



Appendix F

Storm Water Pollution Prevention  
Plan

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# Stormwater Pollution Prevention Plan

## CAPE WIND ENERGY PROJECT BARNSTABLE AND YARMOUTH, MASSACHUSETTS

PREPARED FOR



Cape Wind Associates, LLC  
75 Arlington Street, Suite 704  
Boston, MA 02116

PREPARED BY

ESS Group, Inc.  
888 Worcester Street, Suite 240  
Wellesley, Massachusetts 02482

Project No. E159-000

February 4, 2011



[www.essgroup.com](http://www.essgroup.com)



**STORMWATER POLLUTION PREVENTION PLAN  
Cape Wind Energy Project  
Barnstable and Yarmouth, Massachusetts**

*Owner:*

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**SWPPP Preparation Date:  
February 4, 2011**



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# EPA Notice of Intent Form

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NPDES  
FORM



United States Environmental Protection Agency  
Washington, DC 20460  
**Notice of Intent (NOI) for Storm Water Discharges Associated with  
Construction Activity Under an NPDES General Permit**

Submission of this Notice of Intent (NOI) constitutes notice that the party identified in Section II of this form requests authorization to discharge pursuant to the NPDES Construction General Permit (CGP) permit number identified in Section I of this form. Submission of this NOI also constitutes notice that the party identified in Section II of this form meets the eligibility requirements of the CGP for the project identified in Section III of this form. Permit coverage is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Refer to the instructions at the end of this form.

**I. Permit Number**

\_\_\_\_\_

**II. Operator Information**

Name: Cape Wind Associates, LLC

IRS Employer Identification Number (EIN): \_\_\_\_\_ - \_\_\_\_\_

**Mailing Address:**

Street: 78 Arlington Street, Suite 704

City: Boston State: MA Zip Code: 02116 - \_\_\_\_\_

Phone: 617 - 904 - 3100 Fax (optional): \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

E-mail: \_\_\_\_\_

**III. Project/Site Information**

Project/Site Name: Cape Wind

Project Street/Location: New Hampshire Ave, NSTAR ROW

City: Yarmouth and Barnstable State: MA Zip Code: \_\_\_\_\_ - \_\_\_\_\_

County or similar government subdivision: Barnstable

Latitude/Longitude (Use one of three possible formats, and specify method)

- |   |  |
|---|--|
| Latitude 1. ____° ____' ____" N (degrees, minutes, seconds) | Longitude 1. ____° ____' ____" W (degrees, minutes, seconds) |
| 2. ____° ____' ____" N (degrees, minutes, decimal)          | 2. ____° ____' ____" W (degrees, minutes, decimal)           |
| 3. <u>41.6862</u> ° N (degrees decimal)                     | 3. <u>70.2839</u> ° W (degrees decimal)                      |

Method:  U.S.G.S. topographic map  EPA web site  GPS  Other:

If you used a U.S.G.S. topographic map, what was the scale? \_\_\_\_\_

Project located in Indian Country?  YES  NO

If yes, name of reservation, or if not part of a reservation, put "Not Applicable:" \_\_\_\_\_

Estimated Project Start Date: \_\_\_\_\_ / \_\_\_\_\_ / 2011  
Month Day Year

Estimated Project Completion Date: \_\_\_\_\_ / \_\_\_\_\_ / 2016  
Month Day Year

Estimated Area to be Disturbed (to the nearest quarter acre): 5.00

**IV. SWPPP Information**

Has the SWPPP been prepared in advance of filing this NOI?  YES  NO

Location of SWPPP for Viewing:  Address in Section II  Address in Section III  Other

If other:

SWPPP Street: To Be Determined

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

SWPPP Contact Information (if different than that in Section II):

Name: \_\_\_\_\_

Phone: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Fax (optional): \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

E-mail: \_\_\_\_\_

**V. Discharge Information**

Identify the name(s) of waterbodies to which you discharge. Lewis Bay

Is this discharge consistent with the assumptions and requirements of applicable EPA approved or established TMDL(s)?  YES  NO

**VI. Endangered Species Protection**

Under which criterion of the permit have you satisfied your ESA eligibility obligations?

