd	1.4					1.8	1.9	29.7%	22	2	Minor Arterial	1.5	0.1	0.2											
Osterville-West Barnstable Rd		Main Street	Old Falmouth Road	1.9					1.1	0.9	14.1%	24	2	Minor Arterial	1	0.1	0											
Old Falmouth Road		Osterville-West Barnstable Rd	Old Stage Road	0.9		383	194	9	1.6	0.2	3.1%	26	2	Minor Arterial	1	0.5	0.1											
Old Stage Road		Old Falmouth Road	Oak Street	0.2					2.4	1.0	15.6%	24	2	Minor Arterial	2	0.4	0											
Oak Street		Old Stage Road	Service Road	1.0					1.5	0.2	3.1%	22	2	Urban Collector	1	0.5	0											
Service Road		Oak Street	Staging Area	0.2					0	0.1	1.6%			Trenchless Construction														
Route 6 Crossing		Staging Area	Substation Site	0.1					1.6	6.4	100%																	
FULL ROUTE SCORE (or AVERAGE, where applicable)																												
T4 (Main St and Eversource ROW #345)		Dowdes Beach Road	Landfall Site	East Bay Road	0.2					1	0.7	10.3%	22	2	Local	1	0	0										
		East Bay Road	Dowdes Beach Road	Main Street	0.7					1.7	1.4	20.6%	22	2	Minor Arterial	1.5	0.2	0										
		Main Street	East Bay Road	Osterville-West Barnstable Rd	1.4					1.8	1.1	16.2%	22	2	Minor Arterial	1.5	0.1	0.2										
	Osterville-West Barnstable Rd	Main Street	Utility ROW 345	1.1		436	192	8	0	2.9	42.6%			Off-Road Construction														
	Utility ROW 345	Osterville-West Barnstable Rd	Utility ROW 381	2.9					0	0.1	1.5%			Off-Road Construction														
	Utility ROW 381	Utility ROW 345	Service Road	0.1					1.5	0.5	7.4%	22	2	Urban collector	1	0.5	0											
	Service Road	Utility ROW 381	Staging Area	0.5					1.5	0.1	1.5%			Trenchless Construction	1	0.5	0											
	Route 6 Crossing	Staging Area	Substation Site	0.1					0.9	6.8	100%																	
	FULL ROUTE SCORE (or AVERAGE, where applicable)																											
	T5 (East Bay Rd and South County Rd)	Dowdes Beach Road	Landfall Site	East Bay Road	0.2					1	0.7	8.6%	22	2	Local	1	0	0										
		East Bay Road	Dowdes Beach Road	Main Street	0.7					1.7	1.4	17.3%	22	2	Minor Arterial	1.5	0.2	0										
		Main Street	East Bay Road	South County Road	1.4					1.7	1.0	12.3%	20	2	Minor Arterial	1.5	0.1	0.1										
		South County Road	Main Street	Falmouth Road (Rt. 28)	1.0					3	0.5	6.2%	24	2	Principal Artery	3	0	0										
Falmouth Road (Rt. 28)		South County Road	Cotuit Road (Rt. 149)	0.5					2.1	0.9	11.1%	20	2	Minor Arterial	1.5	0.5	0.1											
Cotuit Road / Prospect St (Rt. 149)		Prospect Street	Old Falmouth Road	0.9					1.1	2.1	25.9%	24	2	Minor Arterial	1	0.1	0											
Old Falmouth Road		Cotuit Road	Old Stage Road	2.1		418	259	6	1.6	0.2	2.5%	26	2	Minor Arterial	1	0.5	0.1											
Old Stage Road		Old Falmouth Road	Oak Street	0.2					2.4	1.0	12.3%	24	2	Minor Arterial	2	0.4	0											
Oak Street		Old Stage Road	Service Road	1.0					1.5	0.2	2.5%	22	2	Urban Collector	1	0.5	0											
Service Road		Oak Street	Staging Area	0.2					0	0.1	1.2%			Trenchless Construction														
Route 6 Crossing		Staging Area	Substation Site	0.1					1.7	8.1	100%																	
FULL ROUTE SCORE (or AVERAGE, where applicable)																												
T6 (Wianno Ave and Main St)		Dowdes Beach Road	Landfall Site	East Bay Road	0.2					1	0.2	3.1%	22	2	Local	1	0	0										
	East Bay Road	Dowdes Beach Road	Wianno Avenue	0.2					2	0.9	13.8%	23	2	Urban Collector	2	0	0											
	Wianno Avenue	East Bay Road	Main Street	0.9					1.7	1.1	16.9%	22	2	Minor Arterial	1.5	0.2	0											
	Main Street	Wianno Avenue	Osterville-West Barnstable Rd	1.1					1.8	1.9	29.2%	22	2	Minor Arterial	1.5	0.1	0.2											
	Osterville-West Barnstable Rd	Main Street	Old Falmouth Road	0.9					1.1	0.9	13.8%	24	2	Minor Arterial	1	0.1	0											
	Old Falmouth Road	Osterville-West Barnstable Rd	Old Stage Road	0.9					1.6	0.2	3.1%	26	2	Minor Arterial	1	0.5	0.1											
	Old Stage Road	Old Falmouth Road	Oak Street	0.2					2.4	1.0	15.4%	24	2	Minor Arterial	2	0.4	0											
	Oak Street	Old Stage Road	Service Road	1.0					1.5	0.2	3.1%	22	2	Urban Collector	1	0.5	0				</							

