

VINEYARD NORTHEAST

CONSTRUCTION AND OPERATIONS PLAN VOLUME I APPENDIX

MARCH 2024

PREPARED BY:

Epsilon
ASSOCIATES INC.

SUBMITTED BY:

VINEYARD NORTHEAST LLC

VINEYARD



OFFSHORE

PUBLIC VERSION

Vineyard Northeast COP

Appendix I-A Offshore Facilities Location Information

Prepared by:
Epsilon Associates

Prepared for:
Vineyard Northeast LLC



March 2024

Vineyard Northeast COP

Appendix I-A1 Wind Turbine Generator, Electrical Service Platform, and Booster Station Coordinates and Water Depths

Prepared by:
Epsilon Associates

Prepared for:
Vineyard Northeast LLC



March 2024

Revision	Date	Description
0	July 2022	Initial submission.
0	April 2023	Resubmitted without revisions.
0	March 2024	Resubmitted without revisions.

Appendix I-A1 Wind Turbine Generator, Electrical Service Platform, and Booster Station Coordinates and Water Depths

Coordinates and water depths for Vineyard Northeast’s wind turbine generator (WTG), electrical service platform (ESP), and booster station positions are provided in the table below. All WTG/ESP positions are within Lease Area OCS-A 0522. The booster station position is within the northwestern aliquot¹ of Lease Area OCS-A 0534.

Table 1 WTG, ESP, and Booster Station Coordinates and Water Depths

Name	Position Type	Easting (m)	Northing (m)	Latitude	Longitude	Water Depth (m)
BU-38	WTG/ESP	377138	4495859	40.6044208	-70.4522053	61.1
BT-38	WTG/ESP	377138	4497670	40.6207305	-70.4525585	60.3
BT-54	WTG/ESP	406770	4497670	40.6246053	-70.1023002	51.2
BT-55	WTG/ESP	408622	4497670	40.6248122	-70.0804069	51.5
BT-56	WTG/ESP	410474	4497670	40.6250149	-70.0585134	51.9
BT-57	WTG/ESP	412326	4497670	40.6252135	-70.0366197	52.3
BG-48	WTG/ESP	395658	4517960	40.8060203	-70.2370332	43.0
BG-49	WTG/ESP	397510	4517960	40.8062536	-70.2150815	41.8
BH-48	WTG/ESP	395658	4516108	40.7893404	-70.2367236	43.1
BH-49	WTG/ESP	397510	4516108	40.7895736	-70.2147773	42.3
BJ-47	WTG/ESP	393806	4514256	40.7724232	-70.2583547	44.4
BJ-48	WTG/ESP	395658	4514256	40.7726604	-70.2364142	43.5
BJ-49	WTG/ESP	397510	4514256	40.7728934	-70.2144734	42.9
BK-46	WTG/ESP	391954	4512404	40.7555021	-70.2799749	46.1
BK-47	WTG/ESP	393806	4512404	40.7557433	-70.2580401	44.9
BK-48	WTG/ESP	395658	4512404	40.7559803	-70.2361051	43.6
BK-49	WTG/ESP	397510	4512404	40.7562132	-70.2141698	43.0
BL-45	WTG/ESP	390102	4510552	40.7385770	-70.3015841	47.9
BL-46	WTG/ESP	391954	4510552	40.7388223	-70.2796551	47.0
BL-47	WTG/ESP	393806	4510552	40.7390633	-70.2577258	45.9
BL-48	WTG/ESP	395658	4510552	40.7393002	-70.2357962	44.6
BL-49	WTG/ESP	397510	4510552	40.7395330	-70.2138664	43.7
BL-50	WTG/ESP	399362	4510552	40.7397616	-70.1919363	43.1
BL-51	WTG/ESP	401214	4510552	40.7399860	-70.1700060	41.7

¹ An aliquot is 1/64th of a Bureau of Ocean Energy Management (BOEM) Outer Continental Shelf (OCS) Lease Block.

Table 1 WTG, ESP, and Booster Station Coordinates and Water Depths (Continued)

Name	Position Type	Easting (m)	Northing (m)	Latitude	Longitude	Water Depth (m)
BL-52	WTG/ESP	403066	4510552	40.7402062	-70.1480754	41.0
BL-53	WTG/ESP	404918	4510552	40.7404223	-70.1261446	40.0
BL-54	WTG/ESP	406770	4510552	40.7406342	-70.1042136	38.9
BL-55	WTG/ESP	408622	4510552	40.7408420	-70.0822823	38.0
BL-56	WTG/ESP	410474	4510552	40.7410456	-70.0603508	37.0
BL-57	WTG/ESP	412326	4510552	40.7412450	-70.0384191	34.9
BM-47	WTG/ESP	393806	4508700	40.7223833	-70.2574117	46.3
BM-48	WTG/ESP	395658	4508700	40.7226201	-70.2354876	45.3
BM-49	WTG/ESP	397510	4508700	40.7228527	-70.2135633	44.6
BM-50	WTG/ESP	399362	4508700	40.7230812	-70.1916387	44.1
BM-51	WTG/ESP	401214	4508700	40.7233054	-70.1697138	43.3
BM-52	WTG/ESP	403066	4508700	40.7235256	-70.1477887	42.7
BM-53	WTG/ESP	404918	4508700	40.7237415	-70.1258634	41.2
BM-54	WTG/ESP	406770	4508700	40.7239533	-70.1039378	41.1
BM-55	WTG/ESP	408622	4508700	40.7241609	-70.0820120	41.0
BM-56	WTG/ESP	410474	4508700	40.7243644	-70.0600860	40.6
BM-57	WTG/ESP	412326	4508700	40.7245637	-70.0381597	40.2
BN-49	WTG/ESP	397510	4506848	40.7061724	-70.2132604	45.1
BN-50	WTG/ESP	399362	4506848	40.7064007	-70.1913412	44.8
BN-51	WTG/ESP	401214	4506848	40.7066248	-70.1694219	44.5
BN-52	WTG/ESP	403066	4506848	40.7068448	-70.1475022	44.0
BN-53	WTG/ESP	404918	4506848	40.7070607	-70.1255824	42.7
BN-54	WTG/ESP	406770	4506848	40.7072723	-70.1036623	42.7
BN-55	WTG/ESP	408622	4506848	40.7074798	-70.0817420	42.7
BN-56	WTG/ESP	410474	4506848	40.7076832	-70.0598214	42.5
BN-57	WTG/ESP	412326	4506848	40.7078824	-70.0379006	42.4
BP-51	WTG/ESP	401214	4504996	40.6899442	-70.1691302	44.8
BP-52	WTG/ESP	403066	4504996	40.6901640	-70.1472160	44.8
BP-53	WTG/ESP	404918	4504996	40.6903797	-70.1253016	44.8
BP-54	WTG/ESP	406770	4504996	40.6905913	-70.1033870	44.8
BP-55	WTG/ESP	408622	4504996	40.6907987	-70.0814721	44.6
BP-56	WTG/ESP	410474	4504996	40.6910019	-70.0595570	44.4
BP-57	WTG/ESP	412326	4504996	40.6912010	-70.0376417	44.3
BQ-51	WTG/ESP	401214	4503144	40.6732635	-70.1688387	45.4
BQ-52	WTG/ESP	403066	4503144	40.6734832	-70.1469300	44.8
BQ-53	WTG/ESP	404918	4503144	40.6736988	-70.1250211	44.5
BQ-54	WTG/ESP	406770	4503144	40.6739102	-70.1031119	44.2