A  B  C  D  E  F

If you select criterion F, provide permit tracking number of operator under which you are certifying eligibility:

\_\_\_\_\_

**VII. Certification Information**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

E-mail: \_\_\_\_\_

**NOI Preparer (Complete if NOI was prepared by someone other than the certifier)**

Prepared by: \_\_\_\_\_

Organization: \_\_\_\_\_

Phone: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Ext. \_\_\_\_\_ E-mail: \_\_\_\_\_

# Project Narrative

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## **1.0 INTRODUCTION**

Section 402 of the Clean Water Act requires permits for stormwater discharges associated with construction activities under the National Pollutant Discharge Elimination System (NPDES) program or by an equivalent state permit program. Pursuant to the Environmental Protection Agency's (EPA) NPDES program, a Construction General Permit (CGP) is required for any construction activity that disturbs one or more acres of land. The CGP authorizes the discharge of stormwater pollution from construction activities, in accordance with the terms and conditions of the general permit, and has been included in Attachment 1. The general permit includes provisions for the development of a Stormwater Pollution Prevention Plan (SWPPP) to maximize the potential benefits of pollution prevention and sediment and erosion control measures at construction sites.

The Cape Wind Energy Project activity subject to the jurisdiction of the CGP is the installation of the upland transmission cable system. The NPDES CGP regulations are not applicable to underwater work (installation of submarine cable, WTG's, and ESP) because there can be no stormwater discharges underwater. All underwater work will be performed using Best Management Practices (BMPs) to reduce impacts to the affected marine environment.

A SWPPP is a comprehensive guide which is designed to prevent stormwater pollution impacts to wetlands and surface water resources from construction activities. The SWPPP will:

- Define the characteristics of the site and the type of construction which will be occurring;
- Describe the site plan for the facilities/structures to be constructed;
- Describe the practices that will be implemented to control erosion and the release of pollutants in stormwater;
- Provide certification and notification of the SWPPP by an authorized representative;
- Create an implementation schedule to ensure that the practices described in this SWPPP are, in fact, implemented, and provide a means to evaluate the plan's effectiveness in reducing erosion, sediment, and pollutant levels in stormwater discharged from the subject activities; and
- Describe the final stabilization/termination design to minimize erosion and prevent stormwater impacts after construction is complete.

### **1.1 SWPPP Content**

This SWPPP has been prepared in accordance with the CGP and includes the following items:

- Identification of the SWPPP coordinator with a description of this person's duties;
- Identification of the stormwater pollution prevention team that will assist in implementation of the SWPPP during construction;
- Description of the existing site conditions, including existing land use and soil types at the site, as well as the location of surface waters which are located on or next to the site (wetlands, streams, rivers, lakes, ponds, etc.);

Barnstable for approximately 4,000 feet and then cross back into Yarmouth within coastal waters. The submarine cable system in Barnstable will enter Lewis Bay from Nantucket Sound between the existing Federal shipping channel and Egg Island. The transmission cable system will make landfall in the Town of Yarmouth at New Hampshire Avenue. From this landfall, an upland transmission cable system will be installed in an underground conduit within existing roadway layouts until it intersects with an existing NSTAR Electric Right-of-Way (ROW) located east of Willow Street in Yarmouth. The upland transmission cable system will then continue within the currently cleared and maintained portions of the NSTAR Electric ROW through Yarmouth and will cross into Barnstable to extend to its terminus at the Barnstable Switching Station. Refer to Figure 1 for a Site Locus.

### **3.2 Existing Land Use**

The proposed Project will be located in residential areas of Yarmouth and Barnstable, Massachusetts and will cross one category of land use. The land use category is briefly defined below.

- **Commercial/Residential Land** – Includes land currently used in a residential or commercial capacity. For the proposed project, the underground cable is located within existing roadways in residential and commercial areas as well as existing cleared and maintained transmission line right of way.