**New England Wind 2 Connector  
Results of Environmental Scoring (Raw, Ratio, and Weighted Scores)**

				Onshore Export Cable Routes						
	Scoring Criteria	Weight	Score Type	T1 (East Bay Rd and Old Mill Rd)	T2 (Old Mill Rd and Eversource ROW #345)	T3 (East Bay Rd and Main St)	T4 (Main St and Eversource ROW #345)	T5 (East Bay Rd and South County Rd)	T6 (Wianno Ave and Main St)	T7 (Wianno Ave and Old Mill Rd)
Length (miles)				6.6	6.7	6.6	7	8.3	6.7	7.3
Developed Environment	Residential Units	3	Raw	314	363	383	436	418	327	369
			Ratio	0.72	0.83	0.88	1.00	0.96	0.75	0.85
			Weighted	2.16	2.50	2.64	3.00	2.88	2.25	2.54
	Commercial / Industrial Units	3	Raw	6	4	194	192	259	157	92
			Ratio	0.02	0.02	0.75	0.74	1.00	0.61	0.36
			Weighted	0.07	0.05	2.25	2.22	3.00	1.82	1.07
	Sensitive Receptors	2	Raw	3	2	9	8	6	12	7
			Ratio	0.25	0.17	0.75	0.67	0.50	1.00	0.58
			Weighted	0.50	0.33	1.50	1.33	1.00	2.00	1.17
	Potential for Traffic Congestion	3	Raw	1.9	1.3	1.6	0.9	1.7	1.7	2.1
			Ratio	0.90	0.62	0.76	0.43	0.81	0.81	1.00
			Weighted	2.71	1.86	2.29	1.29	2.43	2.43	3.00
	Historic Resources	1	Raw	126	108	354	335	468	304	259
			Ratio	0.27	0.23	0.76	0.72	1.00	0.65	0.55
Weighted			0.27	0.23	0.76	0.72	1.00	0.65	0.55	
Archaeological Resources	1	Raw	5.7	6.0	5.7	6.3	7.5	5.8	6.4	
		Ratio	0.76	0.80	0.76	0.84	1.00	0.77	0.85	
		Weighted	0.76	0.80	0.76	0.84	1.00	0.77	0.85	
Potential to Encounter Subsurface Contamination	1	Raw	0	0	0	0	0	0	0	
		Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Weighted	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
subtotal (raw unweighted score)				456.60	484.30	947.30	978.20	1160.20	807.50	735.50
subtotal (weighted score)				6.47	5.77	10.18	9.40	11.30	9.92	9.18
Natural Environment	Wetland Resource Areas	2	Raw	1.0	0.8	0.7	0.5	0.7	0.5	0.8
			Ratio	1.00	0.80	0.70	0.50	0.70	0.50	0.80
			Weighted	2.00	1.60	1.40	1.00	1.40	1.00	1.60
	Rare Species Habitat	2	Raw	0.2	0.2	0.1	0.1	0.1	0.1	0.2
			Ratio	1.00	1.00	0.50	0.50	0.50	0.50	1.00
			Weighted	2.00	2.00	1.00	1.00	1.00	1.00	2.00
	Public Water Supplies	1	Raw	1.9	2.2	3.7	4.1	4.1	3.7	1.9
			Ratio	0.46	0.54	0.90	1.00	1.00	0.90	0.46
			Weighted	0.46	0.54	0.90	1.00	1.00	0.90	0.46
	Article 97 Jurisdictional Areas	2	Raw	0	1	0	1	0	0	0
			Ratio	0.00	1.00	0.00	1.00	0.00	0.00	0.00
			Weighted	0.00	2.00	0.00	2.00	0.00	0.00	0.00
	Tree Clearing	3	Raw	0.3	2.2	0.3	2.7	0.3	0.3	0.3
			Ratio	0.11	0.81	0.11	1.00	0.11	0.11	0.11
Weighted			0.33	2.44	0.33	3.00	0.00	0.33	0.33	
subtotal (raw unweighted score)				3.40	6.40	4.80	8.40	5.20	4.60	3.20
subtotal (weighted score)				4.80	8.58	3.64	8.00	3.40	3.24	4.40
total ratio score				5.50	6.82	6.87	8.39	7.58	6.60	6.57
total weighted score				11.27	14.35	13.82	17.40	14.70	13.16	13.58

**Attachment B**

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Supporting Plans

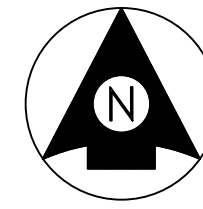
**Attachment B1**

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Dowses Beach Landing HDD Landfall Drill Paths





# NEW ENGLAND WIND 2 CONNECTOR DOWSES BEACH LANDING HDD LANDFALL DRILL PATHS

## INDEX OF SHEETS

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**LOCATION MAP**  
SCALE: 1" = 10,000'

REV.	DATE	REVISION DESCRIPTION	STATUS	DRAWN	CHKD	APPRVD
B	2022-09-21	ISSUED FOR STATE PERMITTING	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 2 CONNECTOR

TITLE:

DOWSES BEACH LANDING  
COVER SHEET

DOCID:

CWW-HDD-STC-DW-0004

SHEET 1 OF 9	DWG. NO.	SCALE AS SHOWN	FORMAT/SIZE ANSI D	REV. B
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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.