Table 1 WTG, ESP, and Booster Station Coordinates and Water Depths (Continued)

Name	Position Type	Easting (m)	Northing (m)	Latitude	Longitude	Water Depth (m)
BQ-55	WTG/ESP	408622	4503144	40.6741175	-70.0812025	44.9
BQ-56	WTG/ESP	410474	4503144	40.6743206	-70.0592929	44.6
BQ-57	WTG/ESP	412326	4503144	40.6745195	-70.0373830	45.7
BR-53	WTG/ESP	404918	4501292	40.6570178	-70.1247408	46.7
BR-54	WTG/ESP	406770	4501292	40.6572291	-70.1028371	46.7
BR-55	WTG/ESP	408622	4501292	40.6574362	-70.0809331	46.8
BR-56	WTG/ESP	410474	4501292	40.6576392	-70.0590289	47.0
BR-57	WTG/ESP	412326	4501292	40.6578380	-70.0371246	47.6
BS-53	WTG/ESP	404918	4499481	40.6407060	-70.1244669	48.8
BS-54	WTG/ESP	406770	4499481	40.6409172	-70.1025685	48.8
BS-55	WTG/ESP	408622	4499481	40.6411242	-70.0806699	49.2
BS-56	WTG/ESP	410474	4499481	40.6413271	-70.0587711	49.6
BS-57	WTG/ESP	412326	4499481	40.6415258	-70.0368720	49.9
BT-46	WTG/ESP	391954	4497670	40.6228006	-70.2774379	53.9
BT-45	WTG/ESP	390102	4497670	40.6225564	-70.2993290	55.2
BT-47	WTG/ESP	393806	4497670	40.6230407	-70.2555466	53.4
BT-48	WTG/ESP	395658	4497670	40.6232767	-70.2336550	53.1
BT-49	WTG/ESP	397510	4497670	40.6235085	-70.2117631	52.2
BT-50	WTG/ESP	399362	4497670	40.6237361	-70.1898710	51.8
BT-51	WTG/ESP	401214	4497670	40.6239596	-70.1679787	51.6
BT-52	WTG/ESP	403066	4497670	40.6241790	-70.1460861	51.3
BT-53	WTG/ESP	404918	4497670	40.6243942	-70.1241933	51.1
BM-44	WTG/ESP	388250	4508700	40.7216480	-70.3231824	47.6
BM-45	WTG/ESP	390102	4508700	40.7218973	-70.3012591	47.2
BM-46	WTG/ESP	391954	4508700	40.7221424	-70.2793355	47.1
BN-43	WTG/ESP	386398	4506848	40.7047151	-70.3447697	49.3
BN-44	WTG/ESP	388250	4506848	40.7049684	-70.3228521	48.5
BN-45	WTG/ESP	390102	4506848	40.7052175	-70.3009343	47.6
BN-46	WTG/ESP	391954	4506848	40.7054625	-70.2790162	46.9
BN-47	WTG/ESP	393806	4506848	40.7057033	-70.2570979	46.0
BN-48	WTG/ESP	395658	4506848	40.7059399	-70.2351793	45.3
BP-42	WTG/ESP	384546	4504996	40.6877783	-70.3663461	51.4
BP-43	WTG/ESP	386398	4504996	40.6880356	-70.3444343	50.2
BP-44	WTG/ESP	388250	4504996	40.6882887	-70.3225222	49.6
BP-45	WTG/ESP	390102	4504996	40.6885377	-70.3006098	48.7
BP-46	WTG/ESP	391954	4504996	40.6887825	-70.2786972	47.9
BP-47	WTG/ESP	393806	4504996	40.6890231	-70.2567843	46.5

Table 1 WTG, ESP, and Booster Station Coordinates and Water Depths (Continued)

Name	Position Type	Easting (m)	Northing (m)	Latitude	Longitude	Water Depth (m)
BP-48	WTG/ESP	395658	4504996	40.6892596	-70.2348712	45.3
BP-49	WTG/ESP	397510	4504996	40.6894920	-70.2129578	45.1
BP-50	WTG/ESP	399362	4504996	40.6897202	-70.1910441	45.0
BQ-41	WTG/ESP	382694	4503144	40.6708376	-70.3879115	53.2
BQ-42	WTG/ESP	384546	4503144	40.6710989	-70.3660055	52.4
BQ-43	WTG/ESP	386398	4503144	40.6713560	-70.3440992	51.8
BQ-44	WTG/ESP	388250	4503144	40.6716090	-70.3221925	50.5
BQ-45	WTG/ESP	390102	4503144	40.6718578	-70.3002856	49.9
BQ-46	WTG/ESP	391954	4503144	40.6721025	-70.2783785	49.3
BQ-47	WTG/ESP	393806	4503144	40.6723430	-70.2564710	48.1
BQ-48	WTG/ESP	395658	4503144	40.6725793	-70.2345633	47.1
BQ-49	WTG/ESP	397510	4503144	40.6728115	-70.2126554	46.4
BQ-50	WTG/ESP	399362	4503144	40.6730396	-70.1907472	46.2
BR-40	WTG/ESP	380842	4501292	40.6538930	-70.4094661	55.7
BR-41	WTG/ESP	382694	4501292	40.6541582	-70.3875658	55.1
BR-42	WTG/ESP	384546	4501292	40.6544194	-70.3656652	54.5
BR-43	WTG/ESP	386398	4501292	40.6546764	-70.3437643	53.5
BR-44	WTG/ESP	388250	4501292	40.6549292	-70.3218631	52.9
BR-45	WTG/ESP	390102	4501292	40.6551779	-70.2999617	51.8
BR-46	WTG/ESP	391954	4501292	40.6554224	-70.2780600	50.8
BR-47	WTG/ESP	393806	4501292	40.6556628	-70.2561580	50.1
BR-48	WTG/ESP	395658	4501292	40.6558990	-70.2342558	49.2
BR-49	WTG/ESP	397510	4501292	40.6561311	-70.2123533	48.3
BR-50	WTG/ESP	399362	4501292	40.6563590	-70.1904505	47.9
BR-51	WTG/ESP	401214	4501292	40.6565827	-70.1685475	47.4
BR-52	WTG/ESP	403066	4501292	40.6568023	-70.1466443	47.0
BS-39	WTG/ESP	378990	4499481	40.6373137	-70.4310177	58.4
BS-40	WTG/ESP	380842	4499481	40.6375830	-70.4091230	57.2
BS-41	WTG/ESP	382694	4499481	40.6378481	-70.3872280	56.8
BS-42	WTG/ESP	384546	4499481	40.6381091	-70.3653327	55.8
BS-43	WTG/ESP	386398	4499481	40.6383659	-70.3434372	55.0
BS-44	WTG/ESP	388250	4499481	40.6386186	-70.3215413	53.9
BS-45	WTG/ESP	390102	4499481	40.6388672	-70.2996452	53.3
BS-46	WTG/ESP	391954	4499481	40.6391115	-70.2777488	52.8
BS-47	WTG/ESP	393806	4499481	40.6393518	-70.2558522	51.6
BS-48	WTG/ESP	395658	4499481	40.6395879	-70.2339553	51.1
BS-49	WTG/ESP	397510	4499481	40.6398198	-70.2120581	50.3