### **3.3 Soil Types**

Soil characterization for the site has been conducted using the MassGIS Soil Survey Datalayer for Barnstable County, Massachusetts. The Soils datalayer has been automated from 1:25,000 published soils surveys as provided on various media by the United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS). All soils data released by MassGIS have been "SSURGO-certified," which means they have been reviewed and approved by the NRCS and meet all standards and requirements for inclusion in the national release of county-level digital soils data. The soil types present in the roadway and cross country portions of the project area include the following:

- **Barnstable-Plymouth complex, rolling (BcC)** – These undulating and rolling, very deep, excessively drained and well drained soils are on side slopes and hills in glacial moraine areas. Slopes range from 3-15%. The soil substrate typically consists of loamy coarse sand in the upper portions and gravelly loamy coarse sand at lower depths. Permeability is moderately rapid to rapid. Depth to seasonal high water is greater than 6 feet.
- **Carver Coarse Sand (CdA, CdB)** – These very deep, excessively drained soils occur in broad areas of outwash plains. Surface slopes range from 0-3% for CdA mapping units and 3-8% for CdB units. Permeability is very rapid in the subsoil and substratum. Depth to seasonal high water table is more than 6 feet.
- **Plymouth-Barnstable complex, rolling, very bouldery, (PvC)** - These very deep, excessively drained and well drained soils are formed on side slopes of moraines. Stones and boulders cover 1-3% of the surface and slopes range from 3-15%. Permeability is moderately rapid to rapid in the subsoil of the Plymouth and Barnstable soil. Permeability in the substratum is generally very rapid. Depth to seasonally high water table is generally more than 6 feet.

- **Plymouth-Barnstable complex, hilly, very bouldery (PvD)** - These hilly and steep, very deep, excessively drained and well drained soils are on hills and ridges on moraines. Stones and boulders cover 1-3% of the surface and slopes range from 15-35%. The soil typically consists of light brownish gray, loose gravelly coarse sand in the lower part. Permeability ranges from moderately rapid to very rapid. Depth to seasonal high water is greater than 6 feet.
- **Plymouth-Barnstable-Nantucket complex, hilly, very bouldery (Pyd)** - These hilly and very steep, and very deep, excessively drained and well drained soils are on hills and ridges on moraines. Stones and boulders cover 1-3% of the surface and slopes range from 15-35%. The soil typically consists of loamy coarse sand in the surface and becomes gravelly coarse sand at lower depths. Depth to seasonal high water is more than 6 feet; however, a perched water table may occur at a depth of 2.0-2.5 feet in early spring.

These soils are characterized within Hydrologic Soil Group "A" or "B" in the Barnstable County Soil Survey. Soils within Hydrologic Group A and B generally have a moderate to high infiltration rate when thoroughly wet. The cable installation will not cross any areas with slow infiltration or areas that have high runoff potential. Refer to Figure 2 for a site soils map.

### **3.4 Surface Water Bodies and Wetlands**

#### **3.4.1 Yarmouth**

The proposed upland transmission cable system route begins at the landfall at New Hampshire Avenue in Yarmouth and extends north for approximately four miles within the existing roadway layouts of Berry Avenue, Higgins Crowell Road, and Willow Street. The route then leaves the existing roadway layout west of Willow Street to follow within the currently cleared and maintained portions of the NSTAR Electric ROW until it leaves Yarmouth and enters Barnstable along the NSTAR Electric ROW in a westerly direction to the existing Barnstable Switching Station.

Two coastal and six freshwater wetland systems were identified within approximately 100 feet of the proposed upland transmission cable system route in Yarmouth. Figure 3, Sheets A – G depicts an overview of the wetlands present along the upland cable route. The following are descriptions of those wetland resource areas identified within 100 feet of the upland transmission cable system route.

- **Salt Marsh 1** is located approximately 200 feet west of the proposed landfall, between Lewis Bay and Shore Road in Yarmouth. This salt marsh is vegetated with poison ivy (*Toxicodendron radicans*), salt meadow cordgrass (*Spartina patens*), rushes (*Juncus* spp.), and seaside goldenrod (*Solidago sempervirens*). This salt marsh is positioned between the residences at 43 and 37 Shore Drive.
- **Salt Marsh 2** is located approximately 95 to 120 feet west of the proposed transmission line route on New Hampshire Avenue. It is bordered by residences to the east and west, Shore Road to the south, and Broadway to the north. Salt Marsh 2 is vegetated by high tide bush (*Iva frutescens*), bayberry (*Morella caroliniensis*), poison ivy, salt meadow cordgrass, rushes,

and seaside goldenrod. A defined channel is visible in the center of the salt marsh.

