



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

45 DAY PUBLIC NOTICE

Comment Period Begins: October 2, 2012
Comment Period Ends: November 19, 2012
File Number: NAE-2009-789
In Reply Refer To: Michael J. Elliott
Phone: (978) 318-8131
E-mail: michael.j.elliott@usace.army.mil

The District Engineer has received permit applications from the two applicants below to **conduct work in waters of the United States** as described below.

APPLICANT: Deepwater Wind Block Island, LLC and Deepwater Wind Block Island Transmission System, LLC (collectively "Deepwater Wind").

ACTIVITY: Deepwater Wind Block Island, LLC proposes to construct and maintain the Block Island Wind Farm (BIWF), a 30-megawatt (MW) offshore wind farm located in Rhode Island state territorial waters. The BIWF will consist of five 6-MW wind turbine generators (WTGs), a submarine cable interconnecting the five WTGs, and a 34.5-kilovolt (kV) submarine transmission cable from the northernmost WTG to an interconnection point on east-central Block Island where the cable will go ashore to a new substation built at the existing Block Island Power Company (BIPCO) property. In connection with the BIWF, Deepwater Wind Block Island Transmission, LLC proposes to construct the Block Island Transmission System (BITS), a 34.5-kV alternating current bi-directional submarine transmission cable from Block Island to the Rhode Island mainland. The proposed BIWF and BITS facilities are shown in **Figures 1-5** and on the plans provided in **Attachment A**. A more detailed description of the project is below.

Deepwater Wind has submitted an Environmental Report as part of their application. This large document is not attached to this public notice. However, Deepwater Wind has made the Environmental Report available on their website at the following address:

www.dwwind.com/block-island/block-island-project-overview

Paper copies of the Environmental Report are also available for public review at the Block Island Town Hall and at the Maury Loontjens Memorial Library in Narragansett. The Environmental Report Table of Contents is attached to this public notice as **Attachment B**.

WATERWAY AND LOCATION OF THE PROPOSED WORK:

The five WTGs are proposed to be built approximately 3 statute miles off of the southeast coast of Block Island in Rhode Island Sound (Atlantic Ocean). The proposed locations on the USGS Block Island, RI quadrangle sheet for the five WTGs are listed in **Table 1** below. The cable locations are shown on the attached plans. The BITS will make landfall on east-central Block Island at the same location as the BIWF cable and will also interconnect at a new substation built at the existing Block Island Power Company (BIPCO) property. The BITS will make landfall on the Rhode Island mainland in the Town of Narragansett.

Table 1. WTG Coordinates

#	Coordinate Plane WGS 1984	
	Latitude	Longitude
WTG 1	41° 7' 32.596" N	71° 30' 27.230" W
WTG 2	41° 7' 11.770" N	71° 30' 50.208" W
WTG 3	41° 6' 53.060" N	71° 31' 16.183" W
WTG 4	41° 6' 36.710" N	71° 31' 44.810" W
WTG 5	41° 6' 23.050" N	71° 32' 15.540" W

PROPOSED WORK AND PURPOSE:

Deepwater Wind Block Island, LLC, a wholly owned indirect subsidiary of Deepwater Wind Holdings, LLC, proposes to develop the BIWF, a 30-MW offshore wind farm located approximately 3 miles southeast of Block Island, Rhode Island and 16 miles south of the Rhode Island mainland. In connection with the BIWF, Deepwater Wind Block Island Transmission, LLC, also a wholly owned indirect subsidiary of Deepwater Wind Holdings, LLC, proposes to develop the BITS, a 34.5-kV alternating current (AC) bi-directional submarine transmission cable that will run approximately 21.8 miles from Block Island to the Rhode Island mainland (see **Figure 1**) (collectively “Deepwater Wind” and “Project”).

The Project will also include construction of one new substation at the site of an existing power generation facility on BIPCO property (Block Island Substation). The Block Island Substation will provide a point of interconnection for the power from the BIWF and will be the point of interconnection for BITS on Block Island. The Block Island Substation will consist of two adjoining switchyards: one dedicated to the BIWF (BIWF Generation Switchyard) and the other dedicated to the BITS (BITS Island Switchyard). The Project will also include upgrades to the existing substation on the BIPCO property. The BITS will connect to the existing The Narragansett Electric Company d/b/a National Grid (TNEC) distribution system on the Rhode Island mainland via a new switchyard located in the Town of Narragansett, Rhode Island.

The BIWF is located entirely within Rhode Island state territorial waters. The BIWF WTGs, Inter-Array Cable, and a portion of the Export Cable are located within the Rhode Island Renewable Energy Zone established by the Rhode Island Coastal Resources Management Council (CRMC). The offshore BITS cable is located in Rhode Island state territorial waters and in federal waters on the Outer Continental Shelf (OCS). Onshore cables, the substation, switchyards and other ancillary facilities associated with the BIWF and the BITS will be located in the Towns of New Shoreham (Block Island) and Narragansett in Washington County, Rhode Island. Construction staging and laydown for offshore construction will occur at the Quonset Point port facility in North Kingstown, also in Washington County, Rhode Island.

According to the applicant, the BIWF is expected to generate approximately 125,500 megawatt-hours (MWh) each year once it is fully operational, supplying enough energy to power approximately 17,200 Rhode Island households. The BIWF will be capable of supplying the majority of Block Island’s electricity needs and will provide an alternative energy source to the diesel-fired generators that are currently used to power Block Island. The BITS will export excess power from the BIWF to the Rhode Island mainland and will be capable of supplying power from the existing TNEC distribution system to Block Island. On June 30, 2010, Deepwater

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Wind and TNEC executed a power purchase agreement (PPA) for the sale of power from the BIWF to TNEC. The Rhode Island Public Utilities Commission (PUC) issued a written order on August 16, 2010 approving the PPA.

The BIWF will consist of five 6-MW WTGs, a submarine cable interconnecting the WTGs (Inter-Array Cable), and a 34.5-kV transmission cable approximately 6.2 miles long from the northernmost WTG to an interconnection point on Block Island (Export Cable). The WTGs would be attached to the seafloor using jacket foundations secured with four foundation piles or skirt piles driven to a depth of up to 250 feet below the mudline. Deepwater Wind plans to install five WTGs with a hub height above mean low water (MLW) between 269 feet and 328 feet and a rotor diameter between 505 feet and 541 feet, for a total height between 581 feet and 659 feet above MLW. The blade clearance will range between 75 feet and 118 feet above MLW. An illustration of a representative 6-MW WTG and foundation are shown in **Figures 3, 4 and 5**.

The WTG foundations will result in approximately 0.35 acre seafloor disturbance from the WTG foundations of all five WTGs, including armouring of the Inter-Array Cable at the base of each turbine. Construction activities would result in up to 1.2 acres of seafloor disturbance associated with jack-up and/or anchored derrick barges used to install the foundations and WTGs. The submarine cables will be installed using a jet plow to minimize sediment resuspension and seafloor disturbance during cable laying. Installation of the Inter-Array and Export Cable would result in up to 14.91 acres of seafloor disturbance. During operation, cable armouring in areas where the target depth is not achieved may require up to 0.39 acre of sand and/or cement bags for cable protection. The Export Cable will be brought ashore on Block Island at Crescent Beach using either a short-distance or long-distance horizontal directional drill (HDD) that would temporarily disturb up to 2.3 acres of beach and parking areas onshore. The long-distance HDD would require the installation of a temporary cofferdam up to 1,900 feet from shore. The cofferdam would result in removal and refill of approximately 333 cubic yards of sediment. The onshore BIWF facilities will not result in fill or discharge into wetlands and waters of the United States. The Export Cable will require one crossing of a navigable water attached to the existing bridge that spans Trims Pond and Harbor Pond on Beach Avenue.

The BITS is a proposed 34.5-kV AC bi-directional submerged transmission cable that will run approximately 21.8 miles from the substation on Block Island to the switchyard in Narragansett, Rhode Island and to its interconnection point with the TNEC distribution system. The BITS will be located within the state of Rhode Island, its territorial waters, and federal waters (approximately 9 miles on the OCS). The BITS will make landfall on Block Island at Crescent Beach adjacent to the BIWF Export Cable and will be collocated with the BIWF Export Cable within existing road rights-of-way to the BIPCO property. The BITS cable route on the Rhode Island mainland will make landfall on Rhode Island mainland at the Narragansett Town Beach parking lot and will follow an onshore route to a new switchyard located on municipally owned land in the Town of Narragansett.

The BITS will be installed offshore using a jet plow to minimize sediment resuspension and seafloor disturbance. Installation activities would result in a maximum of 39.64 acres of seafloor disturbance. During operation, bags of sand and/or cement for cable armouring associated with two existing telecommunications cable crossings and areas where the target burial depth may not be achieved would result in up to 1.33 acres of seafloor disturbance. The BITS cable would be brought ashore using either a short-distance or long-distance HDD that would temporarily disturb up to 2.3 acres of beach and parking areas onshore. The long-distance HDD option would require the installation of two temporary cofferdams that would result in removal and fill of approximately 333 cubic yards of sediment per cofferdam. The onshore BITS facilities will not result in fill or

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discharge into wetlands and waters of the United States. The onshore BITS facilities will also avoid state-regulated coastal shoreline features; however, there will be impacts on a state-regulated 200-foot contiguous area. The BITS will be collocated with the BIWF Export Cable attached to the existing bridge that spans Trims Pond and Harbor Pond on Beach Avenue.

The work is described on the enclosed plans entitled “34.5 kV BIWF Underground Route” and “34.5 kV BITS Underground Route” dated “May 23, 2012”. Additional detail plan sheets can be viewed by going to the Deepwater Wind website at the following address: www.dwwind.com/block-island/block-island-project-overview. Refer to the Environmental Report Table of Contents.

AUTHORITY:

Permits are required pursuant to:

- Section 10 of the Rivers and Harbors Act of 1899
- 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 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 that may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, 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 and, in general, the needs and welfare of the people.

The Corps of Engineers 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. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Under the OCS Lands Act, as amended, the Bureau of Ocean Energy Management (BOEM) has the authority to grant a right-of-way for the portion of the BITS located on the OCS in federal territorial waters. The Corps of Engineers will work collaboratively with BOEM to ensure effective implementation of the required NEPA process; the required Endangered Species Act (ESA) Section 7 consultations; the Magnuson-Stevens Fishery and Conservation Management Act Essential Fish Habitat consultation (Section 305); the National Historic Preservation Act Section 106 process; and the Coastal Zone Management Act (CZMA) review process. The Corps of Engineers will act as the Lead Federal Agency and BOEM will be a Cooperating Agency for review of the Project under NEPA and for conducting inter-agency consultations in accordance with the other applicable statutes.

ENDANGERED SPECIES ACT:

The federal Endangered Species Act (ESA) of 1973, as amended (16 USC 1531 et seq.), prohibits unauthorized taking, possession, sale, and transport of listed species. Under Section 7 of the ESA, federal agencies must consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) to ensure that any action authorized, funded, or carried out by that agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat. The NMFS has jurisdiction over most listed marine species and anadromous fish species, while the USFWS has jurisdiction over terrestrial and freshwater species and some marine species with land-based habitats that are unlikely to occur in the Rhode Island Sound, such as manatees, polar bears, sea otters, and walrus.

The District Engineer has made a preliminary determination that the BIWF and BITS may affect but are not likely to adversely affect terrestrial and marine protected species. Further consultation with the USFWS and NMFS regarding threatened and endangered species is being conducted and will be concluded prior to the final decision.

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 NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

The BIWF will temporarily impact approximately 16.55 acres of EFH during construction and permanently impact approximately 0.74 acre during operation. The BIWF area will affect EFH species during lifestages summarized in Table 2 below and shown on **Figure 2**. This habitat consists mainly of sands with some areas of cobble and boulders. The cable installation portion of this Project will temporarily impact a maximum of 47.02 acres of EFH during construction and permanently impact a maximum of 1.33 acres during operation for those species listed in **Table 2** below and their lifestages. The cable areas provide EFH for those species listed in Table 2. Habitat at this site can be described as sands and silts.