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**GENERAL NOTES**

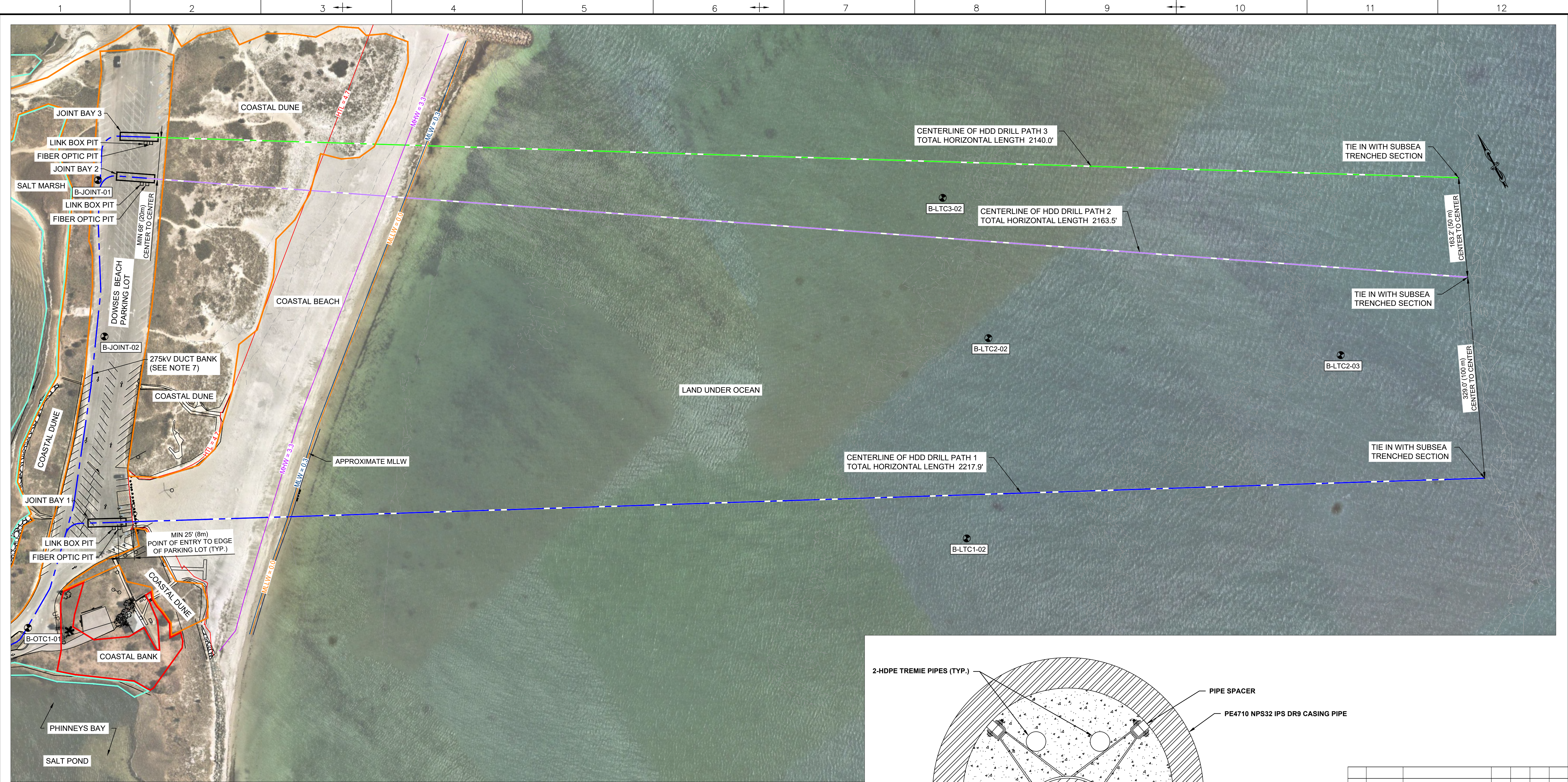
1. UNLESS OTHERWISE NOTED:
  - 1.1. DIMENSIONS ARE IN FEET.
  - 1.2. CHAINAGES ARE MEASURED ALONG A LEVEL PLAN OF DRILL PATH.
  - 1.3. ELEVATIONS OVER WATER ARE BASED ON MEAN LOWER LOW WATER (MLLW) DATUM FOR DOWSES BEACH (LONGITUDE -70.361478, LATITUDE 41.624038). DATUM WAS CONVERTED FROM NAVD88 TO MLLW 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.