Table 1 WTG, ESP, and Booster Station Coordinates and Water Depths (Continued)

Name	Position Type	Easting (m)	Northing (m)	Latitude	Longitude	Water Depth (m)
BS-50	WTG/ESP	399362	4499481	40.6400476	-70.1901607	49.7
BS-51	WTG/ESP	401214	4499481	40.6402712	-70.1682630	49.4
BS-52	WTG/ESP	403066	4499481	40.6404907	-70.1463651	49.0
BT-39	WTG/ESP	378990	4497670	40.6210038	-70.4306695	59.2
BT-40	WTG/ESP	380842	4497670	40.6212729	-70.4087801	58.8
BT-41	WTG/ESP	382694	4497670	40.6215379	-70.3868904	58.2
BT-42	WTG/ESP	384546	4497670	40.6217988	-70.3650005	57.3
BT-43	WTG/ESP	386398	4497670	40.6220555	-70.3431103	56.9
BT-44	WTG/ESP	388250	4497670	40.6223080	-70.3212197	55.7
BU-39	WTG/ESP	378990	4495859	40.6046939	-70.4303216	60.6
BU-40	WTG/ESP	380842	4495859	40.6049629	-70.4084375	60.2
BU-41	WTG/ESP	382694	4495859	40.6052277	-70.3865532	59.3
BU-42	WTG/ESP	384546	4495859	40.6054884	-70.3646686	58.8
BU-43	WTG/ESP	386398	4495859	40.6057449	-70.3427836	58.4
BU-44	WTG/ESP	388250	4495859	40.6059973	-70.3208984	57.5
BU-37	WTG/ESP	375286	4495859	40.6041435	-70.4740888	61.9
BV-44	WTG/ESP	388250	4494048	40.5896866	-70.3205774	58.9
BV-43	WTG/ESP	386398	4494048	40.5894344	-70.3424573	59.3
BV-42	WTG/ESP	384546	4494048	40.5891780	-70.3643369	60.2
BV-41	WTG/ESP	382694	4494048	40.5889174	-70.3862162	60.6
BV-40	WTG/ESP	380842	4494048	40.5886527	-70.4080952	61.1
BV-39	WTG/ESP	378990	4494048	40.5883839	-70.4299740	62.0
BV-38	WTG/ESP	377138	4494048	40.5881110	-70.4518524	62.4
BV-37	WTG/ESP	375286	4494048	40.5878338	-70.4737305	62.8
BV-36	WTG/ESP	373434	4494048	40.5875526	-70.4956084	63.2
AL-37	Booster Station	375286	4555000	41.1367340	-70.4859500	37.7

Notes:

1. Grid coordinates referenced to UTM Zone 19 north in meters, NAD 1983 (2011) datum.
2. Lease Area background bathymetry is sourced from National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information (NCEI) Continuously Updated Digital Elevation Model (CUDEM). The vertical datum elevation is referenced to NAVD88.

Vineyard Northeast COP

Appendix I-A2 Vineyard Northeast Easements Request

Prepared by:
Epsilon Associates

Prepared for:
Vineyard Northeast LLC



March 2024

Revision	Date	Description
0	April 2023	Initial submission. Developed in response to Bureau of Ocean Energy Management (BOEM) Round 2 Comments (dated March 1, 2023).
0	March 2024	Resubmitted without revisions.

Appendix I-A2 Vineyard Northeast Easements Request

Pursuant to 30 CFR §§ 585.200, .620(a), and .622(b), Vineyard Northeast LLC (the “Proponent”) is preliminarily requesting from the Bureau of Ocean Energy Management (BOEM) two project easements for its offshore export cables that correspond to the federal portions of the Massachusetts Offshore Export Cable Corridor (OECC) and Connecticut OECC described in Section 3.5 of Construction and Operations Plan (COP) Volume I. The requested project easements are described below.

Massachusetts OECC Easement Description

As described in Section 3.5.2.1 of COP Volume I, the Massachusetts OECC travels from the northernmost tip of Lease Area OCS-A 0522 (the “Lease Area”) along the northeastern edge of the Massachusetts Wind Energy Area (MA WEA) and Rhode Island/Massachusetts (RI/MA) WEA and then heads across Buzzards Bay towards the Horseneck Beach Landfall Site in Westport, Massachusetts. From the Lease Area boundary to the landfall site, the Massachusetts OECC is approximately 126 kilometers (km) (78 statute miles [mi]).¹

The Massachusetts OECC is typically 720 meters (m) (2,362 feet [ft]) wide. Where the Massachusetts OECC approaches the northern border of Lease Area OCS-A 0501, it widens to approximately 1,891 m (6,204 ft) to enable high voltage alternating current (HVAC) offshore export cables (if used) to connect to a booster station in Lease Area OCS-A 0534. The Massachusetts OECC is also wider at expected cable crossings to allow the cables to cross existing cables perpendicularly and to provide flexibility for the installation process, which is more complex at cable crossings. At this time, the Proponent is requesting an easement for the full width of the Massachusetts OECC but expects to further refine the width of the requested easement prior to BOEM’s Record of Decision.

Figure 1 shows the entire Massachusetts OECC described in the COP. The requested project easement consists of the portion of the Massachusetts OECC in federal waters (bounded by solid lines). The remainder of the Massachusetts OECC passes through Massachusetts state waters (bounded by dotted lines). Figure 1 also depicts the BOEM Outer Continental Shelf (OCS) Lease Blocks and Aliquots that are intersected by the Massachusetts OECC. The requested project easement (the portion of the Massachusetts OECC in federal waters) is approximately 116 km (72 mi) long and includes approximately 89.8 km² (22,190 acres). The approximate extent of the project easement (in federal waters) can be determined by connecting in sequence the coordinates listed in Table 1 below. The coordinates are provided for the vertices of the polygon that form the requested easement in both geographic NAD 1983 (2011) (longitude, latitude) and UTM Zone 19N, NAD 1983 (2011) (eastings, northings).