Deepwater Wind has minimized impacts to fish and invertebrate species by siting the Project to avoid direct impacts to important habitats such as eelgrass and hard bottom substrates known to be used by some species throughout various lifestages. Deepwater Wind has also minimized impacts on marine habitats by selecting construction techniques and equipment (e.g., jet plowing, horizontal directional drill (HDD) and dynamic positioning vessels) that substantially minimize disturbance and alteration of substrate during construction activities. However, despite this effort, it is unavoidable that some marine habitats will be temporarily degraded (both water column and bottom habitat) and/or altered from the BIWF and BITS activities. Loss of EFH may adversely affect some of the species. However, the District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the NMFS regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

Table 2. Essential Fish Habitat Designations for Federally Managed Species in Rhode Island Sound and Adjacent Atlantic Ocean

Species	EFH Quadrant a/,b/			
	Eggs	Larvae	Juveniles	Adults
Atlantic cod (<i>Gadus morhua</i>)	1,2,4	1,2,4	1,2	1,2,3,4,5
haddock (<i>Melanogrammus aeglefinus</i>)		4,5		
whiting (<i>Merluccius bilinearis</i>)	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5	4
red hake (<i>Urophycis chuss</i>)	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5	5
witch flounder (<i>Glyptocephalus cynoglossus</i>)	1,4	1		
winter flounder (<i>Pseudopleuronectes americanus</i>)	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5
yellowtail flounder (<i>Limanda ferruginea</i>)	1,2,4	1,2,4	1,2,4	1,2
windowpane flounder (<i>Scophthalmus aquosus</i>)	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5
American plaice (<i>Hippoglossoides platessoides</i>)		5	5	5
ocean pout (<i>Macrozoarces americanus</i>)	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5
Atlantic sea herring (<i>Clupea harengus</i>)		5	1,2,3,4,5	1,2,3,4,5
monkfish (<i>Lophius americanus</i>)	1,2,3,4,5	1,2,3,4,5	1,2	1,2,3
bluefish (<i>Pomatomus saltatrix</i>)			1,4,5	1,2,4,5
long-finned squid (<i>Loligo pealeii</i>)	N/A ^{c,d} 1,2,3,4,5	N/A ^{c,d} 1,2,3,4,5	1,2,5	1,3,5
short-finned squid (<i>Illex illecebrosus</i>)	N/A ^{c,d} 1,2,3,4,5	N/A ^{c,d} 1,2,3,4,5		
Atlantic butterfish (<i>Peprilus triacanthus</i>)		1	5	
Atlantic mackerel (<i>Scomber scombrus</i>)	4,5	5	5	5
summer flounder (<i>Paralichthys dentatus</i>)	4	1,2,4,5	2,5	1,2,3,4,5
scup (<i>Stenotomus chrysops</i>)	N/A ^{c,d} 1,2,3,4,5	N/A ^{c,d} 1,2,3,4,5	1,2,3,4,5	1,2,3,4,5
black sea bass (<i>Centropomus striata</i>)	N/A ^{c,d} 1,2,3,4,5		1,2,3,4,5	3,5
surf clam (<i>Spisula solidissima</i>)	N/A ^{c,d} 1,2,3,4,5	N/A ^{c,d} 1,2,3,4,5	5	5
ocean quahog (<i>Arctica islandica</i>)	N/A ^{c,d} 1,2,3,4,5	N/A ^{c,d} 1,2,3,4,5	4	4
spiny dogfish (<i>Squalus acanthias</i>)	N/A ^{d,e}	N/A ^{d,e}	1,2,4,5	1,2,4,5
king mackerel (<i>Scomberomorus cavalla</i>)	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5
Spanish mackerel (<i>Scomberomorus maculatus</i>)	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5
cobia (<i>Rachycentron canadum</i>)	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5	1,2,3,4,5
sand tiger shark (<i>Carcharias taurus</i>)		1,2,3,4,5		
common thresher shark (<i>Alopias vulpinus</i>)		1,2,3,4	1,2,3,4	1,2,3,4
blue shark (<i>Prionace glauca</i>)		1,2,3,4,5	1,2,3,4	1,2,3,4
white shark (<i>Carcharodon carcharias</i>)			1	
dusky shark (<i>Carcharhinus obscurus</i>)			1,2,3,5	
shortfin mako shark (<i>Isurus oxyrinchus</i>)		1,2	1,2,3,4,5	
sandbar shark (<i>Carcharhinus plumbeus</i>)			1,2,3,4,5	1,2,3,5
bluefin tuna (<i>Thunnus thynnus</i>)			1,2	1,2,3,4,5
Little skate (<i>Leucoraja erinacea</i>)			1,2,3,4,5	1,2,3
Winter skate (<i>Leucoraja ocellata</i>)			1,2,3,4,5	1

a/ The proposed facilities cross five of EFH 10-minute by 10-minute squares of latitude and longitude along the coast. The numbers presented in this table for each species and lifestage represent the project-assigned square number where the species and specific lifestage have designated EFH.
 b/ Empty space denotes that EFH has not been designated within the square for the given species and lifestage.
 c/ N/A indicates some of the species either have no data available on the designated lifestages, or those lifestages are not present in the species' reproductive cycle.
 d/ Pre-recruits and recruits.
 e/ Juveniles born live.
 f/ Insufficient data for the lifestages listed.

SECTION 106 COORDINATION:

Based on his initial review, the District Engineer 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.

COASTAL ZONE MANAGEMENT ACT:

The state of Rhode Island has an approved **Coastal Zone Management Program**. Where applicable, the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Rhode Island Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant's consistency statement.

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

- Permit, License or Assent from State.
- Permit from Local Wetland Agency or Conservation Commission.
- Water Quality Certification in accordance with Section 401 of the Clean Water Act.

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 Michael J. Elliott at (978) 318-8131, (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 Corps of Engineers 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.

In accordance with 33 CFR 325.2(a)(8), we publish monthly a list of permits issued or denied during the previous month at www.nae.usace.army.mil/reg, under the heading "Monthly General and Individual Permit Authorizations." Relevant environmental decision documents are available upon written request and, where applicable, upon the payment of administrative fees. Also visit www.nae.usace.army.mil for more information on the New England District Corps of Engineers programs.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.

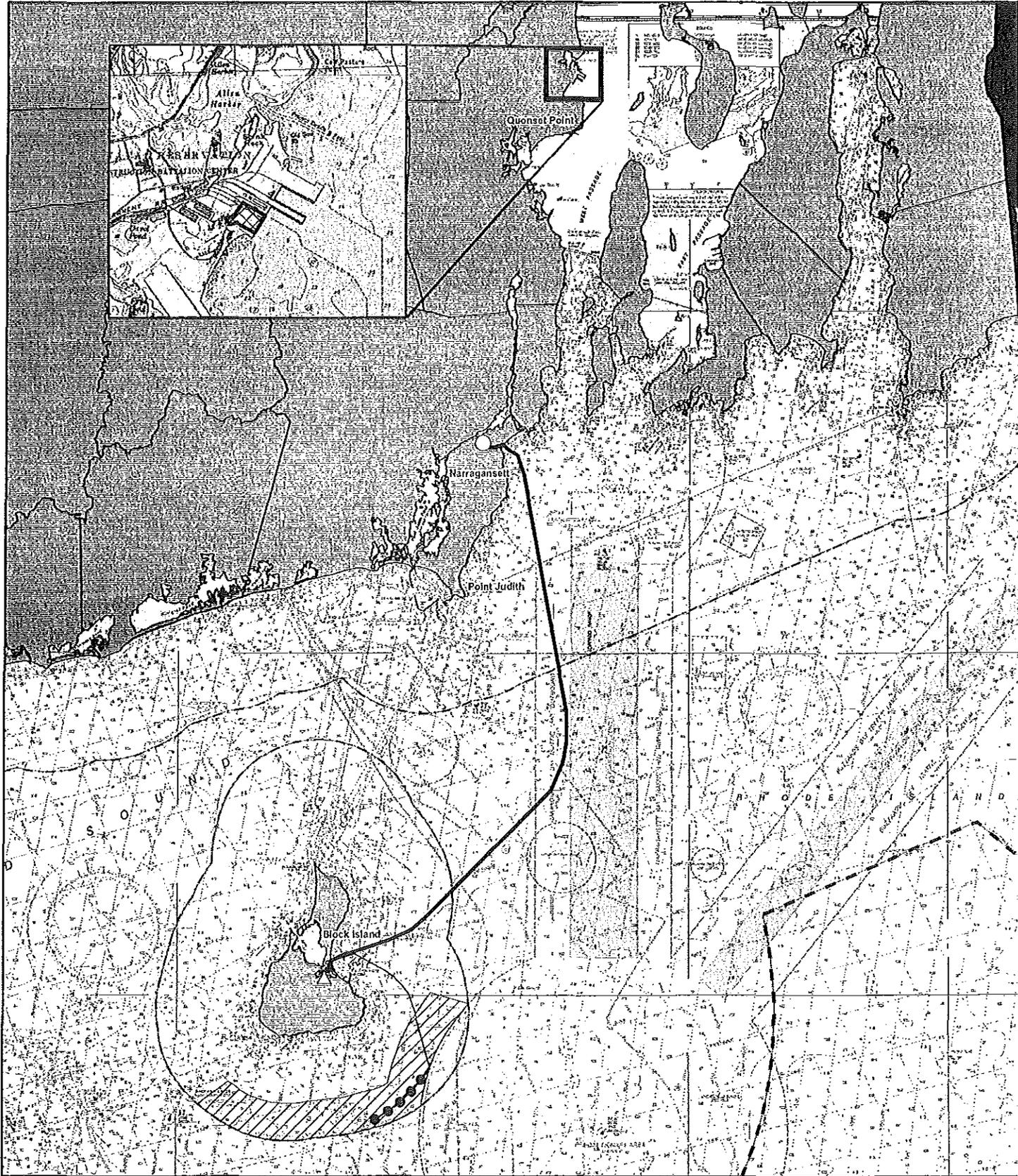


Robert J. DeSista
Chief, Permits and Enforcement Branch
Regulatory Division

If you would prefer not to continue receiving Public Notices, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here () and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

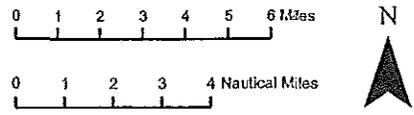
NAME: _____

ADDRESS: _____



- WTG Array
- △ Block Island Substation
- Narragansett Substation
- BITS Alternative 1
- Export Cable
- Intra-Array Cable
- ▨ Quonset Point Port Facility
- ▨ Renewable Energy Zone
- 3 Nautical Mile Line (State Waters)
- 12 Nautical Mile Line (Federal Waters)

Figure 1
Deepwater Wind
Block Island Wind Farm
and
Block Island Transmission System
Project Location Map

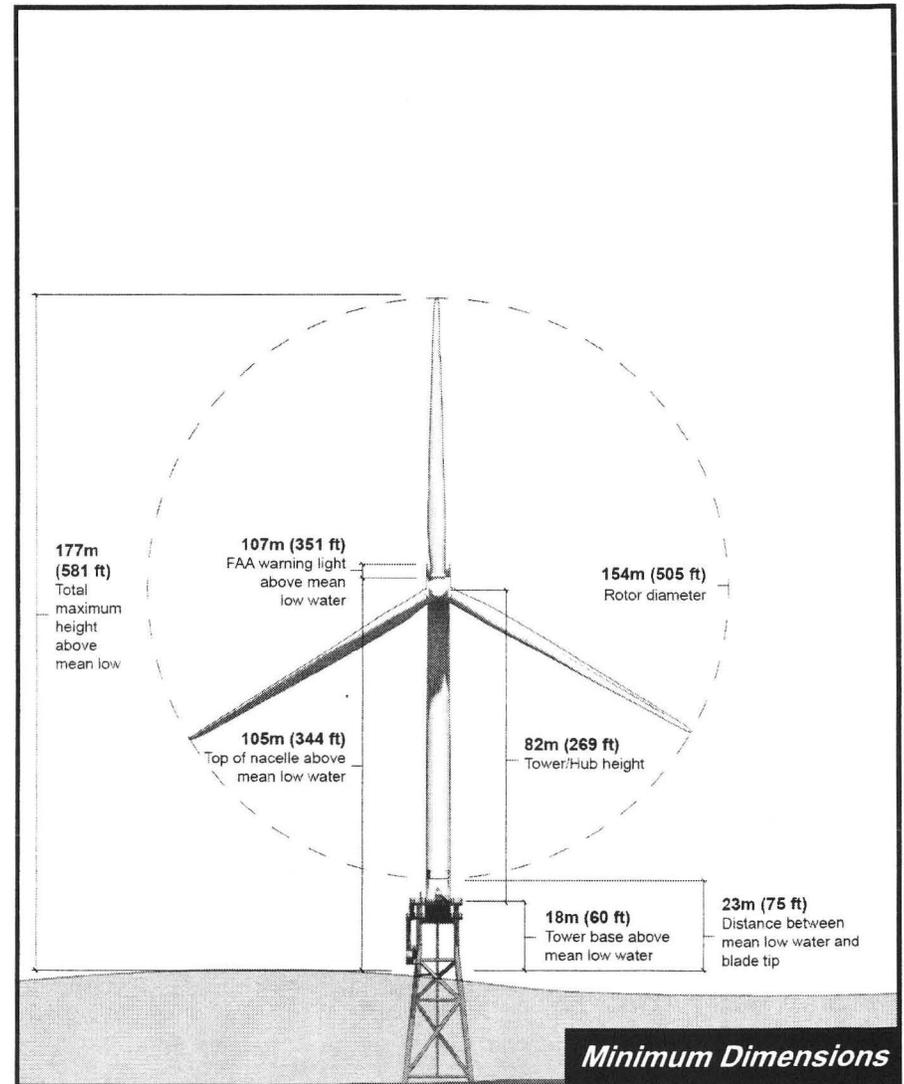
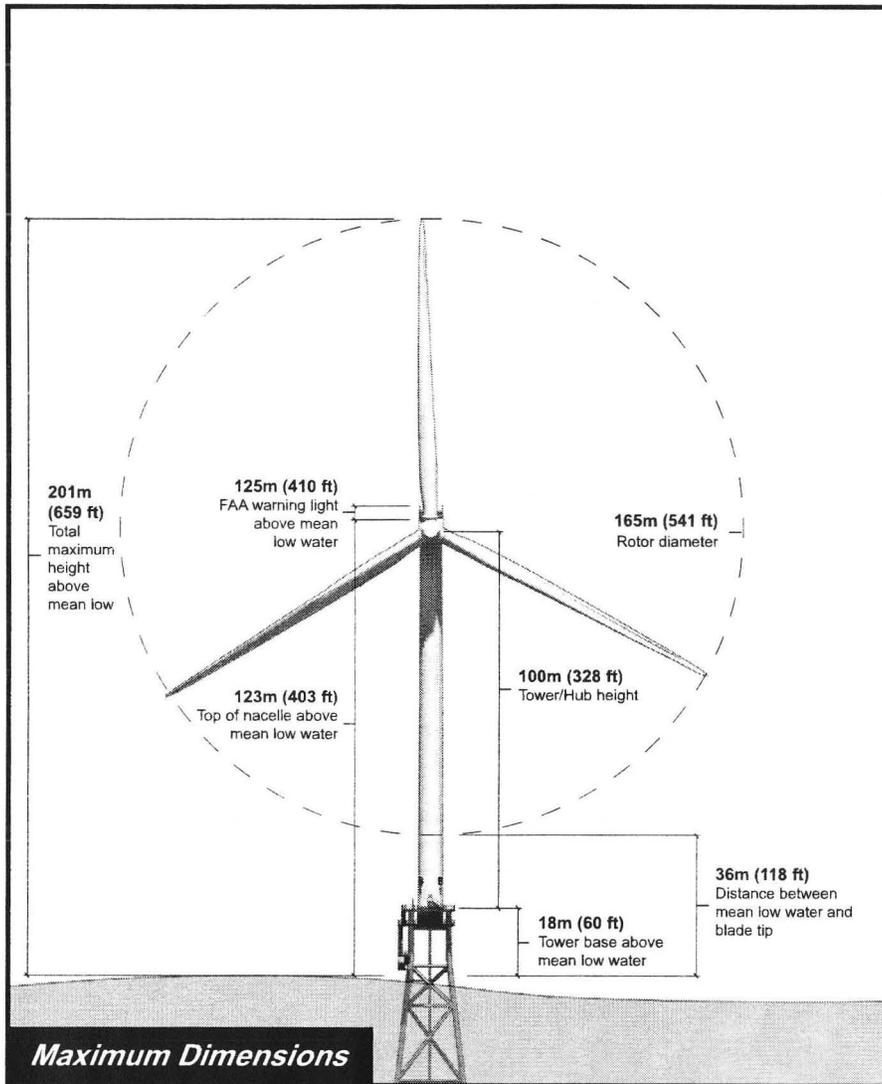