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B	2022-09-21	ISSUED FOR STATE PERMITTING	IFI	RN	MD/EA	KEF					
A	2022-08-19	ISSUED FOR CLIENT REVIEW	IFCR	RN	MD/EA	KEF					
REV.	DATE	REVISION DESCRIPTION	STATUS	DRAWN	CHKD	APPRVD					
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 2 CONNECTOR											
TITLE:											
DOWSES BEACH LANDING GENERAL NOTES											
DOCID:											
CWW-HDD-STC-DW-0004											
SHEET	2	DWG. NO.	SCALE	FORMAT/SIZE	REV.						
OF	9		AS SHOWN	ANSI D	B						

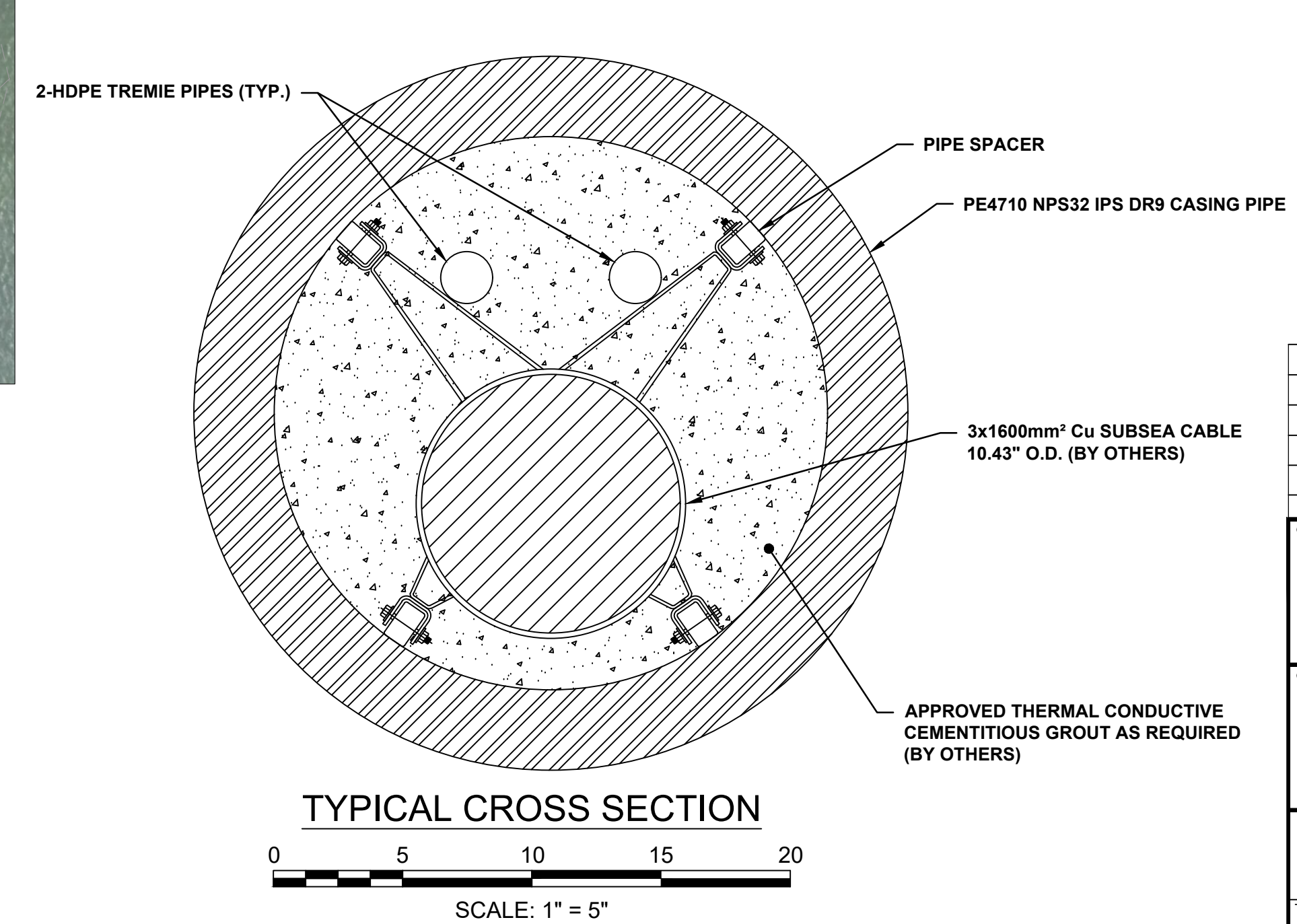
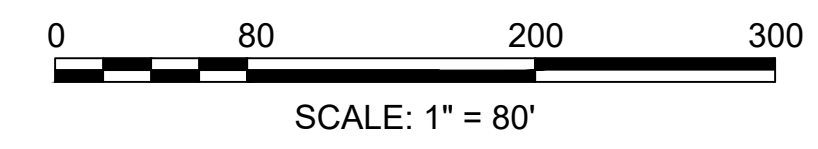
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 by: rishiraghu, robert



**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:**
- REFER TO GENERAL NOTES ON SHEET 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.
  - 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.
  - 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.
  - BORING LOCATIONS SHOWN WERE PROVIDED BY AVANGRID, BORINGS WERE PERFORMED BY OTHERS.
  - TIDAL DATA INTERPOLATED FROM DAWOOD SURVEY OUTSIDE OF DAWOOD SURVEY LIMITS.
  - REFER TO DRAWING SET CWW-OCP-STC-DW-0001 FOR DETAILS OF INTERFACING 275 KV DUCT BANK.