¹ The length of the Massachusetts OECC is measured from the Lease Area boundary to the offshore edge of the corridor at the landfall site.

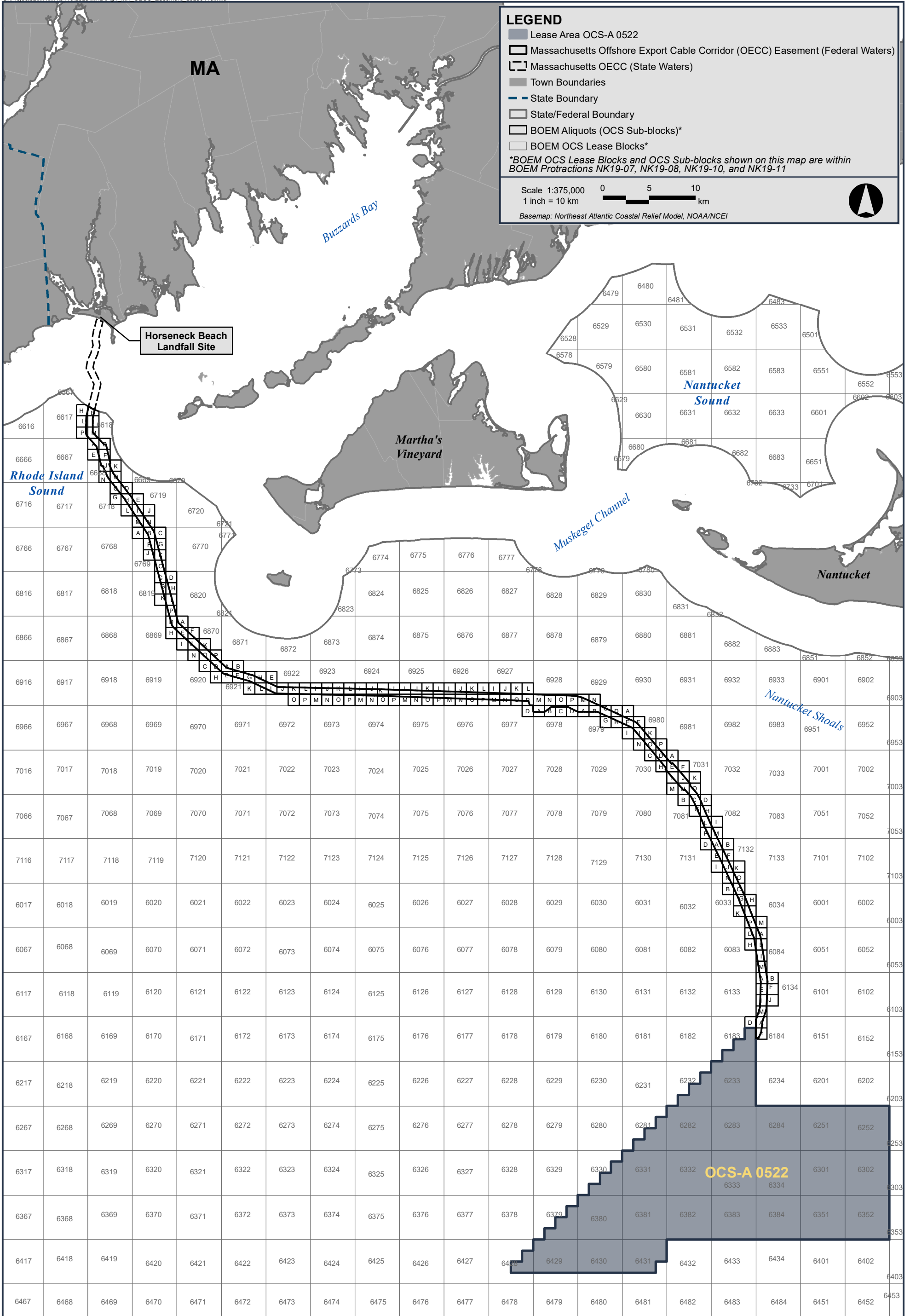


Figure 1
Massachusetts OECC Easement

Table 1 Massachusetts OECC Easement Coordinates

Point Number	Easting (m)	Northing (m)	Latitude	Longitude	Side of Corridor
1	399200	4519315	-70.19526864	40.81866448	Southwestern
2	399200	4520400	-70.19544416	40.82843889	Southwestern
3	399200	4521290	-70.19558819	40.83645648	Southwestern
4	399290	4521494	-70.19455153	40.83830237	Southwestern
5	399291	4521496	-70.19454458	40.83831704	Southwestern
6	399640	4522619	-70.190585	40.84847767	Southwestern
7	399641	4522623	-70.19057777	40.84851172	Southwestern
8	399765	4525367	-70.1895405	40.87324165	Southwestern
9	399765	4525370	-70.18954305	40.87326911	Southwestern
10	399006	4530117	-70.19932722	40.91593126	Southwestern
11	399005	4530120	-70.19933773	40.91595904	Southwestern
12	397287	4534510	-70.22046035	40.95528261	Southwestern
13	397287	4534511	-70.2204651	40.95529067	Southwestern
14	395363	4538615	-70.24401469	40.99201086	Southwestern
15	395363	4538616	-70.24401555	40.99201219	Southwestern
16	393627	4542216	-70.26527023	41.02421499	Southwestern
17	393619	4542233	-70.2653629	41.02436454	Southwestern
18	393101	4543461	-70.27173917	41.03535709	Southwestern
19	392590	4544671	-70.27802356	41.04618722	Southwestern
20	392589	4544672	-70.27803205	41.04619997	Southwestern
21	392252	4545284	-70.28215816	41.05165931	Southwestern
22	392250	4545286	-70.28217965	41.05168195	Southwestern
23	391518	4546134	-70.29103187	41.05922242	Southwestern
24	391405	4546036	-70.29236598	41.05832495	Southwestern
25	389452	4548313	-70.31601001	41.07856231	Southwestern
26	389566	4548410	-70.31466507	41.07945089	Southwestern
27	388036	4550238	-70.33321122	41.09570866	Southwestern
28	386049	4552612	-70.357306	41.11681368	Southwestern
29	386047	4552614	-70.35732232	41.11682622	Southwestern
30	385928	4552724	-70.35877024	41.11780225	Southwestern
31	385925	4552726	-70.3588024	41.11781952	Southwestern
32	385738	4552833	-70.36104271	41.11875997	Southwestern
33	385737	4552834	-70.36105741	41.11876549	Southwestern
34	385389	4552994	-70.36523371	41.12015614	Southwestern
35	382132	4554489	-70.40430871	41.13315735	Southwestern
36	382126	4554491	-70.40438402	41.13316875	Southwestern