Data Sources:
 NOAA ENC (2011)
 NOAA OCS (May 2011)
 RISIS (Aug 2001)

September 2012

File: P:\Deepwater Wind\RI\Deepwater RI GIS\GIS
 20120510_Draft\Report\GIS_Spatial\MXD\Environmental\Report
 20120530_Final\Report\20120922_Updates
 Fig1_1_1_Project_Location_SitePlan
 Prepared By: wilsamsc@es
 Coordinate System: NAD 1983 StatePlane Rhode Island FIPS 3300 Feet

Figure 3. Block Island Wind Farm Conceptual Turbine



Block Island Wind Farm

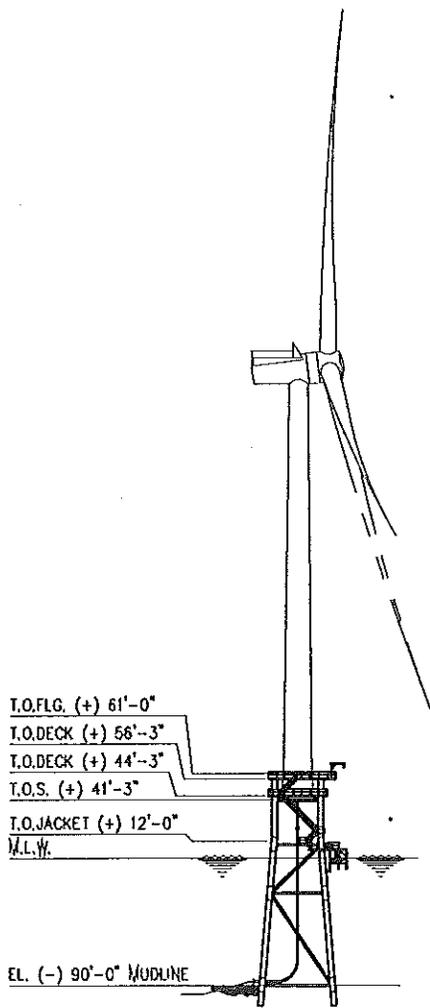
Conceptual Turbine

September 27, 2012

Prepared for:

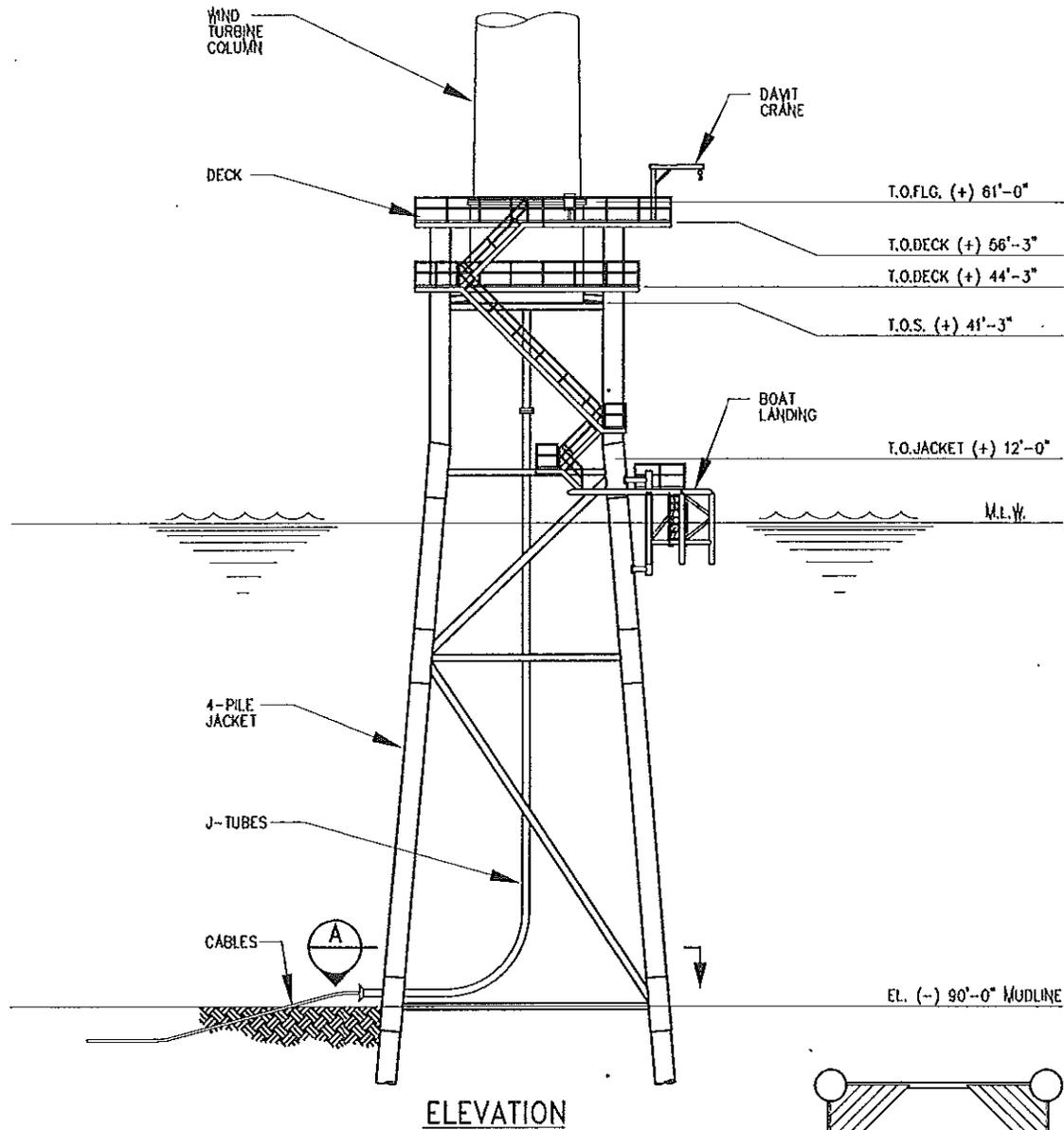


Prepared by:
edr Companies

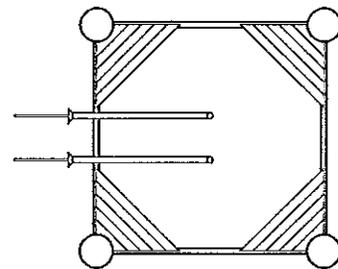


ELEVATION

Upstream Engineering LLC "Providing Value Added Engineering Services" HOUSTON, TEXAS www.upstreamengineering.com (281) 531-0047				 DEEPWATERWIND® ASSEMBLY ELEVATION TURBINE & PLATFORM	
Registration No.: F-2752					
B	03/15/12	REVISED ISSUED FOR PERMITTING	JR	RS	
A	01/24/12	ISSUED FOR PERMITTING	JR	RS	
No.	DATE	REVISION	BY	APP.	
DESIGNED BY: D. YBARRA		SCALE: 1/128"=1'-0"			
DRAWN BY: J. RHAME		DATE: 01/11/12		PROJ. No.: P12-002 FILENAME: 9001.dwg	
				Figure 4 REV. No.: B	



ELEVATION



SECTION A
SCALE 1"=40'-0"

Upstream Engineering LLC			
"Providing Value Added Engineering Services"			
HOUSTON, TEXAS www.upstreamengineering.com (281) 531-0047			
Registration No.: F-2752			
C		REVISED ISSUED FOR PERMITTING	JR
B	03/15/12	REVISED ISSUED FOR PERMITTING	JR RS
No.	DATE	REVISION	BY APP.
DESIGNED BY: D. YBARRA		SCALE: 1/32"=1'-0"	
DRAWN BY: J. RHAME		DATE: 01/11/12	



DEEPWATERWIND®

4-PILE JACKET w/DECK STRUCTURE

PROJ. No.: P12-002	Figure 5	REV. No.: C
FILENAME: 9002.dwg		

Attachment A

Appendix B-1

Block Island

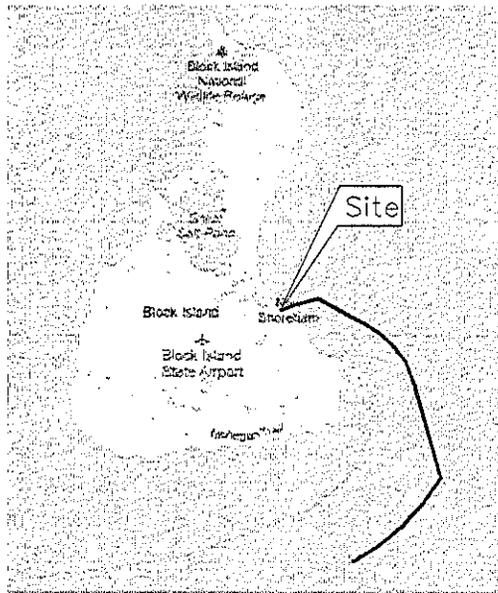
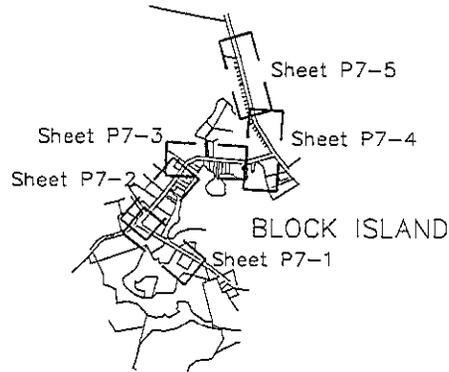
Preliminary Project Design Plans



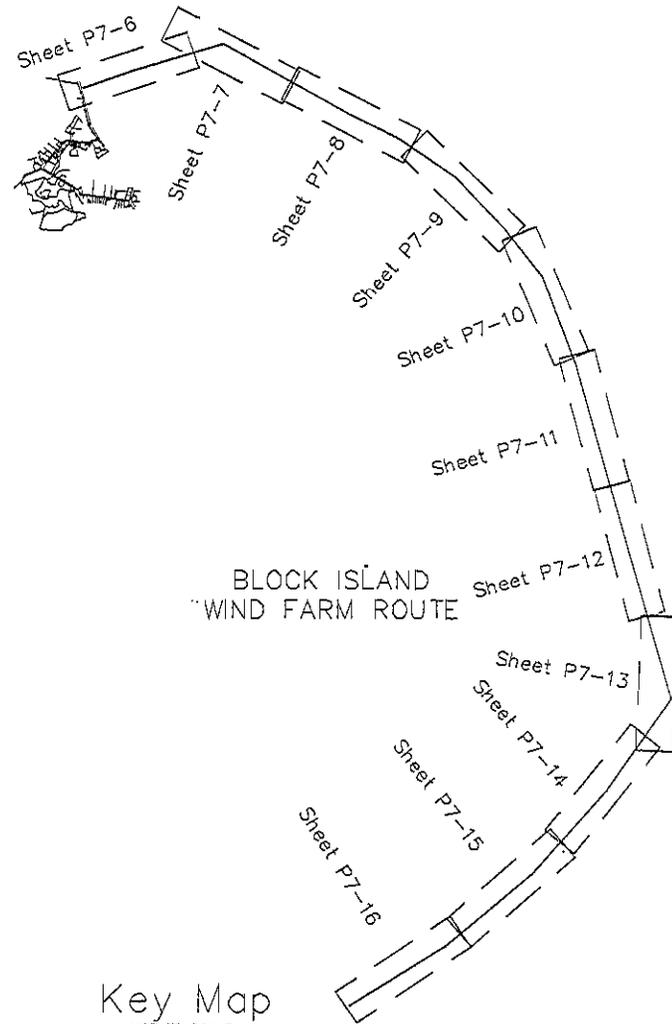
DEEPWATERWIND

THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWER'S CLIENT IS GRANTED.