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REV	DATE	REVISION DESCRIPTION	STATUS	DRAWN	CHKD	APPRVD
B	2022-09-21	ISSUED FOR STATE PERMITTING	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: AVANGRID Offshore Wind 125 High Street Boston, MA 02110

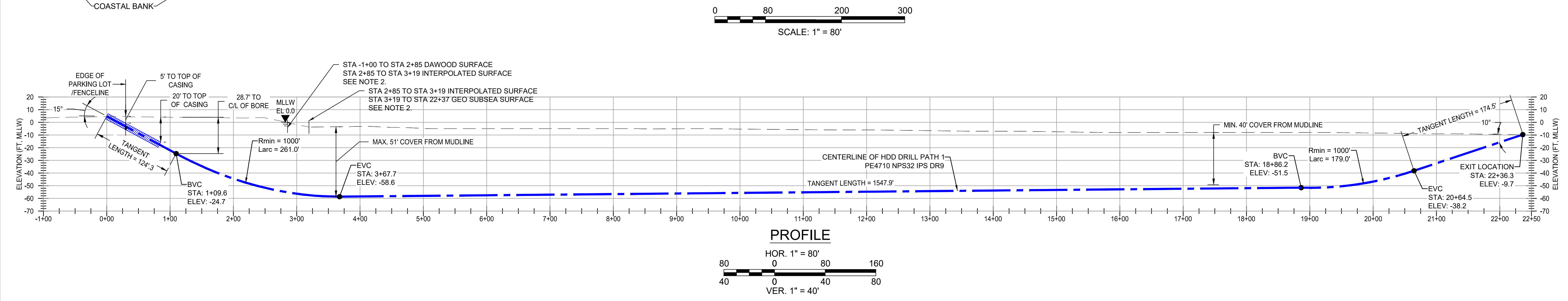
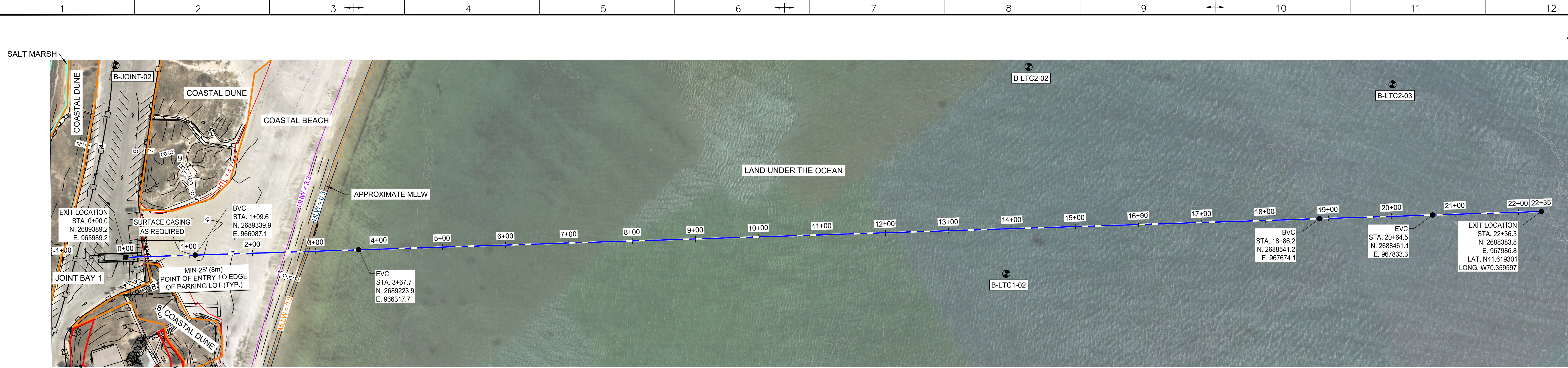
PROJECT: NEW ENGLAND WIND 2 CONNECTOR

TITLE: DOWISES BEACH LANDING HDD OVERALL PLAN

DOCID: CWW-HDD-STC-DW-0004

SHEET OF	3 OF 9	DWG. NO.	SCALE	AS SHOWN	FORMAT/SIZE	ANSI D	REV.	B
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**NOTES:**

- REFER TO GENERAL NOTES ON SHEET 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.
- CONTRACTOR TO CONSTRUCT APPROPRIATE CONTAINMENT FOR DRILLING MUD.
- 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.
- PROFILE AND CASING DEPTH SHALL BE REFINED AFTER COMPLETION OF OFFSHORE GEOTECHNICAL INVESTIGATION BY AVANGRID.
- OFFSHORE BOREHOLE LOCATIONS INDICATED ON PLAN ARE PROPOSED AND HAVE NOT BEEN DRILLED.
- PIPE SPECIFICATIONS ARE FOR REFERENCE ONLY. FINAL PIPE SPECIFICATIONS WILL BE DETERMINED AFTER COMPLETION OF A STRESS ANALYSIS.