Table 1 Massachusetts OECC Easement Coordinates (Continued)

Point Number	Easting (m)	Northing (m)	Latitude	Longitude	Side of Corridor
37	380000	4554485	-70.42970059	41.13280444	Southwestern
38	378990	4555000	-70.44183139	41.13729442	Southwestern
39	377138	4555000	-70.46389109	41.13701615	Southwestern
40	376401	4554453	-70.47256322	41.13197826	Southwestern
41	376195	4554460	-70.47501764	41.13200899	Southwestern
42	375200	4554478	-70.48686871	41.13202152	Southwestern
43	375200	4555200	-70.48701118	41.13852148	Southwestern
44	374835	4555200	-70.49135795	41.13846529	Southwestern
45	374715	4555655	-70.49288799	41.14254062	Southwestern
46	374713	4555659	-70.49291278	41.14257806	Southwestern
47	374710	4555662	-70.49295156	41.14260797	Southwestern
48	374705	4555664	-70.49300058	41.14262747	Southwestern
49	374701	4555665	-70.49305515	41.14263468	Southwestern
50	374480	4555673	-70.49568946	41.14266936	Southwestern
51	374480	4555673	-70.49568966	41.14266936	Southwestern
52	367179	4555917	-70.58271047	41.14370901	Southwestern
53	358033	4556224	-70.69172327	41.14491852	Southwestern
54	358033	4556224	-70.69172536	41.14491853	Southwestern
55	355068	4556288	-70.72705509	41.1449759	Southwestern
56	347611	4556451	-70.81590994	41.14507228	Southwestern
57	347535	4556460	-70.81681722	41.14514477	Southwestern
58	347395	4556493	-70.81848951	41.14541378	Southwestern
59	347323	4556518	-70.81935722	41.14562683	Southwestern
60	344630	4557784	-70.85175107	41.15650975	Southwestern
61	344628	4557785	-70.8517781	41.15651693	Southwestern
62	341961	4558548	-70.8837407	41.16287525	Southwestern
63	341921	4558560	-70.88422008	41.16297053	Southwestern
64	341920	4558560	-70.8842395	41.1629763	Southwestern
65	341883	4558581	-70.88467637	41.16315329	Southwestern
66	341742	4558661	-70.8863875	41.16384649	Southwestern
67	341705	4558681	-70.88682437	41.16402347	Southwestern
68	341704	4558682	-70.88684149	41.1640325	Southwestern
69	341673	4558711	-70.88721186	41.16428146	Southwestern
70	336645	4563383	-70.94836439	41.20534446	Southwestern
71	336419	4563592	-70.95111201	41.20718744	Southwestern
72	336384	4563630	-70.95154401	41.20752121	Southwestern

Table 1 Massachusetts OECC Easement Coordinates (Continued)

Point Number	Easting (m)	Northing (m)	Latitude	Longitude	Side of Corridor
73	336323	4563706	-70.95229133	41.20818661	Southwestern
74	336270	4563794	-70.95294861	41.20897434	Southwestern
75	336232	4563884	-70.95342091	41.20977062	Southwestern
76	336215	4563933	-70.95363316	41.21020897	Southwestern
77	333679	4573562	-70.98648921	41.29637755	Southwestern
78	333677	4573566	-70.98651401	41.296417	Southwestern
79	331043	4577568	-71.01906905	41.3318954	Southwestern
80	331043	4577569	-71.01907743	41.33190381	Southwestern
81	329340	4579762	-71.04002552	41.35128907	Southwestern
82	329314	4579796	-71.04034403	41.3515837	Southwestern
83	329313	4579797	-71.04035539	41.35159721	Southwestern
84	329296	4579836	-71.04057261	41.35194017	Southwestern
85	328902	4580715	-71.04553549	41.35977456	Southwestern
86	328820	4580897	-71.04655981	41.36139127	Southwestern
87	328804	4580933	-71.0467617	41.36170992	Southwestern
88	328776	4581048	-71.04713427	41.36273833	Southwestern
89	328630	4581012	-71.04886426	41.36238401	Southwestern
90	328429	4581827	-71.05149891	41.36968435	Southwestern
91	328338	4582196	-71.05269043	41.37298533	Southwestern
92	328337	4582199	-71.05269941	41.37301116	Southwestern
93	328231	4582667	-71.05410034	41.37720189	Southwestern
94	328132	4583102	-71.05540265	41.38109705	Southwestern
95	328131	4583106	-71.0554213	41.38113168	Southwestern
96	328128	4583109	-71.05545184	41.38116113	Southwestern
97	327875	4583367	-71.05855294	41.38342135	Southwestern
98	327865	4583377	-71.05867973	41.38351762	Southwestern
99	327068	4584255	-71.06845515	41.39124927	Southwestern
100	326997	4584371	-71.06933458	41.3922747	Southwestern
101	326973	4584504	-71.06965406	41.39347146	Southwestern
102	326996	4586227	-71.06987786	41.40898593	Southwestern
103	326996	4586266	-71.0698829	41.40933502	Southwestern
104	326997	4586268	-71.06988098	41.40934967	Southwestern
105	327005	4586306	-71.06978514	41.40969116	Southwestern
106	327263	4587397	-71.06701341	41.41956706	Southwestern
107	327344	4587349	-71.06603077	41.41915696	Northern
108	327436	4587298	-71.06492206	41.41871348	Northern

Table 1 Massachusetts OECC Easement Coordinates (Continued)

Point Number	Easting (m)	Northing (m)	Latitude	Longitude	Side of Corridor
109	327547	4587238	-71.06357714	41.41820235	Northern
110	327640	4587191	-71.0624448	41.41779411	Northern
111	327735	4587145	-71.06130256	41.41740183	Northern
112	327830	4587101	-71.06015056	41.41702606	Northern
113	327924	4587060	-71.05902214	41.41667641	Northeastern
114	327716	4586180	-71.06125779	41.40871412	Northeastern
115	327715	4586177	-71.06126166	41.40868474	Northeastern
116	327695	4584641	-71.06106402	41.3948581	Northeastern
117	327696	4584636	-71.06105085	41.39480873	Northeastern
118	327699	4584631	-71.06101457	41.39476642	Northeastern
119	328393	4583867	-71.05250699	41.38803692	Northeastern
120	328393	4583866	-71.05250118	41.38803253	Northeastern
121	328836	4583422	-71.04708523	41.38412319	Northeastern
122	328966	4583291	-71.04549568	41.38297568	Northeastern
123	329127	4583328	-71.04357713	41.38333938	Northeastern
124	329330	4582432	-71.04089849	41.37532285	Northeastern
125	329620	4581256	-71.03709995	41.36479289	Northeastern
126	329475	4581220	-71.03883005	41.36443872	Northeastern
127	329487	4581169	-71.03866467	41.3639802	Northeastern
128	329558	4581010	-71.03776955	41.36256713	Northeastern
129	329935	4580172	-71.03303994	41.35509972	Northeastern
130	329937	4580168	-71.0330156	41.35507009	Northeastern
131	331620	4577999	-71.01229884	41.33589701	Northeastern
132	331637	4577976	-71.01209343	41.33569092	Northeastern
133	334312	4573912	-70.97903412	41.29965864	Northeastern
134	334360	4573803	-70.97842673	41.29869226	Northeastern
135	336905	4564141	-70.94546723	41.21222515	Northeastern
136	336906	4564139	-70.94545857	41.21220726	Northeastern
137	336913	4564122	-70.94536751	41.21205371	Northeastern
138	336915	4564118	-70.94534068	41.21202155	Northeastern
139	336927	4564104	-70.94519659	41.21189324	Northeastern
140	336928	4564102	-70.94517895	41.21187962	Northeastern
141	342131	4559268	-70.8819032	41.16939075	Northeastern
142	342134	4559266	-70.88186885	41.16937263	Northeastern
143	342199	4559230	-70.88108711	41.16905593	Northeastern
144	342202	4559228	-70.88104812	41.16904434	Northeastern