BLOCK ISLAND, LLC. 34.5 kV BIWF UNDERGROUND ROUTE



Location Map
NOT TO SCALE



Key Map
NOT TO SCALE



AZCOM

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
B	ISSUED FOR PERMIT	05/23/2012	JJS	JJS	DEJ		
A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ		

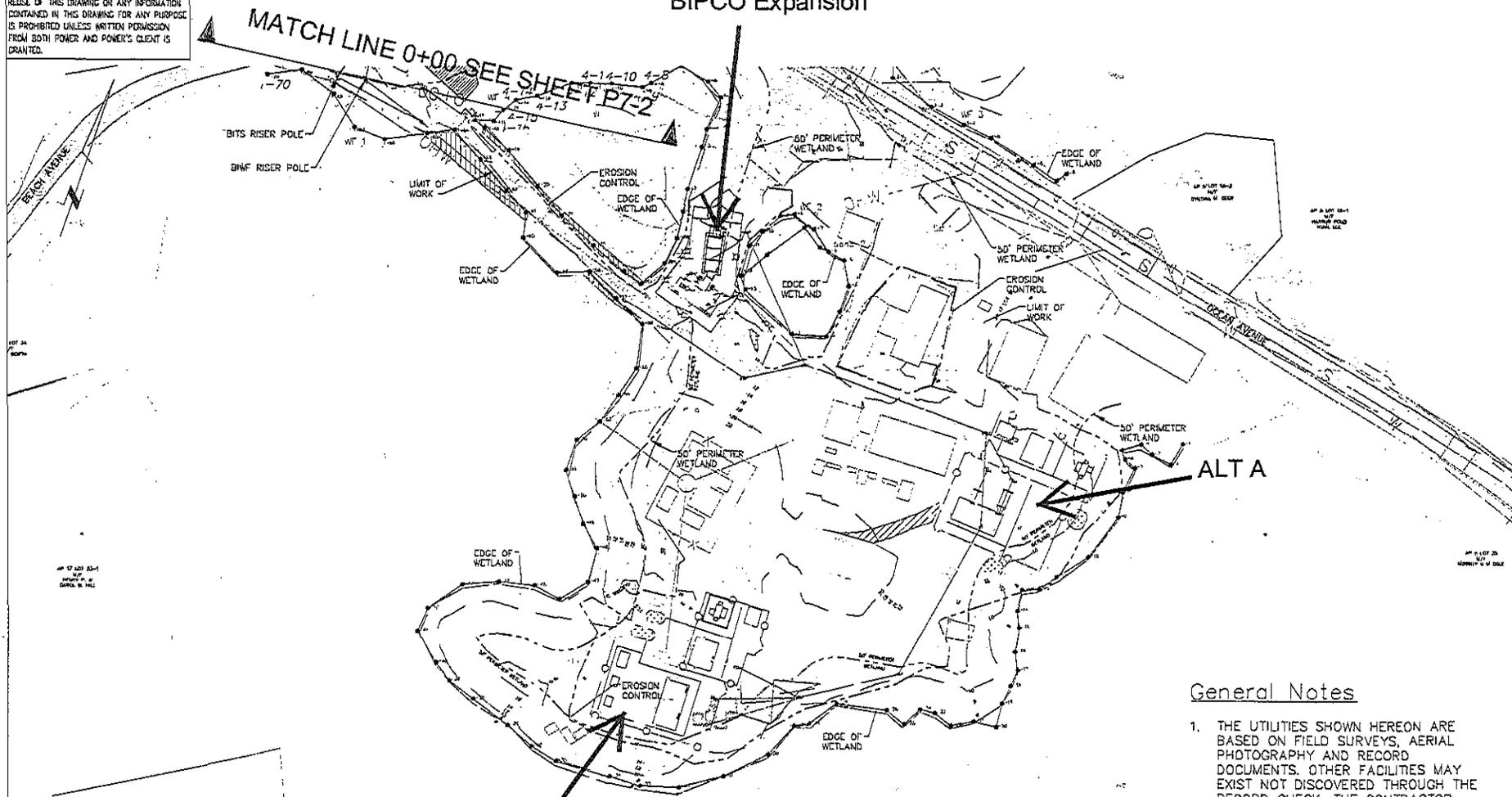
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DRN	BWF	03/19/2012
CKD	DEJ	03/19/2012
SCALE: NONE		
FOR 8.5x11 DWG ONLY		



DEEP WATER WIND BLOCK ISLAND, LLC	JOB NUMBER 119630	REV B
ROUTE KEY SHEET 34.5 kV BIWF UNDERGROUND ROUTE		DRAWING NUMBER G2-1

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BIPCO Expansion



General Notes

1. THE UTILITIES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG.



REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
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A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ		

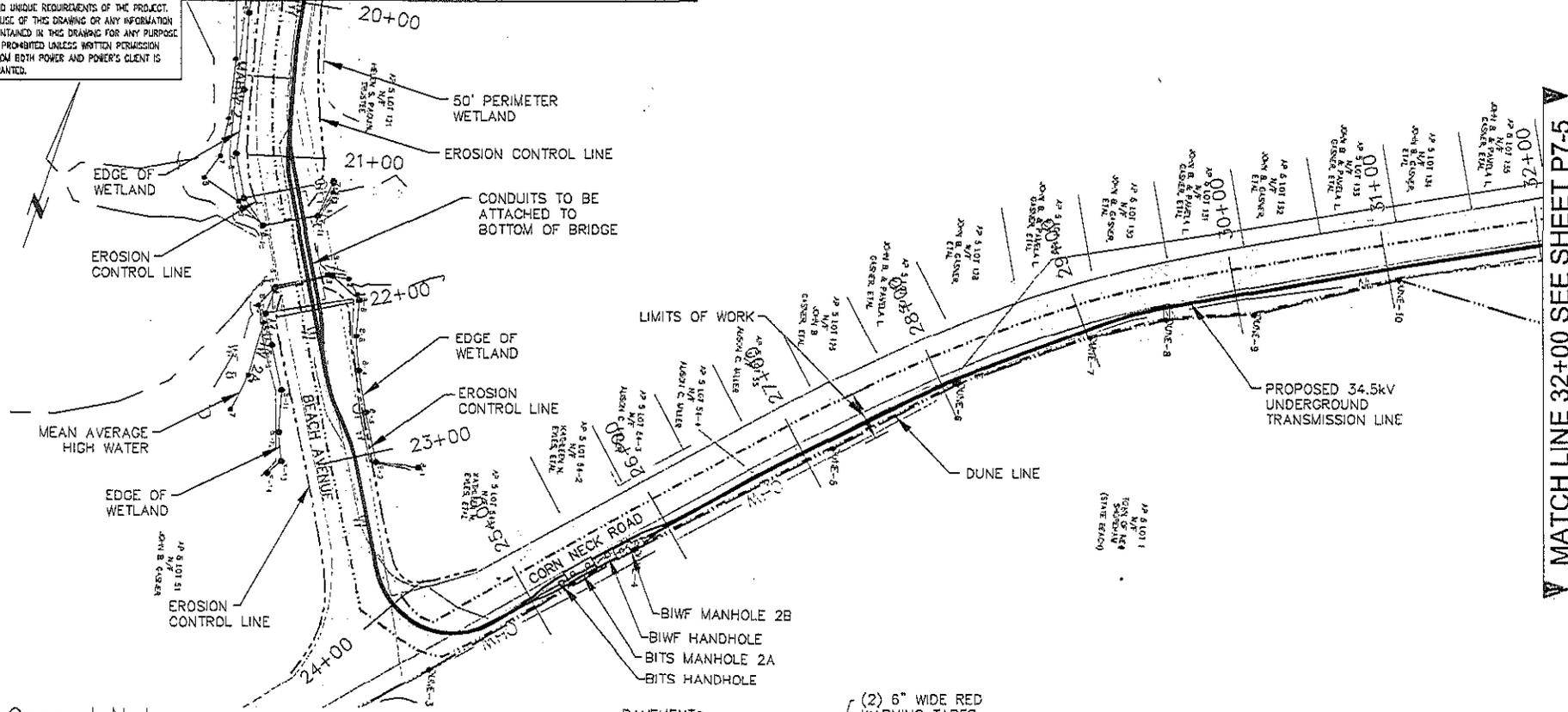
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DRN	JJS	04/13/2012
CKD	DEJ	04/13/2012
SCALE: 1" = 150'		
FOR 8.5x11 DWG ONLY		



DEEP WATER WIND BLOCK ISLAND TRANSMISSION, LLC	JOB NUMBER 119630	REV B
BLOCK ISLAND PLAN VIEW 34.5 KV BIWF UNDERGROUND ROUTE	DRAWING NUMBER P7-1	

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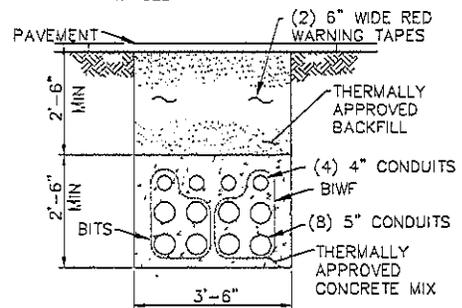
MATCH LINE 20+00 SEE SHEET P7-3



MATCH LINE 32+00 SEE SHEET P7-5

General Notes

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DOUBLE CIRCUIT SECTION

SCALE: N.T.S.

DSGN	JJS	04/13/2012
DRN	JJS	04/13/2012
CKD	DEJ	04/13/2012

SCALE: 1" = 100'

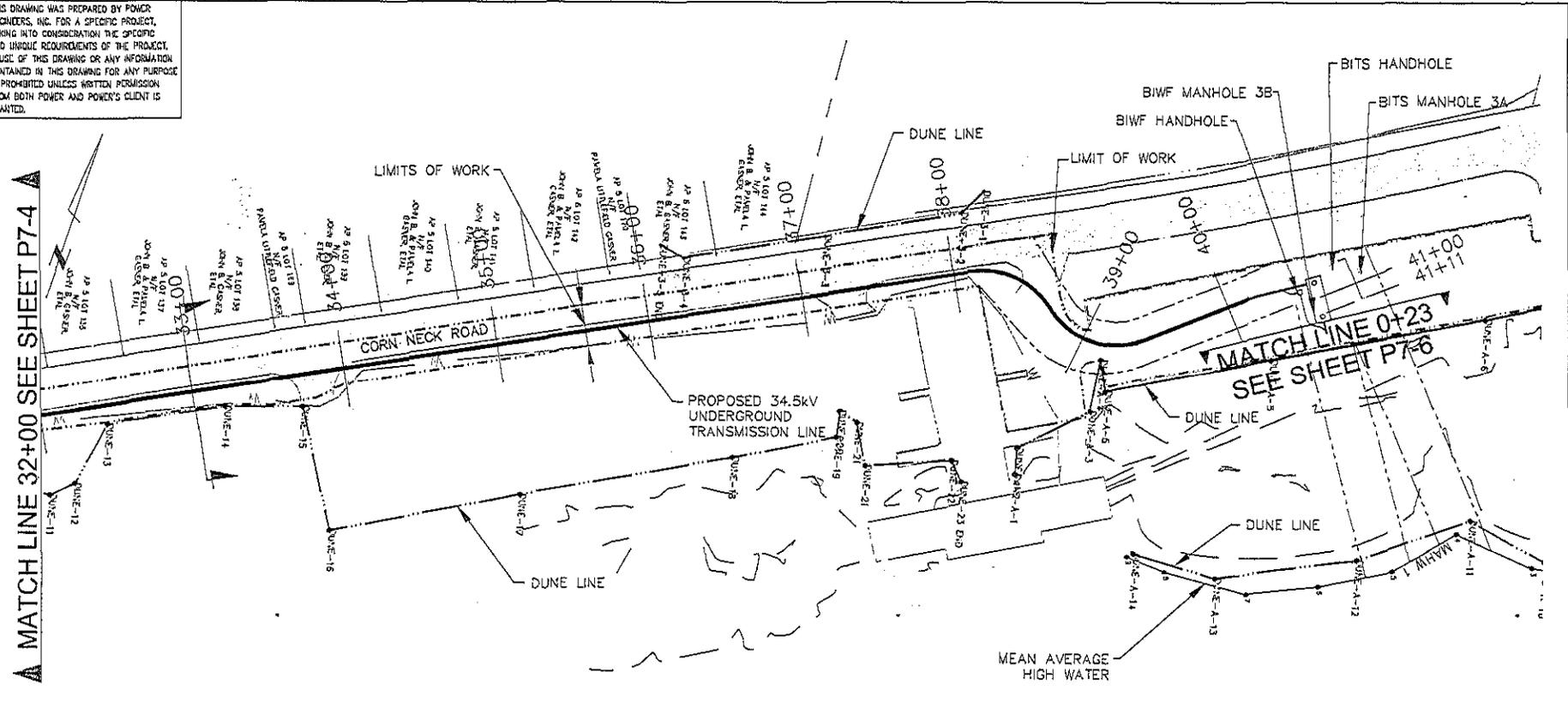
FOR 8.5x11 DWG ONLY

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
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A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ		