- **Wetland 1 and 1A, Isolated Vegetated Wetland** is an Atlantic white cedar (*Chamaecyparis thyoides*) swamp located on the east and west sides of Higgins Crowell Road in Yarmouth. The wetland is within approximately 60 feet of the road, and is located at a well-defined break in slope. On the east side of the road, the wetland is relatively undisturbed and consists of a mixed cedar, tupelo (*Nyssa sylvatica*), and red maple (*Acer rubrum*) canopy, and a shrub layer with highbush blueberry (*Vaccinium corymbosum*), sweet pepperbush (*Clethra alnifolia*), green briar (*Smilax rotundifolia*), fetterbush (*Leucothoe racemosa*), and swamp azalea (*Rhododendron viscosum*). On the west side of the road, the majority of the mature Atlantic white cedars are dead or in decline. Vegetation includes several live Atlantic white cedar saplings, red maple, tupelo, inkberry (*Ilex glabra*), sweet pepperbush, green briar, highbush blueberry, water willow (*Decodon verticillatus*), and wool grass (*Scirpus cyperinus*). Since the cable will be installed within existing roadway, there will be no direct impact to Wetland 1.
- **Wetland 2, BVW, BANK, LUWW, Waters of the U.S.** consists of Jabinettes Pond on the east side of Higgins Crowell Road, and Thornton Brook, located on both the east and west side of the road. A vegetated wetland abutting Jabinettes Pond is located within 100 feet of the proposed upland transmission cable system route. Jabinettes Pond discharges into Thornton Brook, which appears to flow west and crosses beneath Higgins Crowell Road via a buried culvert. Thornton Brook is mapped as a perennial stream on the current USGS map. However, the stream channel was observed completely dry during the field reviews in October 2001 and December 2002. Since the cable will be installed within existing roadway, there will be no direct impact to Wetland 2.
- **Wetland 3, BVW, BANK, Waters of the U.S.** is a forested wetland located approximately 50 feet west of Higgins Crowell Road in Yarmouth. An intermittent stream channel flows west through the wetland and into Little Sandy Pond, located approximately 700 feet west of Higgins Crowell Road. The intermittent stream channel was observed dry in areas in the vicinity of the wetland delineation in December 2002. Since the cable will be installed within existing roadway, there will be no direct impact to Wetland 3.
- **Wetland 4, IVW, Waters of the U.S.** is a large forested swamp located approximately 30 feet east of Higgins Crowell Road in Yarmouth. The wetland has an open understory and canopy and is vegetated with red maple, sweet pepperbush, highbush blueberry and *Sphagnum* mosses. The wetland is defined by an obvious topographic break in slope. A headwall with a partially-buried culvert is located on the wetland's edge, adjacent to the roadway, but does not appear to be functioning. Since the cable will be installed within existing roadway, there will be no direct impact to Wetland 4.
- **Wetland 5, BVW, BANK, Waters of the U.S.** is located on the west side of Higgins Crowell Road in Yarmouth and is separated from the road by a strip of upland dominated by pitch pine and sheep laurel (*Kalmia angustifolia*). A manmade intermittent channel on the

west side of the wetland flows west into Hawes Run. Both the wetland and intermittent channel were dry at the time of inspection in December 2002. However, observations of the area during non-drought periods indicate that it does not meet the definition of Pond under the WPA (310 CMR 10.04) or the Yarmouth Wetlands Protection Regulations (Section 1.04). Since the cable will be installed within existing roadway, there will be no direct impact to Wetland 5.

- **Wetland 6, BVW, BANK, LUW, Waters of the U.S.** (federal, state, and local jurisdiction) consists of Long Pond, which is situated on the northern edge of the ROW just west of Willow Street. The pond contains open water, surrounded by a fringe of emergent marsh and shrub swamp dominated by highbush blueberry, sweet pepperbush, swamp azalea, and leatherleaf (*Chamaedaphne calyculata*). The wetland is located at the base of a steep slope; however, many of the wetland plants, including swamp azalea and sweet pepperbush, are growing significantly upslope. Therefore, the boundary of the wetland was delineated using evidence of hydrology and hydric soils, under criteria established by the MADEP.

#### **3.4.2 Barnstable**

There are no state- or locally-regulated freshwater wetland resource areas, Riverfront Area, or Buffer Zones located within the limits of work associated with the Barnstable portion of the upland transmission cable system route.