Table 1 Massachusetts OECC Easement Coordinates (Continued)

Point Number	Easting (m)	Northing (m)	Latitude	Longitude	Side of Corridor
145	344855	4558469	-70.84924512	41.16271767	Northeastern
146	344882	4558461	-70.84891846	41.16265263	Northeastern
147	344883	4558461	-70.84890496	41.16264905	Northeastern
148	344909	4558448	-70.84859625	41.1625454	Northeastern
149	347594	4557186	-70.81629076	41.1516922	Northeastern
150	347597	4557185	-70.81625534	41.1516835	Northeastern
151	347662	4557170	-70.81548031	41.15155882	Northeastern
152	347665	4557170	-70.81544327	41.15155586	Northeastern
153	355083	4557008	-70.72703842	41.15145998	Northeastern
154	358050	4556944	-70.69167959	41.15140262	Northeastern
155	358055	4556943	-70.69162837	41.15140231	Northeastern
156	367203	4556637	-70.5825792	41.15019261	Northeastern
157	379281	4556233	-70.43860633	41.14843717	Northeastern
158	379314	4556230	-70.43820904	41.1484184	Northeastern
159	379406	4556219	-70.43712174	41.14832937	Northeastern
160	379406	4556219	-70.43711861	41.14832913	Northeastern
161	379776	4556179	-70.43269494	41.14802636	Northeastern
162	379942	4556161	-70.43071473	41.14789124	Northeastern
163	379976	4556156	-70.43031177	41.1478494	Northeastern
164	380053	4556140	-70.4293959	41.1477213	Northeastern
165	380057	4556139	-70.42934214	41.14771351	Northeastern
166	380276	4556092	-70.42672278	41.14732144	Northeastern
167	380316	4556081	-70.42624319	41.14722806	Northeastern
168	380417	4556048	-70.42504387	41.14693897	Northeastern
169	380433	4556042	-70.42485098	41.14688871	Northeastern
170	380712	4555933	-70.42150488	41.14595015	Northeastern
171	380732	4555924	-70.4212664	41.14587716	Northeastern
172	385689	4553648	-70.36177782	41.12609102	Northeastern
173	386053	4553481	-70.35741695	41.12463888	Northeastern
174	386083	4553466	-70.35705665	41.12450362	Northeastern
175	386320	4553330	-70.35421505	41.12331072	Northeastern
176	386385	4553282	-70.35342707	41.12288763	Northeastern
177	386553	4553127	-70.35140296	41.12152313	Northeastern
178	386586	4553093	-70.35100305	41.12121593	Northeastern
179	388588	4550700	-70.3267219	41.09994597	Northeastern
180	390119	4548871	-70.30816935	41.08368124	Northeastern

Table 1 Massachusetts OECC Easement Coordinates (Continued)

Point Number	Easting (m)	Northing (m)	Latitude	Longitude	Side of Corridor
181	390234	4548967	-70.30681745	41.08456381	Northeastern
182	390914	4548172	-70.29858665	41.07749743	Northeastern
183	392177	4546702	-70.28329317	41.06442762	Northeastern
184	392063	4546604	-70.28462754	41.0635302	Northeastern
185	392820	4545727	-70.27547353	41.05573205	Northeastern
186	392857	4545676	-70.27502055	41.05527109	Northeastern
187	393124	4545229	-70.27177162	41.0512839	Northeastern
188	393142	4545195	-70.27154979	41.0509763	Northeastern
189	393241	4544980	-70.27033523	41.04905696	Northeastern
190	393246	4544969	-70.27027534	41.04895819	Northeastern
191	393764	4543741	-70.26389765	41.03796508	Northeastern
192	394279	4542521	-70.25756628	41.02704775	Northeastern
193	394279	4542521	-70.2575625	41.02704164	Northeastern
194	396012	4538926	-70.23634868	40.99489514	Northeastern
195	396014	4538923	-70.23632758	40.99486271	Northeastern
196	397944	4534806	-70.21270838	40.95802733	Northeastern
197	397953	4534784	-70.21259218	40.95782981	Northeastern
198	399690	4530346	-70.19124254	40.91807472	Northeastern
199	399710	4530270	-70.19098508	40.91739411	Northeastern
200	400482	4525446	-70.18104759	40.87403958	Northeastern
201	400488	4525410	-70.18097422	40.87371925	Northeastern
202	400488	4525409	-70.18097295	40.87370556	Northeastern
203	400486	4525372	-70.18098663	40.87338059	Northeastern
204	400358	4522542	-70.18205989	40.84787063	Northeastern
205	400356	4522496	-70.18207707	40.84746228	Northeastern
206	400355	4522495	-70.18208067	40.84744533	Northeastern
207	400342	4522451	-70.1822334	40.84705358	Northeastern
208	399972	4521261	-70.18642958	40.8362893	Northeastern
209	399966	4521242	-70.18649816	40.83611334	Northeastern
210	399966	4521241	-70.18650163	40.83610601	Northeastern
211	399957	4521222	-70.18659645	40.83593723	Northeastern
212	399956	4521218	-70.18660933	40.83590103	Northeastern
213	399776	4519923	-70.18854033	40.8242129	Northeastern
214	399508	4519315	-70.19161566	40.81870457	Northeastern
215	399508	4519315	-70.19161566	40.81870457	Northeastern

Connecticut OECC Easement Description

As described in Section 3.5.2.2 of COP Volume I, the Connecticut OECC travels from the southwestern tip of Lease Area OCS-A 0522 along the southwestern edge of the MA WEA and then heads between Block Island and the tip of Long Island towards potential landfall sites near New London, Connecticut. As the Connecticut OECC approaches shore, it splits into three variations to connect to three potential landfall sites. The “Eastern Point Beach Approach” of the Connecticut OECC connects to the Eastern Point Beach Landfall Site, the “Ocean Beach Approach” connects to the Ocean Beach Landfall Site, and the “Niantic Beach Approach” connects to the Niantic Beach Landfall Site. Depending on the approach used, the maximum length of the Connecticut OECC from the Lease Area boundary to the landfall site is approximately 171-179 km (106-111 mi).²

The Connecticut OECC is typically 720 m (2,362 ft) wide, but is wider at expected cable crossings to enable the cables to cross perpendicularly and to provide flexibility during installation. At this time, the Proponent is requesting an easement for the full width of the Connecticut OECC but expects to further refine the width of the requested easement prior to BOEM’s Record of Decision.