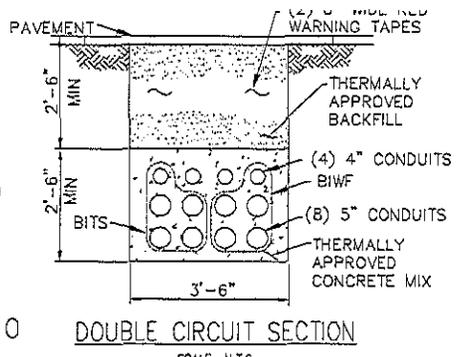
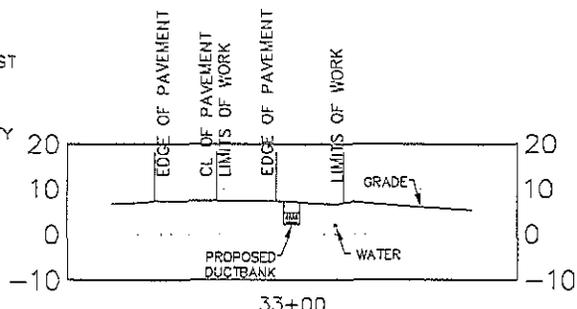
DEEP WATER WIND BLOCK ISLAND TRANSMISSION, LLC	JOB NUMBER 119630	REV B
BLOCK ISLAND PLAN VIEW 34.5 kV BIWF UNDERGROUND ROUTE	DRAWING NUMBER P7-4	

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General Notes

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
B	ISSUED FOR PERMIT	05/23/2012	JJS	JJS	DEJ		
A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ		

DSGN	JJS	04/13/2012
DRN	JJS	04/13/2012
CKD	DEJ	04/13/2012
SCALE: 1" = 100'		
FOR 8.5x11 DWG ONLY		

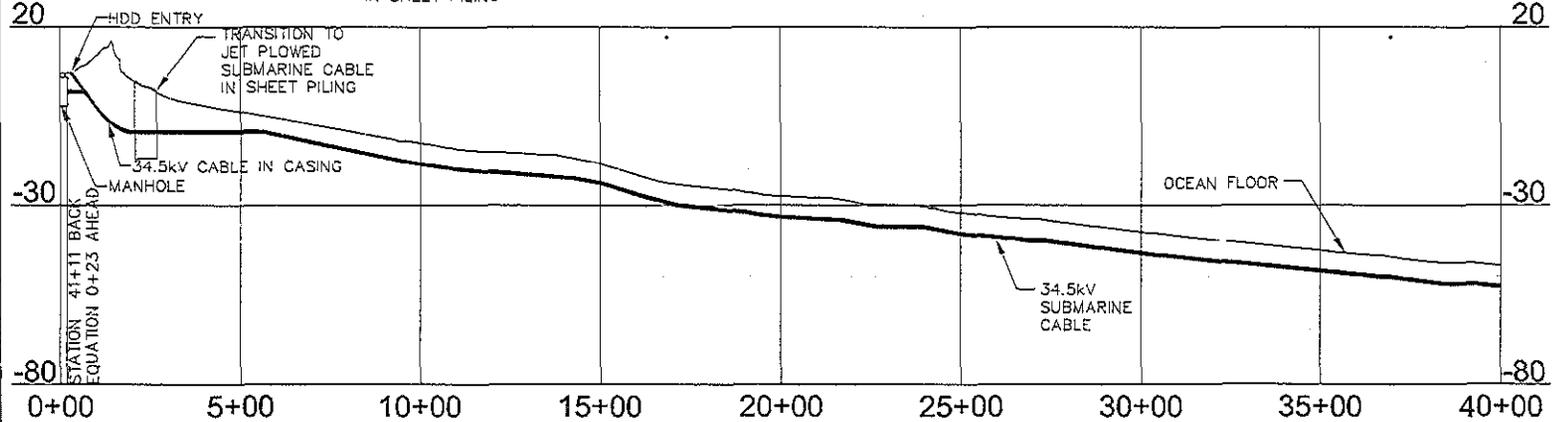
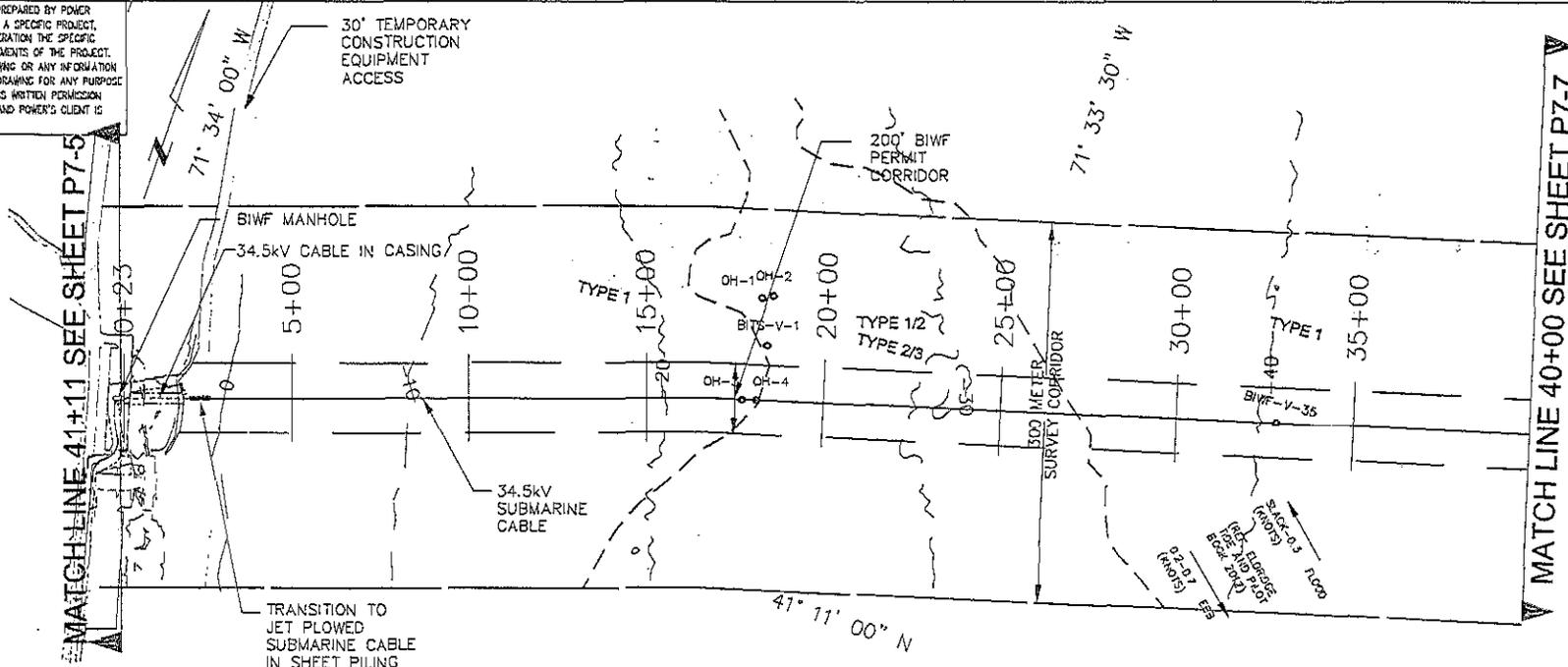


DEEP WATER WIND
BLOCK ISLAND TRANSMISSION, LLC

BLOCK ISLAND PLAN VIEW
34.5 kV BIWF UNDERGROUND ROUTE

JOB NUMBER	119630	REV	B
DRAWING NUMBER	P7-5		

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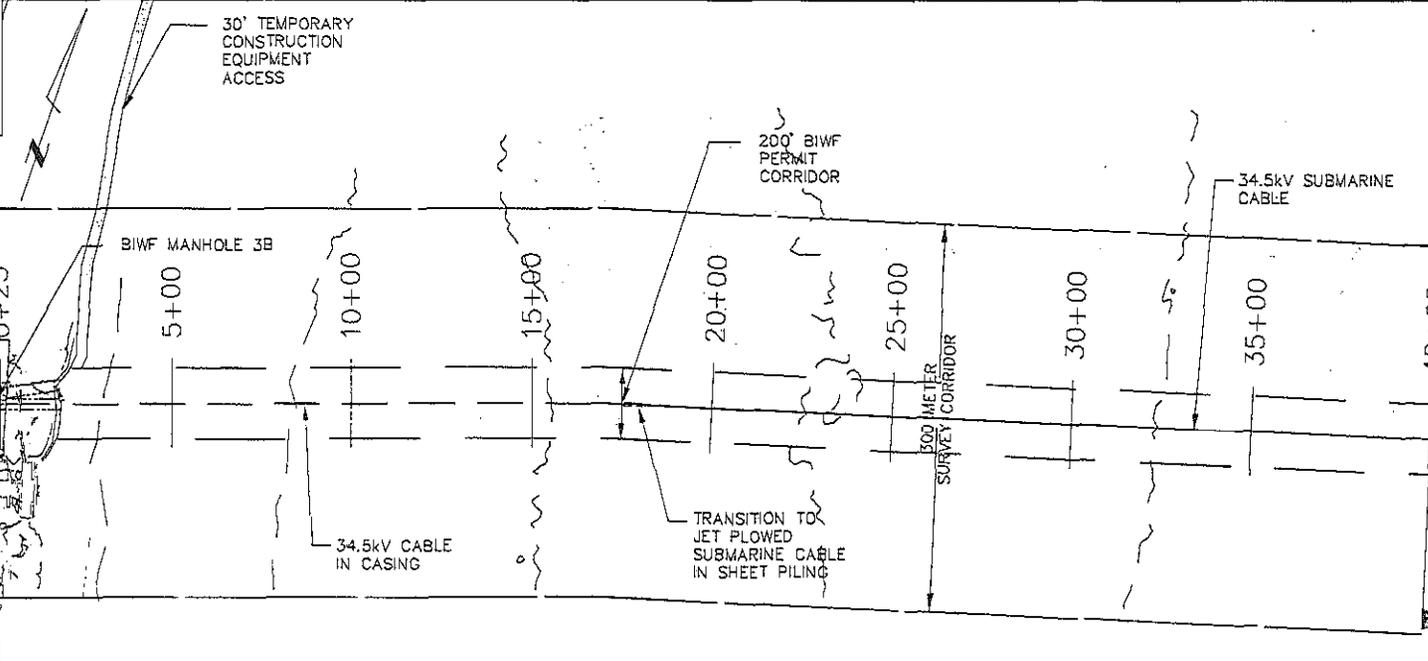
Short-Distance HDD



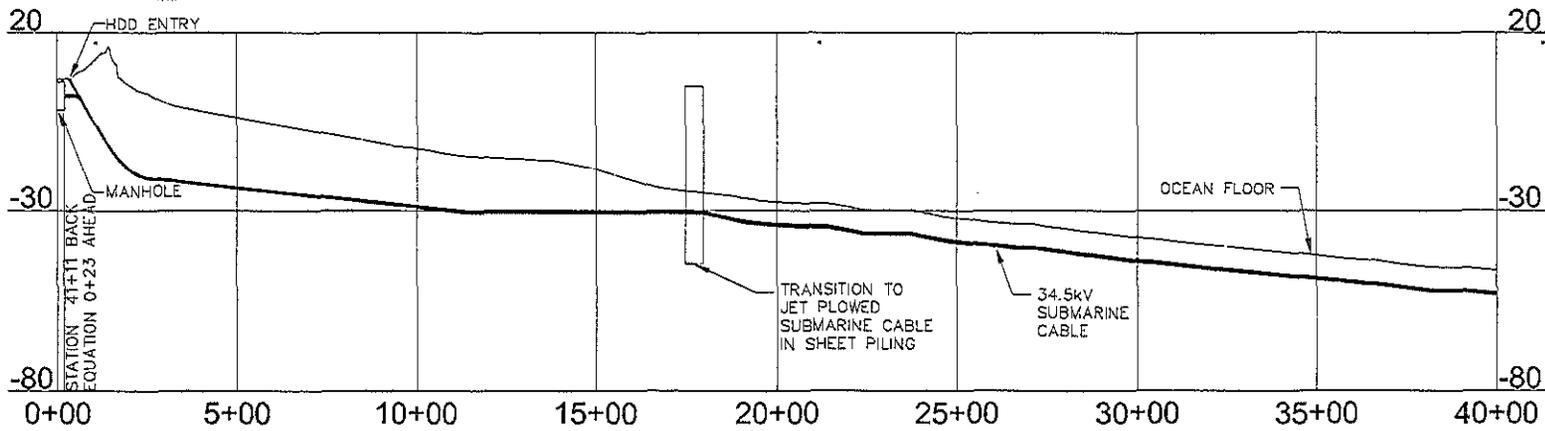
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							CKD	DEJ	03/19/2012					
B	ISSUED FOR PERMIT	05/23/2012	JJS	JJS	DEJ		SCALE: 1" = 50' VERT. 1" = 500' HORIZ.				DEEP WATER WIND BLOCK ISLAND, LLC OCEAN PLAN AND PROFILES 34.5 kV BIWF UNDERGROUND ROUTE		DRAWING NUMBER P7-6	
A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ		FOR 8.5x11 DWG ONLY							
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS							