#### **3.5 Federally Endangered Species**

The U.S. Fish and Wildlife Service (USFWS) completed its review of the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) (formerly Mineral Management Service), proposed issuance of a lease or easement to Cape Wind Associates, LLC to construct, operate, maintain and decommission the Cape Wind Project in November 2008. The USFWS transmitted a biological opinion (BO) on the effect on the threatened piping plover (*Charadris melodus*) and endangered roseate tern (*Sterna dougalli dougalli*) in accordance with Section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et seq.). According to the USFWS BO, the upland cable installation will not have an adverse impact on these species.

The National Marine Fisheries Service (NMFS) issued a revised BO for the Project on December 30, 2010. The NMFS BO only concerned species of whales and turtles with habitats located offshore, thus the revised BO does not impact the conclusion that the upland cable installation will not have an adverse impact on federally endangered species.

#### **3.6 Historic Properties**

There will be no impacts to historic properties from the installation of the upland cable since the route is within roadway or maintained NSTAR Electric ROWs.

#### **3.7 Construction Details**

The following sections will present detailed descriptions of the proposed work activities. For purposes of this SWPPP the submarine cable system is not described since there are no stormwater discharges

associated with underwater work. The landfall transition and the upland transmission cable system and their associated construction activities are described below.

### **3.7.1 Landfall Transition**

The transition of the interconnecting 115 kV submarine transmission lines from water to land will be accomplished through the use of Horizontal Directional Drill (HDD) methodology in order to minimize disturbance within the intertidal zone and near shore area. The HDD will be staged at the upland landfall area and will drill boreholes from land toward the offshore exit point. Conduits will be installed through the boreholes and the transmission lines will be pulled through the conduits from the seaward end toward the land. Two parallel transition manhole/transmission line splicing vaults will be installed using conventional excavation equipment (backhoe) at the upland transition point where the submarine and land transmission lines will be connected.

Four 18-inch High Density Polyethylene (HDPE) conduit pipes (one for each three-conductor 115 kV cable and fiber optic cable set) will be installed from the onshore transition vaults to beyond the mean low water level. The offshore end will terminate in a pre-excavated pit where the jet plow cable burial machine will start. The four conduits will have approximately 10 feet of separation within the pre-excavation area. The four boreholes will be approximately 200 feet long (the borehole diameters will be slightly larger than the conduit diameter to allow the conduit to be inserted in the boreholes).

A drill rig will be set up onshore behind a bentonite pit where a 40-foot length of drill pipe will be set in place to begin the horizontal drilling. A bentonite and freshwater slurry will then fill the pit, in which the bentonite will form a hard shell lining of the tunnel wall during the drilling process. After each 40 feet of drill pipe installation, an additional length of drill pipe will be added. When the drill bit emerges in the pre-excavated pit, the bit will be replaced with a series of reamers to widen the borehole, followed by a pulling head on the end of the pipe. The drill pipe will then be used to pull back the conduit into the bored hole from the offshore end. As with the drill process, freshwater will be utilized to the maximum extent practicable as the reaming process nears the pre-excavated pit.

The HDD operation will include an upland based HDD drilling rig system, drilling fluid recirculation systems, residuals management systems, and associated support equipment. The HDD drilling material handling equipment will be located on New Hampshire Avenue. Drilling will take place from the upland site towards Lewis Bay. Excavated soils will be temporarily stored near the HDD drill rig during construction, and will then be reused onsite or removed and disposed of as required.

To further facilitate the HDD operation, a temporary cofferdam will be constructed at the end of the boreholes (see Landfall Details Sheet CD-6 in the Project Plans). The cofferdam will be approximately 65 feet wide and 45 feet long and will be open at the seaward end to allow for manipulation of the HDD conduits. The area enclosed by the cofferdam will be approximately 2,925 square feet. The cofferdam will be constructed using steel sheet piles driven from a barge-

mounted crane. The top of the sheet piles will be cut off approximately five feet above mean high water. This will serve to contain any turbidity associated with the dredging and subsequent jet plow embedment operations and to provide a visual reference to its location for mariners. While the cofferdams will be located outside of areas normally subject to vessel traffic, the location of the cofferdam will be appropriately marked to warn vessels of the temporary cofferdam's presence.