Figure 2 shows the entire Connecticut OECC described in the COP. The requested project easement consists of the portion of the Connecticut OECC in federal waters (bounded by solid lines). The remainder of the Connecticut OECC passes through New York and Connecticut state waters (bounded by dotted lines). Figure 2 also depicts the BOEM OCS Lease Blocks and Aliquots that are intersected by the Connecticut OECC. The requested project easement (the portion of the Connecticut OECC in federal waters) is approximately 131 km (82 mi) long and includes approximately 94.9 km² (23,450 acres). The approximate extent of the project easement (in federal waters) can be determined by connecting in sequence the coordinates in Table 2 below. The coordinates are provided for the vertices of the polygon that form the requested easement in both geographic NAD 1983 (2011) (longitude, latitude) and UTM Zone 19N, NAD 1983 (2011) (eastings, northings).

² The length of the Connecticut OECC is measured from the Lease Area boundary to the offshore edge of the corridor at each landfall site.

LEGEND

- Lease Area OCS-A 0522
- Connecticut Offshore Export Cable Corridor (OECC) Easement (Federal Waters)
- Connecticut OECC (State Waters)
- Town Boundaries
- State Boundary
- State/Federal Boundary
- BOEM Aliquots (OCS Sub-blocks)* **BOEM OCS Lease Blocks and OCS Sub-blocks shown on this map are within BOEM Protractions NK19-07, NK19-08, NK19-10, and NK19-11*
- BOEM OCS Lease Blocks*