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MATCH LINE 41+11 SEE SHEET P7-5



MATCH LINE 40+00 SEE SHEET P7-7



Long-Distance HDD

							DSGN	JJS	03/19/2012		DEEP WATER WIND BLOCK ISLAND, LLC	JOB NUMBER 119630	REV B
							DRN	BWF	03/19/2012		SCALE: 1" = 50' VERT. 1" = 500' HORIZ. FOR 8.5x11 DWG ONLY	OCEAN PLAN AND PROFILES 34.5 kV BIWF UNDERGROUND ROUTE	DRAWING NUMBER P7-6A
							CKD	DEJ	03/19/2012				
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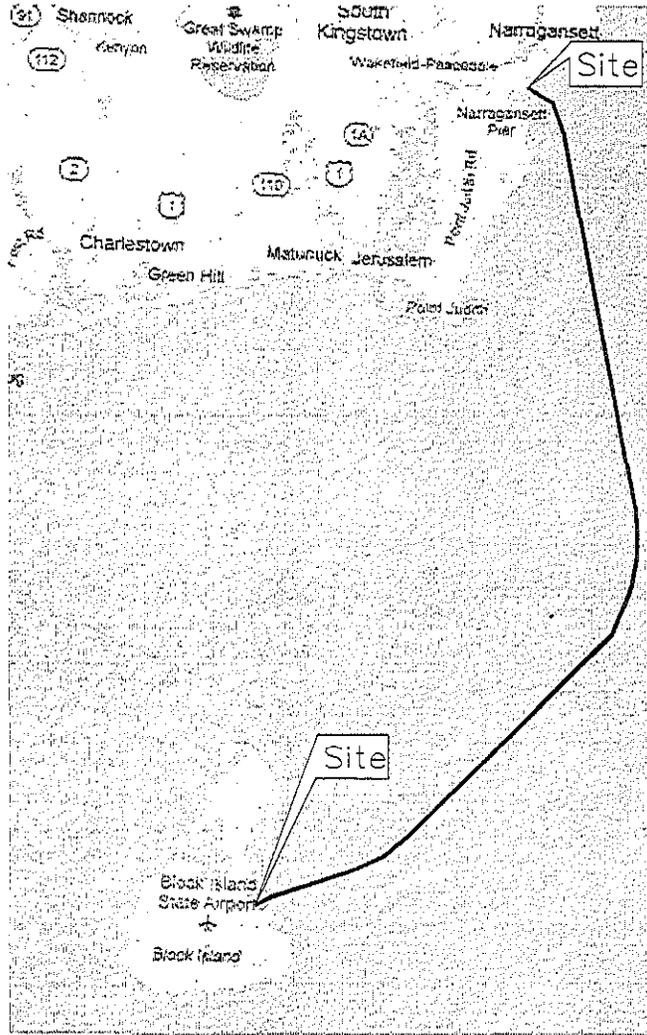
Appendix B-2

BITS Alternative 1 Preliminary Project Design Plans

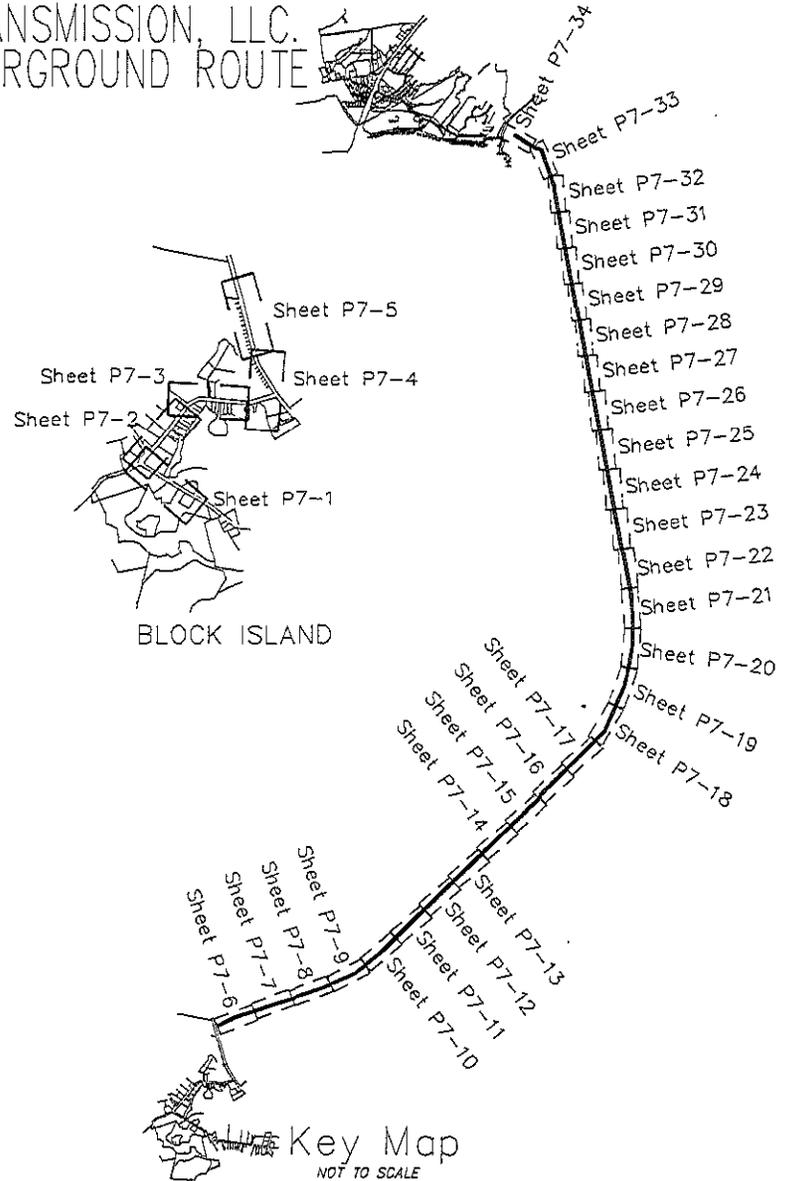


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BLOCK ISLAND TRANSMISSION, LLC. 34.5 kv BITS UNDERGROUND ROUTE



Location Map
NOT TO SCALE



Key Map
NOT TO SCALE



AZCOM

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
B	ISSUED FOR PERMIT	05/23/2012	JJS	JJS	DEJ		
A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ		

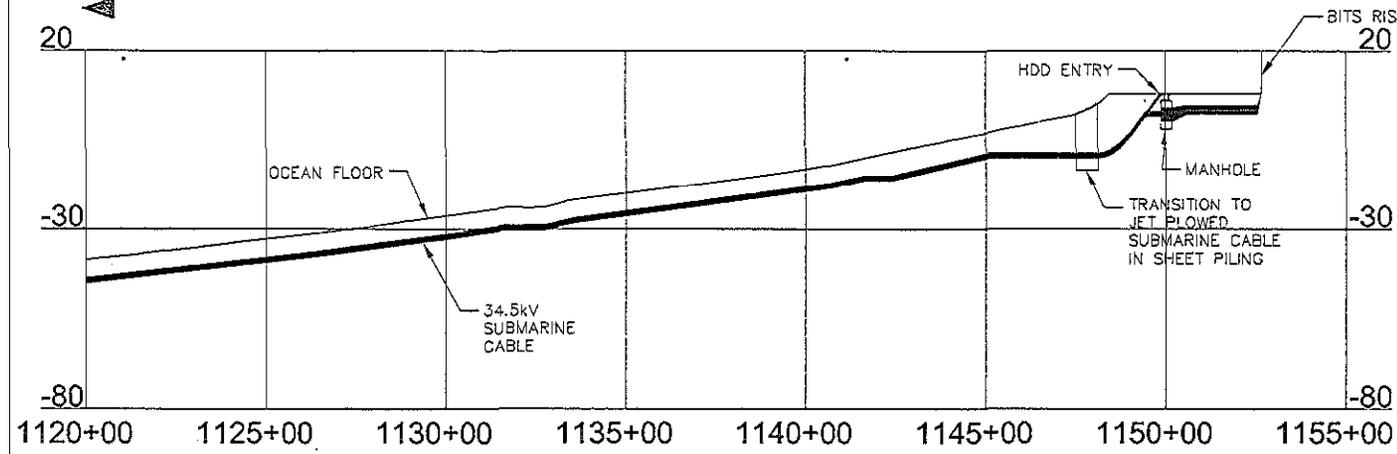
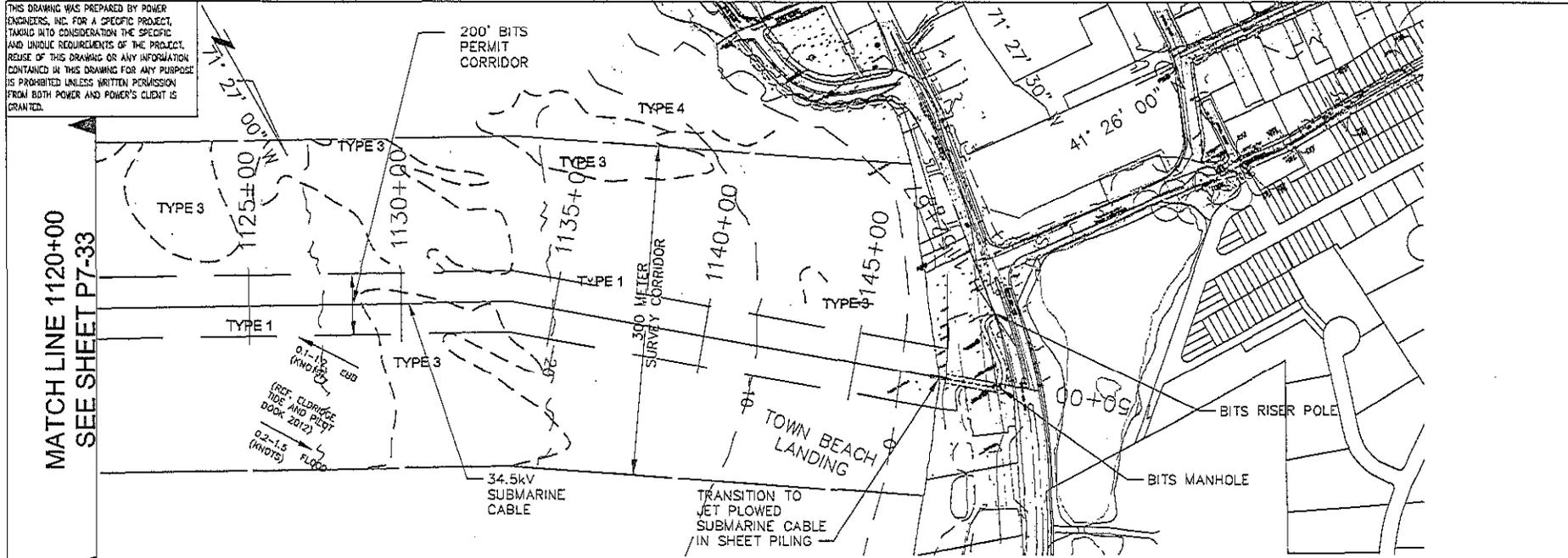
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DRN	BWF	03/19/2012
CKD	DEJ	03/19/2012
SCALE: NONE		
FOR 8.5x11 DWG ONLY		



DEEP WATER WIND BLOCK ISLAND TRANSMISSION, LLC	JOB NUMBER 119631
ROUTE KEY SHEET 34.5 kv BITS UNDERGROUND ROUTE	DRAWING NUMBER G2-1