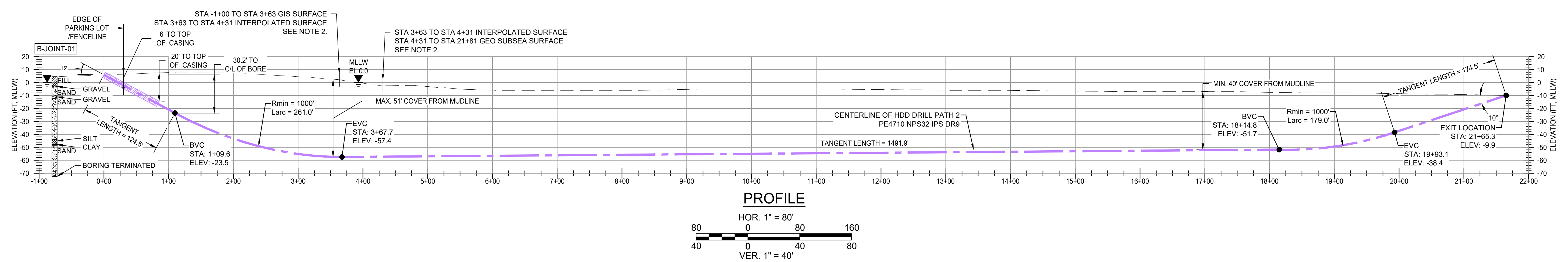
- LEGEND:**
- CENTERLINE OF DRILL PATH 1
  - CONSTRUCTION FENCE
  - HTL HIGH TIDE LINE
  - MHW MEAN HIGH WATER LINE
  - MLW MEAN LOW WATER LINE
  - MLLW MEAN LOWER LOW WATER LINE
  - BORING

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B	2022-09-21	ISSUED FOR STATE PERMITTING	IFI	RN	MD/EA KEF
A	2022-08-19	ISSUED FOR CLIENT REVIEW	IFCR	RN	MD/EA KEF
REV.	DATE	REVISION DESCRIPTION	STATUS	DRAWN	CHKD /APPRVD
CONTRACTOR: <b>Stantec</b> Stantec Consulting Services Inc. 400 Crown Colony Drive Suite 200 Quincy, MA U.S.A. 02169-0982					
CLIENT: <b>AVANGRID</b> <b>Offshore Wind</b> 125 High Street Boston, MA 02110					
PROJECT: <b>NEW ENGLAND WIND 2 CONNECTOR</b>					
TITLE: <b>DOWSES BEACH LANDING HDD 1 - PLAN AND PROFILE</b>					
DOCID: <b>CWW-HDD-STC-DW-0004</b>					
SHEET 4 OF 9	DWG. NO.	SCALE: AS SHOWN	FORMAT/SIZE: ANSI D	REV.:	B

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- NOTES:**
- REFER TO GENERAL NOTES ON SHEET 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.
  - CONTRACTOR TO CONSTRUCT APPROPRIATE CONTAINMENT FOR DRILLING MUD.
  - 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.
  - PROFILE AND CASING DEPTH SHALL BE REFINED AFTER COMPLETION OF OFFSHORE GEOTECHNICAL INVESTIGATION BY AVANGRID.
  - OFFSHORE BOREHOLE LOCATIONS INDICATED ON PLAN ARE PROPOSED AND HAVE NOT BEEN DRILLED.
  - PIPE SPECIFICATIONS ARE FOR REFERENCE ONLY. FINAL PIPE SPECIFICATIONS WILL BE DETERMINED AFTER COMPLETION OF A STRESS ANALYSIS.
  - 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

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REV	DATE	REVISION DESCRIPTION	STATUS	DRAWN	CHKD	APPRVD
B	2022-09-21	ISSUED FOR STATE PERMITTING	IF1	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: **AVANGRID** Offshore Wind  
 125 High Street  
 Boston, MA 02110

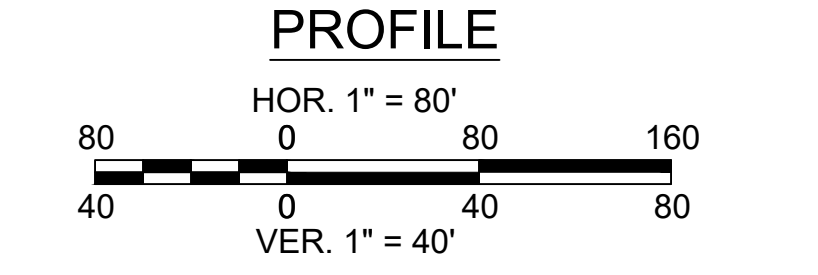
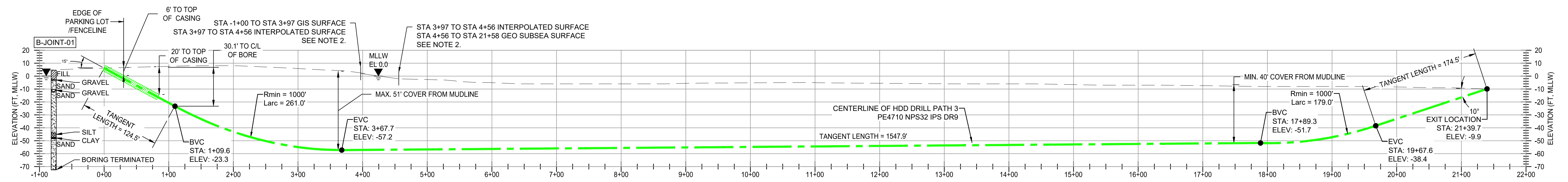
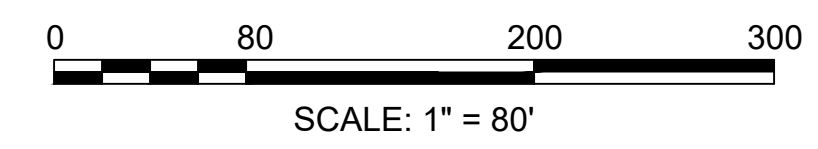
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TITLE: **DOWSES BEACH LANDING  
HDD 2 - PLAN AND PROFILE**