Scale 1:500,000
1 inch = 13 km

0 7.5 15 km


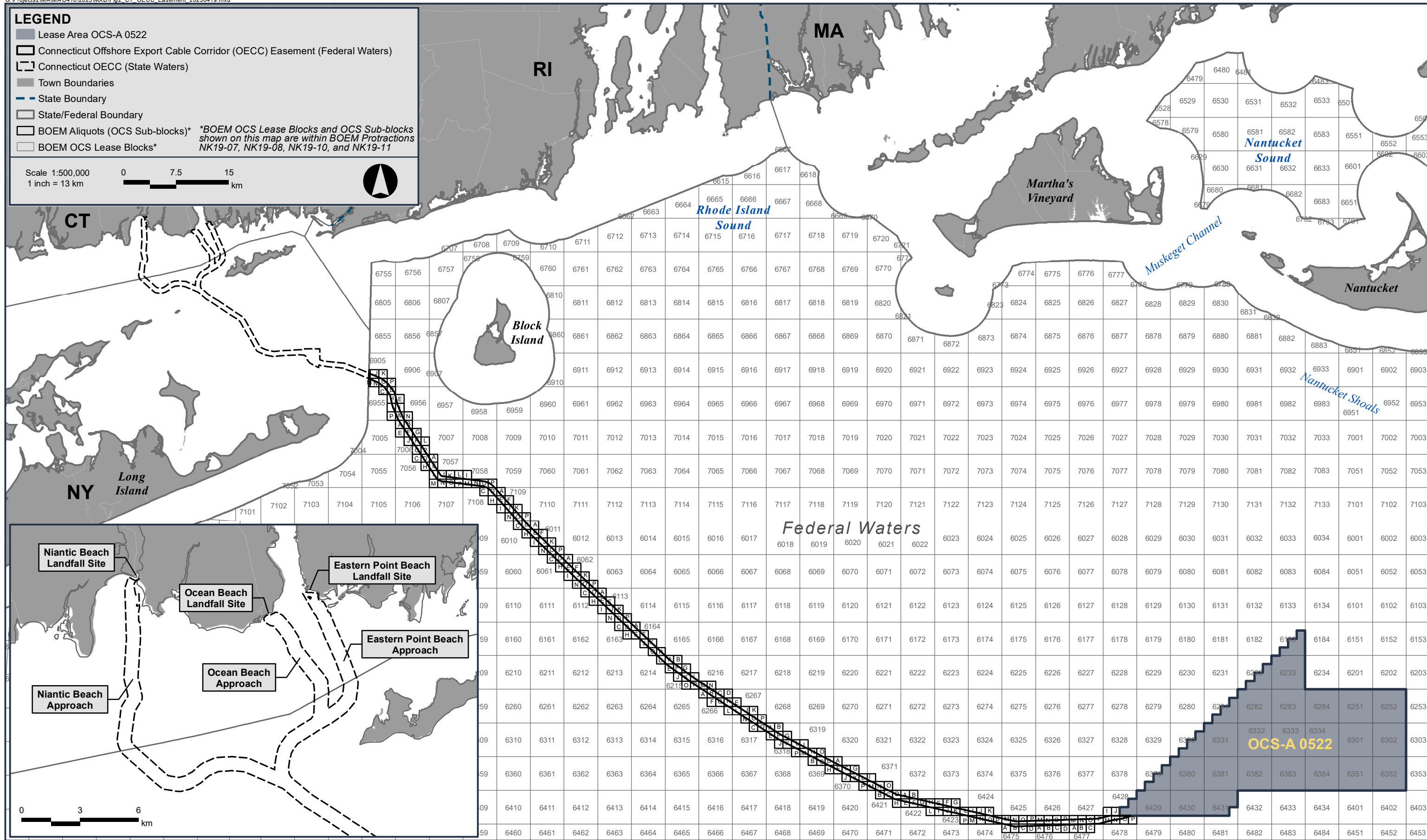



Figure 2
Connecticut OECC Easement

Table 2 Connecticut OECC Easement Coordinates

Point Number	Easting (m)	Northing (m)	Latitude	Longitude	Side of Corridor
1	374286	4494000	-70.485539	40.58725016	Southwestern
2	374305	4493897	-70.48529094	40.58632103	Southwestern
3	372922	4493536	-70.50155305	40.58286109	Southwestern
4	371923	4493399	-70.51332293	40.58147749	Southwestern
5	371443	4493274	-70.51896677	40.58027633	Southwestern
6	369827	4492853	-70.53797417	40.57622871	Southwestern
7	369748	4492841	-70.53890295	40.57611323	Southwestern
8	357889	4492446	-70.67886609	40.57060385	Southwestern
9	357797	4492455	-70.67995638	40.57066764	Southwestern
10	355165	4493056	-70.71117073	40.57562463	Southwestern
11	340738	4496352	-70.88237504	40.60264874	Southwestern
12	340653	4496383	-70.88338296	40.60291075	Southwestern
13	330091	4501822	-71.00962056	40.6497831	Southwestern
14	330090	4501823	-71.00963254	40.64978756	Southwestern
15	327598	4503116	-71.03944619	40.66091536	Southwestern
16	324243	4504858	-71.07960118	40.67588473	Southwestern
17	324227	4504866	-71.07978882	40.67595908	Southwestern
18	324175	4504896	-71.08040581	40.6762186	Southwestern
19	324160	4504906	-71.08058837	40.67629995	Southwestern
20	311928	4512886	-71.2276177	40.74544267	Southwestern
21	311920	4512891	-71.22770694	40.74548571	Southwestern
22	311896	4512908	-71.22800202	40.74563194	Southwestern
23	311889	4512913	-71.22808983	40.74567664	Southwestern
24	308334	4515493	-71.27095719	40.76807433	Southwestern
25	308315	4515507	-71.27118375	40.76820119	Southwestern
26	308254	4515558	-71.2719198	40.76864251	Southwestern
27	308236	4515574	-71.27213486	40.76878044	Southwestern
28	294736	4528396	-71.43618083	40.8809298	Southwestern
29	294733	4528399	-71.43621878	40.88095599	Southwestern
30	287582	4535356	-71.52339017	40.94174392	Southwestern
31	287573	4535365	-71.52349983	40.94182303	Southwestern
32	287544	4535396	-71.52385902	40.94209151	Southwestern
33	287535	4535405	-71.5239649	40.9421735	Southwestern
34	283150	4540322	-71.57773082	40.98526953	Southwestern
35	282865	4540610	-71.5812237	40.98778023	Southwestern
36	282541	4540818	-71.58513921	40.98956858	Southwestern

Table 2 Connecticut OECC Easement Coordinates (Continued)

Point Number	Easting (m)	Northing (m)	Latitude	Longitude	Side of Corridor
37	282138	4540954	-71.58997786	40.99068482	Southwestern
38	281669	4541034	-71.59556986	40.99128299	Southwestern
39	276100	4541706	-71.66195238	40.99581754	Southwestern
40	276049	4541716	-71.66256493	40.99589346	Southwestern
41	275881	4541762	-71.66457187	40.9962571	Southwestern
42	275786	4541803	-71.66572169	40.99660501	Southwestern
43	275638	4541895	-71.66750717	40.99738885	Southwestern
44	275559	4541962	-71.66847736	40.99797165	Southwestern
45	275444	4542092	-71.66989183	40.99911003	Southwestern
46	275412	4542134	-71.67028338	40.99947493	Southwestern
47	270058	4550317	-71.73692566	41.07161391	Southwestern
48	270041	4550345	-71.73713588	41.0718649	Southwestern
49	269989	4550442	-71.73778453	41.07272408	Southwestern
50	269975	4550472	-71.73796349	41.07298859	Southwestern
51	269176	4552383	-71.74817917	41.08995861	Southwestern
52	269166	4552410	-71.74830696	41.09019511	Southwestern
53	269137	4552500	-71.74869121	41.09099493	Southwestern
54	269129	4552527	-71.74879398	41.09123831	Southwestern
55	268755	4554067	-71.75382081	41.1049888	Southwestern
56	267953	4555127	-71.76375741	41.11430168	Southwestern
57	267148	4555726	-71.77356318	41.11946069	Southwestern
58	265750	4556330	-71.79042471	41.12448948	Southwestern
59	265770	4557106	-71.79049385	41.1314771	Northeastern
60	267472	4556371	-71.76995297	41.12535129	Northeastern
61	267544	4556329	-71.76907845	41.12499704	Northeastern
62	268424	4555674	-71.75835962	41.11935747	Northeastern
63	268497	4555603	-71.75747244	41.1187326	Northeastern
64	269374	4554442	-71.74659344	41.10853553	Northeastern
65	269437	4554309	-71.74579846	41.1073643	Northeastern
66	269825	4552711	-71.74058134	41.09308866	Northeastern
67	269846	4552648	-71.7403126	41.09252914	Northeastern
68	270633	4550765	-71.73024993	41.0758101	Northeastern
69	270669	4550697	-71.72979633	41.07520919	Northeastern
70	276000	4542550	-71.66344851	41.00338118	Northeastern
71	276063	4542479	-71.66267619	41.00275956	Northeastern
72	276121	4542443	-71.66197335	41.002451	Northeastern

Table 2 Connecticut OECC Easement Coordinates (Continued)

Point Number	Easting (m)	Northing (m)	Latitude	Longitude	Side of Corridor
73	276212	4542418	-71.66087744	41.00225243	Northeastern
74	281764	4541748	-71.59469202	40.99773142	Northeastern
75	281782	4541746	-71.59447991	40.99771282	Northeastern
76	282287	4541659	-71.58845219	40.99706805	Northeastern
77	282341	4541645	-71.58780448	40.99695939	Northeastern
78	282813	4541486	-71.58213945	40.9956525	Northeastern
79	282893	4541448	-71.58117728	40.9953278	Northeastern
80	283287	4541194	-71.57640886	40.99314985	Northeastern
81	283348	4541145	-71.57567339	40.99272553	Northeastern
82	283668	4540823	-71.57175946	40.98991203	Northeastern
83	283681	4540809	-71.57159646	40.98978835	Northeastern
84	288069	4535889	-71.51780335	40.94666764	Northeastern
85	288089	4535868	-71.51755195	40.94647972	Northeastern
86	295234	4528917	-71.43045376	40.88573949	Northeastern
87	308723	4516104	-71.26652839	40.77366683	Northeastern
88	308766	4516068	-71.26601339	40.77335803	Northeastern
89	312308	4513499	-71.22330363	40.75104196	Northeastern
90	312325	4513487	-71.22309707	40.7509396	Northeastern
91	324546	4505514	-71.07619467	40.68185492	Northeastern
92	324582	4505493	-71.07576286	40.6816733	Northeastern
93	327930	4503755	-71.03570014	40.6667381	Northeastern
94	330421	4502462	-71.00589042	40.65561163	Northeastern
95	340943	4497044	-70.88013243	40.60891713	Northeastern
96	357912	4493167	-70.67876067	40.57710177	Northeastern
97	369684	4493560	-70.53980758	40.58257159	Northeastern
98	371373	4494000	-70.51994363	40.58680248	Northeastern
99	374286	4494000	-70.485539	40.58725016	Northeastern