JOB NUMBER	REV
119631	B

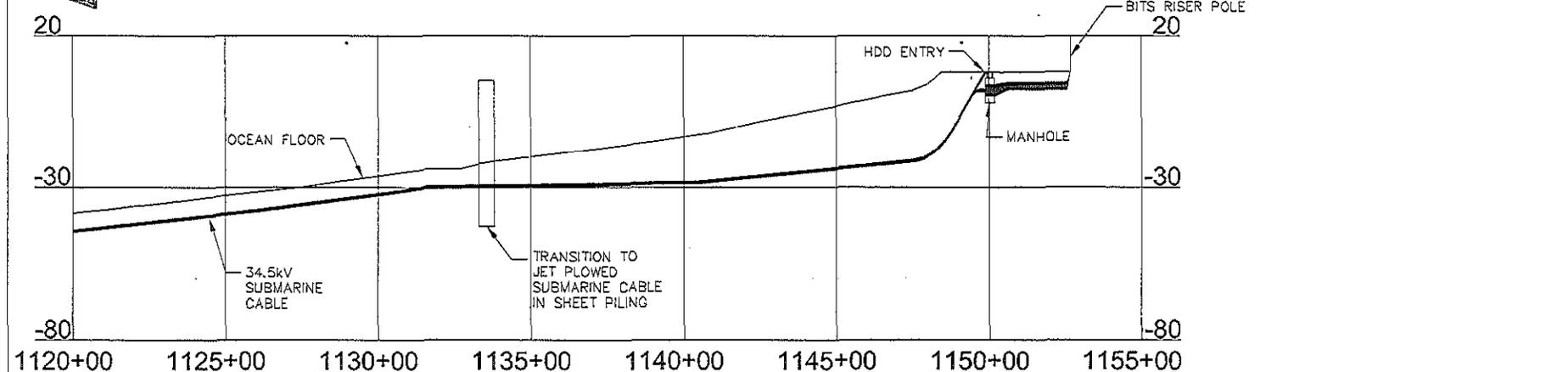
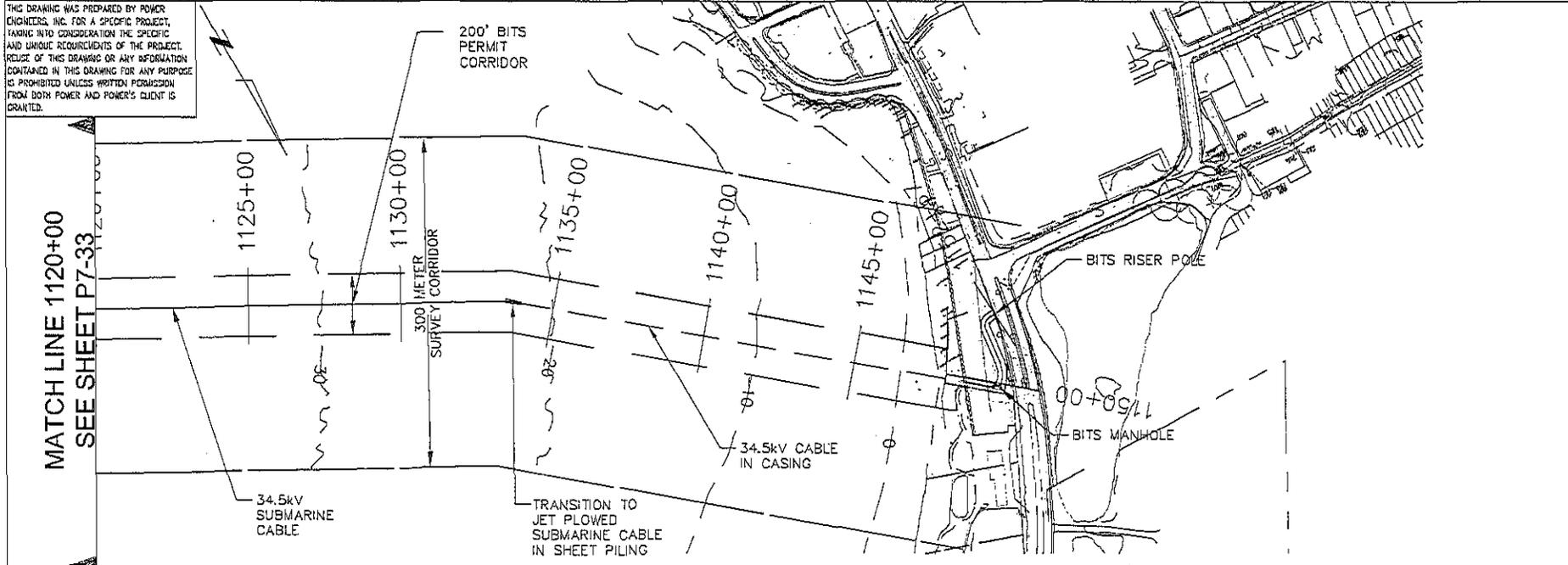
THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWER'S CLIENT IS OBTAINED.



Short-Distance HDD

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							CKD	DEJ	03/19/2012			DRAWING NUMBER		P7-34	
B	ISSUED FOR PERMIT	05/23/2012	JJS	JJS	DEJ			SCALE: 1" = 50' VERT. 1" = 500' HORIZ. FOR 8.5x11 DWG ONLY		OCEAN PLAN AND PROFILES 34.5 kV BITS UNDERGROUND ROUTE					
A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ										
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS								

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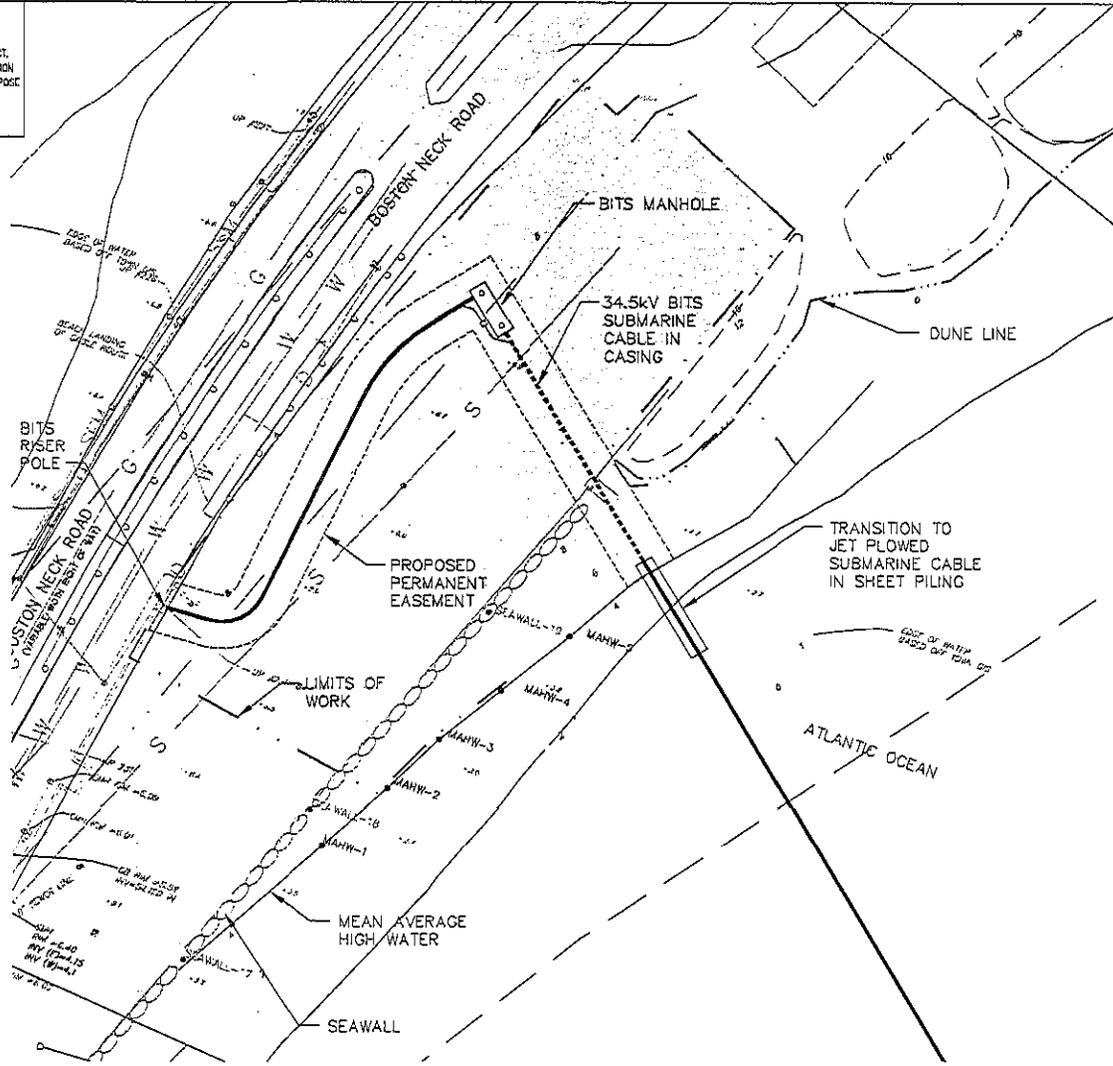


Long-Distance HDD

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							CKD	DEJ	03/19/2012					
							SCALE:		1" = 50' VERT. 1" = 500' HORIZ.		DRAWING NUMBER		P7-34A	
							FOR 8.5x11 DWG ONLY		POWER ENGINEERS		OCEAN PLAN AND PROFILES 34.5 kV BITS UNDERGROUND ROUTE			
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A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ									
	REVISIONS	DATE	DRN	DSGN	CKD	APPD								

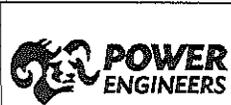
8-5X11 BITS.dwg

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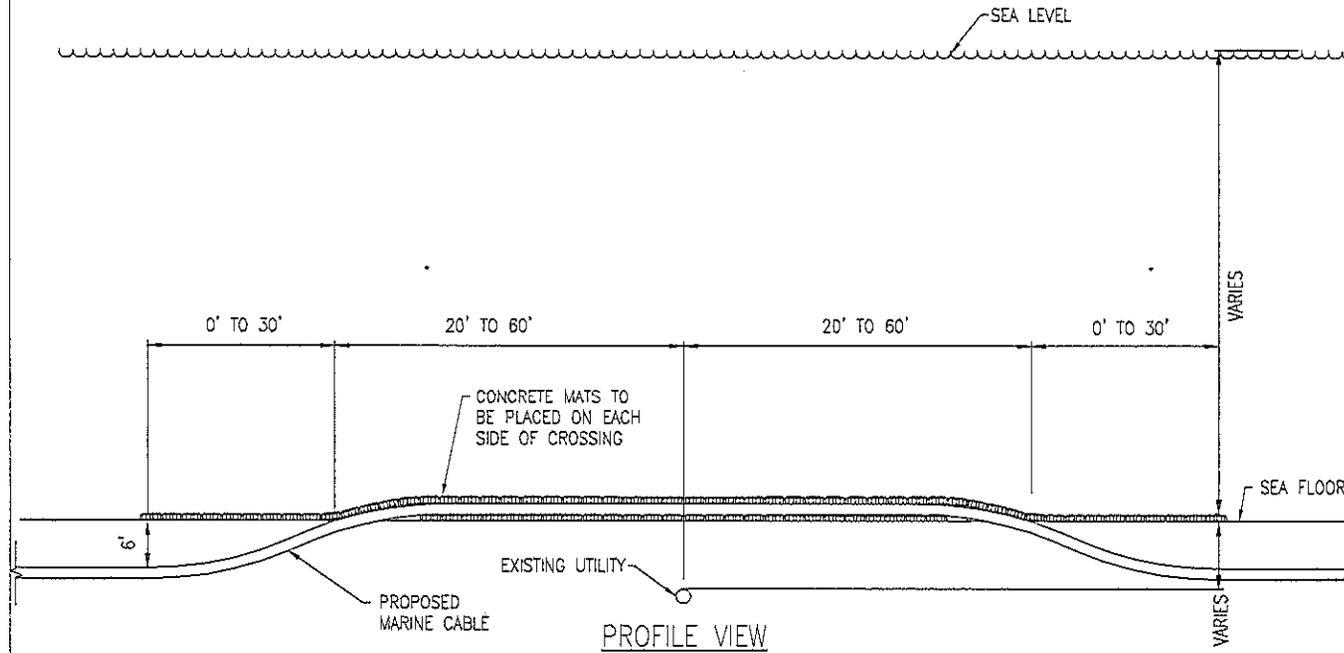
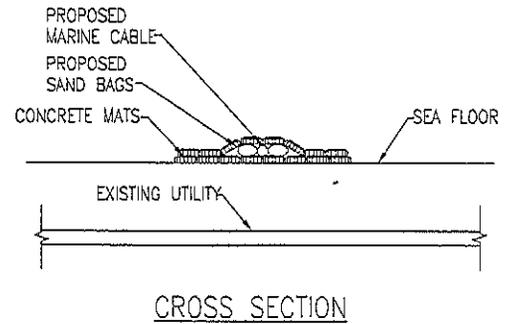
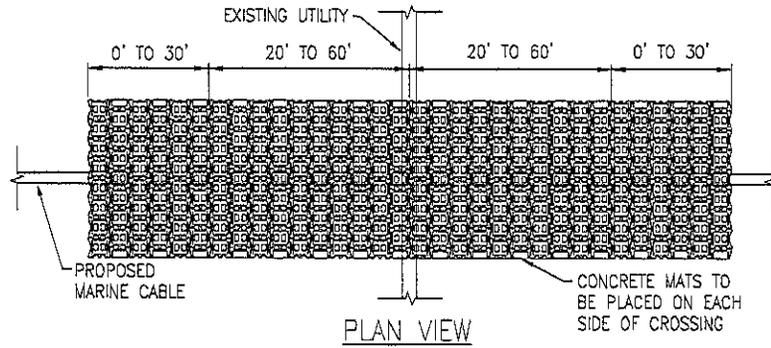
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A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ		

DSGN	JJS	03/19/2012
DRN	BWF	03/19/2012
CKD	DEJ	03/19/2012
SCALE: 1" = 100'		
FOR 8-5x11 DWG ONLY		



DEEP WATER WIND BLOCK ISLAND TRANSMISSION, LLC	JOB NUMBER 119531	REV B
NARRAGANSETT SHORE LANDING 34.5 kv BITS UNDERGROUND ROUTE	DRAWING NUMBER U2-10	

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EXISTING UTILITY CROSSING

SCALE N.T.S.