DOCID: **CWW-HDD-STC-DW-0004**

SHEET 5 OF 9	DWG. NO.	SCALE AS SHOWN	FORMAT/SIZE ANSI D	REV. A
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- NOTES:**
- REFER TO GENERAL NOTES ON SHEET 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.
  - CONTRACTOR TO CONSTRUCT APPROPRIATE CONTAINMENT FOR DRILLING MUD.
  - 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.
  - PROFILE AND CASING DEPTH SHALL BE REFINED AFTER COMPLETION OF OFFSHORE GEOTECHNICAL INVESTIGATION BY AVANGRID.
  - OFFSHORE BOREHOLE LOCATIONS INDICATED ON PLAN ARE PROPOSED AND HAVE NOT BEEN DRILLED.
  - PIPE SPECIFICATIONS ARE FOR REFERENCE ONLY. FINAL PIPE SPECIFICATIONS WILL BE DETERMINED AFTER COMPLETION OF A STRESS ANALYSIS.
  - 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

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REV	DATE	REVISION DESCRIPTION	STATUS	DRAWN	CHKD	APPROVD
B	2022-09-21	ISSUED FOR STATE PERMITTING	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: AVANGRID Offshore Wind 125 High Street Boston, MA 02110

PROJECT: NEW ENGLAND WIND 2 CONNECTOR

TITLE: DOWSES BEACH LANDING HDD 3 - PLAN AND PROFILE

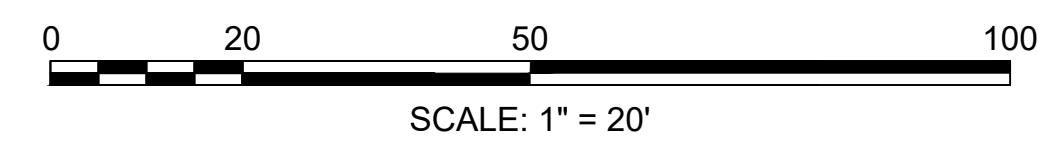
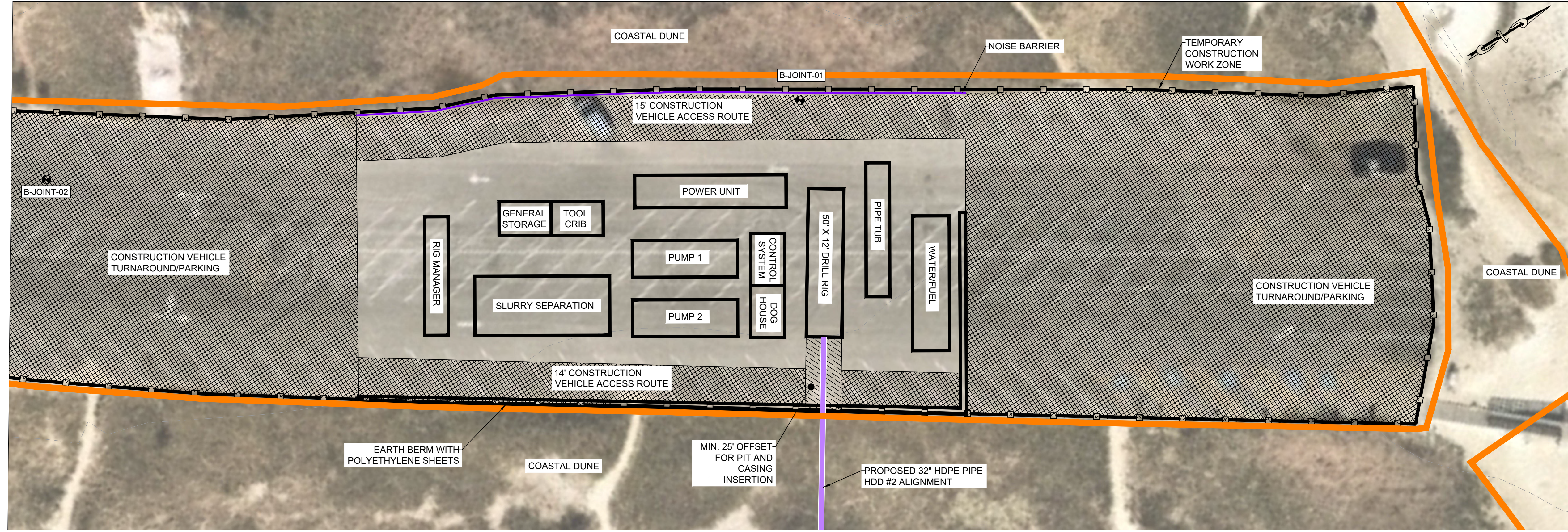
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NOTES:  
1. REFER TO GENERAL NOTES ON SHEET 2