AECOM

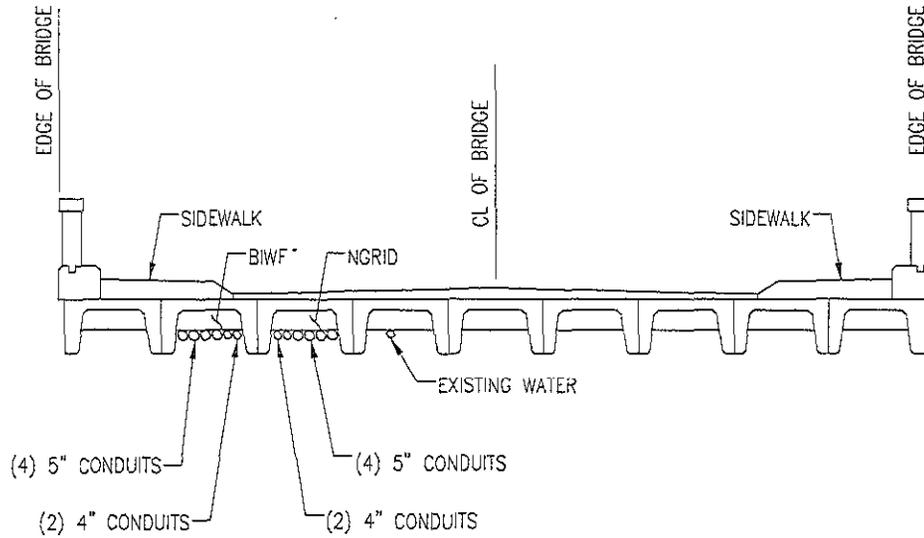
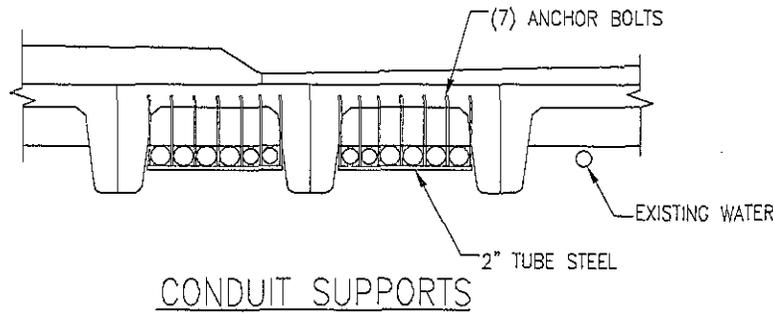
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
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A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ		

DSGN	JJS	03/19/2012
DRN	BWF	03/19/2012
CKD	DEJ	03/19/2012
SCALE: NONE		
FOR 8.5x11 DWG ONLY		



DEEP WATER WIND BLOCK ISLAND, LLC	JOB NUMBER 119630	REV B
UTILITY CROSSING DETAIL 34.5 KV BIWF UNDERGROUND ROUTE		DRAWING NUMBER U2-1

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BRIDGE CROSS SECTION
LOOKING EAST



AZCOM

REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
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A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ		

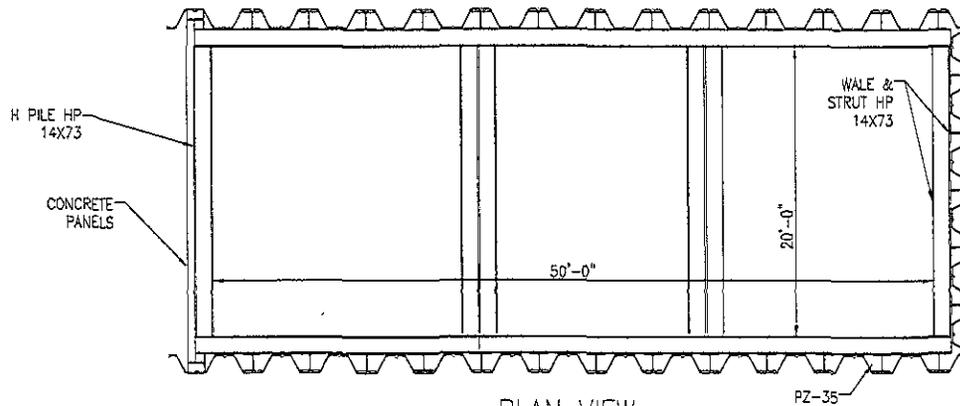
DSGN	JJS	03/19/2012
DRN	BWF	03/19/2012
CKD	DEJ	03/19/2012
SCALE: NONE		
FOR 8.5x11 DWG ONLY		



DEEP WATER WIND BLOCK ISLAND, LLC	JOB NUMBER 119530	REV B
BRIDGE DETAIL 34.5 KV BIWF UNDERGROUND ROUTE	DRAWING NUMBER U2-4	

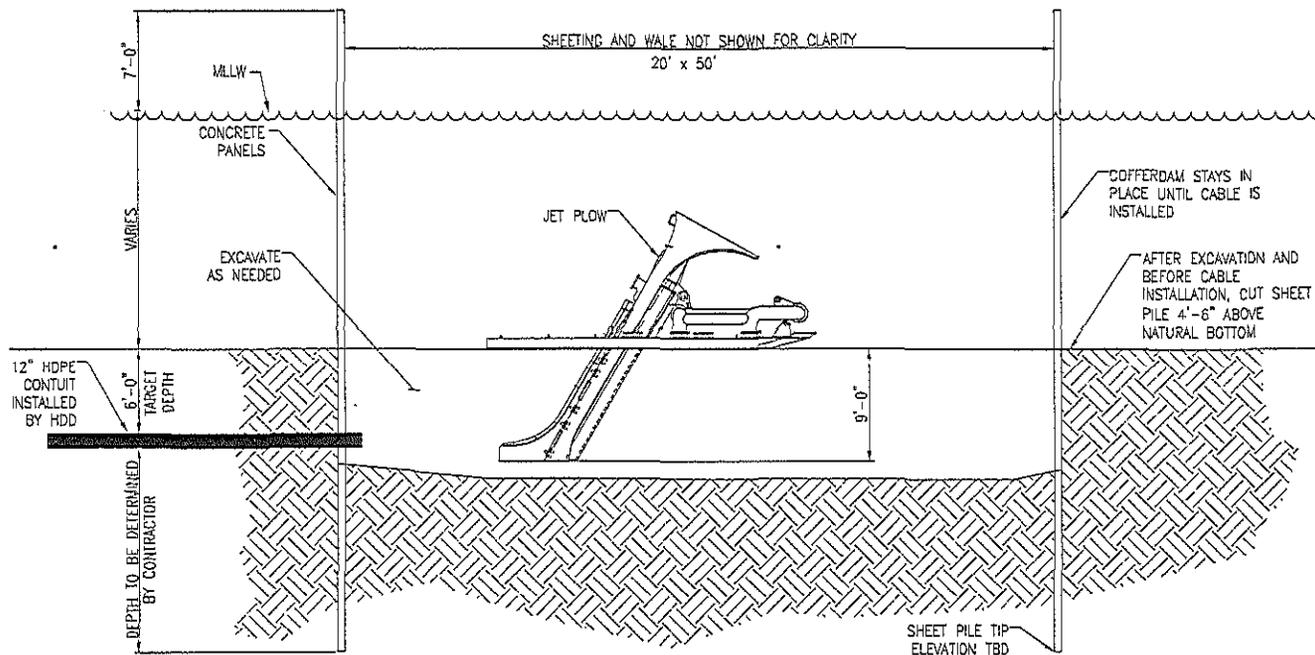
U2-5 Cofferdam Detail.dwg

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PLAN VIEW

SCALE N.T.S.



ELEVATION VIEW

SCALE N.T.S.



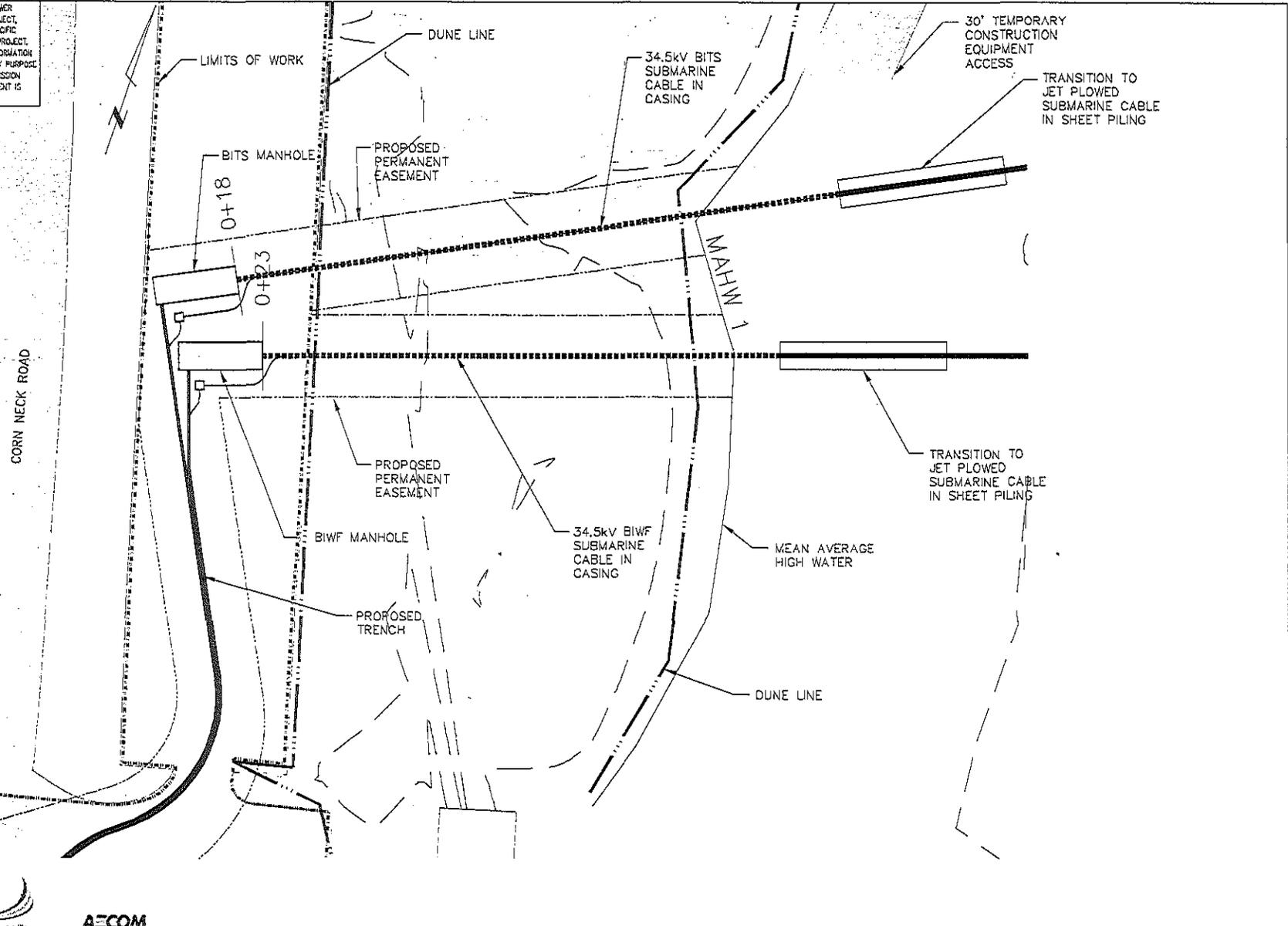
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
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A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ		

DSGN	JJS	03/19/2012
DRN	BWF	03/19/2012
CKD	DEJ	03/19/2012
SCALE: NONE		
FOR 8.5k11 DWG ONLY		



DEEP WATER WIND BLOCK ISLAND, LLC	JOB NUMBER 119630	REV B
COFFERDAM DETAILS 34.5 kv BIWF UNDERGROUND ROUTE	DRAWING NUMBER U2-5	

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DEEPWATER WIND AECOM

									DSGN	JJS	03/19/2012		DEEP WATER WIND BLOCK ISLAND, LLC	JOB NUMBER	REV
								DRN	BWF	03/19/2012	119630			△ B	
								CKD	DEJ	03/19/2012					
B	ISSUED FOR PERMIT	05/23/2012	JJS	JJS	DEJ			SCALE: 1" = 50' VERT. 1" = 500' HORIZ.				BLOCK ISLAND LANDING 34.5 kV BIWF UNDERGROUND ROUTE	DRAWING NUMBER		
A	ISSUED FOR REVIEW	05/07/2012	BWF	JJS	DEJ			FOR 8-5X11 DWG ONLY					U2-9		
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS								

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