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REV.	DATE	REVISION DESCRIPTION	STATUS	DRAWN	CHKD	APPRVD
B	2022-09-21	ISSUED FOR STATE PERMITTING	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:  
**AVANGRID** Offshore Wind  
125 High Street  
Boston, MA 02110

PROJECT:  
**NEW ENGLAND WIND 2 CONNECTOR**

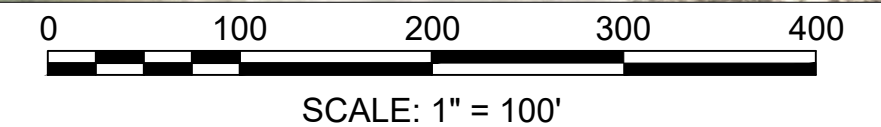
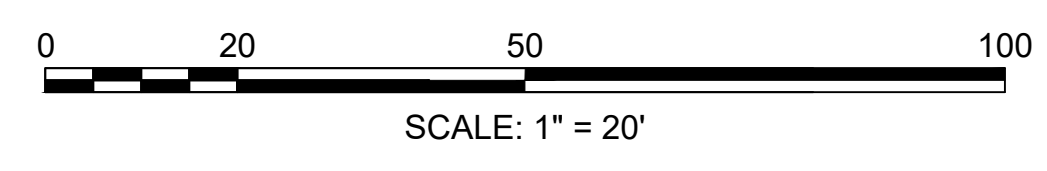
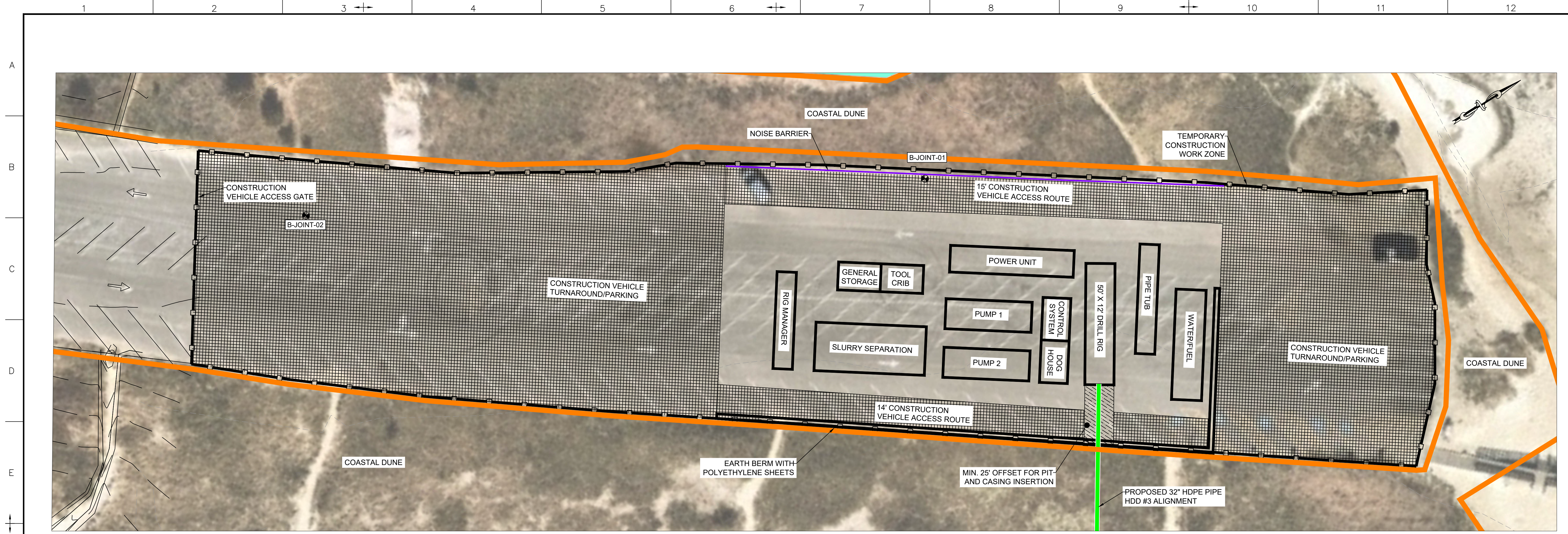
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HDD 2 - CONSTRUCTION STAGING**

DOC ID:  
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NOTES:  
1. REFER TO GENERAL NOTES ON SHEET 2

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CLIENT:  
**AVANGRID** **Offshore Wind**  
 125 High Street  
 Boston, MA 02110

PROJECT:  
NEW ENGLAND WIND 2 CONNECTOR

TITLE:  
DOWSES BEACH LANDING  
HDD 3 - CONSTRUCTION STAGING

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

SHEET	DWG. NO.	SCALE	FORMAT/SIZE	REV.
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OF 9				

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