The area inside the cofferdam will be excavated to expose the seaward end of the borehole. Sediment inside the cofferdam will be excavated to expose the area where the HDD borehole will end at an elevation of approximately -10 feet MLLW, with a 1-foot allowable overdredge. A 20 foot long level area will be created at the closed end of the cofferdam at this elevation. From that point, the bottom of the excavated area will be sloped at 3H:1V until it meets the existing seafloor bottom contour. Approximately 840 cubic yards of sediment will be excavated from the cofferdam. The cofferdam excavation will be backfilled, rather than allowed to in-fill over time. The dredged material will be temporarily placed on a barge for storage, and then the dredged area of the cofferdam will be backfilled with the dredged material. If necessary, the dredged backfill material will be supplemented with imported clean sandy backfill material to restore the seafloor to preconstruction grade. No removal of sediment outside of the cofferdam will be required.

The HDD operation will be designed to include a drilling fluid fracture or overburden breakout monitoring program to minimize the potential of drilling fluid breakout into the waters of Lewis Bay. It is expected that the HDD conduit systems will be drilled through sediment overburden at the landfall location. However, it is anticipated that drilling depths in the overburden will be sufficiently deep to avoid pressure-induced breakout of drilling fluids through the seafloor bottom, based primarily on estimates of overburden thickness and porosity. Nevertheless, a visual and operational monitoring program will be implemented during the HDD operation to detect fluid loss. This monitoring will include:

- Visual monitoring of surface waters in the adjacent Lewis Bay by drilling operation monitoring personnel on a daily basis to observe potential drilling fluid breakout points;
- Drilling fluid volume monitoring by technicians on a daily basis throughout the drilling and reaming operations for each HDD conduit system;
- Development and implementation of a fluid loss response plan and protocol by the drill operator in the event that a fluid loss occurs. The response plan will include drill stem adjustments, injection of loss circulation additives such as Benseal that can be mixed in with drilling fluids at the mud tanks, and other mitigation measures as appropriate; and
- Use of appropriate bentonite drilling fluids that will gel or coagulate upon contact with sea water.

In the unlikely event of an unexpected drilling fluid release, the bentonite fluid density and composition will cause it to remain as a cohesive mass on the seafloor in a localized slurry pile

similar to the consistency of gelatin. This cohesive mass can be quickly cleaned up and removed by divers and appropriate diver-operated vacuum equipment.

It is anticipated that the installation of the borehole and conduit by HDD techniques will take approximately two to four weeks. Upon completion of the installation of the conduit pipes and submarine cable system, the HDD equipment will be removed and New Hampshire Avenue will be restored to its pre-construction grades and conditions. Standard stormwater erosion and sedimentation controls will be installed on the site prior to the initiation of construction activities, and will be inspected and maintained throughout construction operations. Once construction is completed, all equipment and construction materials will be removed from the site and the area will be returned to its original condition.

### **3.7.2 Upland Transmission Cable Route**

Once the 115 kV submarine transmission lines make landfall at the proposed location on New Hampshire Avenue, the transmission lines will be interconnected with a 115 kV upland transmission line system within two parallel below-grade landfall transition vaults with interior dimensions of approximately 7'0" W x 34'0" L x 7'6" H, containing one circuit each. The proposed upland cables will be jointed to the submarine cables at the landfall in Yarmouth. The upland transmission line system will utilize 12 single-conductor 115 kV cables. The 12 cables are expected to be segregated into two circuits, each composed of two cables per phase. The cables will run in a concrete encased duct bank.

The upland transmission line will enter the NSTAR Electric ROW and make the physical connection to the Barnstable Switching Station by continuing with two new underground transmission lines in the existing NSTAR Electric ROW. The new lines will be approximately 1.9 miles in length and will be routed from the point where the new upland transmission line intersects the existing ROW in Yarmouth to the Barnstable Switching Station.

The upland transmission cable system will be installed within existing roadway layouts in Yarmouth from the landfall location to the NSTAR Electric ROW, just east of Willow Street. Construction of the upland transmission line will occur in two phases. The first phase will consist of installing the ductbanks, conduits, and vaults. The second phase will consist of the installation of the upland 115 kV transmission lines, including splices and terminations. Phase I is anticipated to take approximately five months to complete. Phase II is also anticipated to take approximately five months. Portions of these two phases may overlap. The installation of the upland components will occur outside of the summer tourist season.

The upland transmission line installation, from the transition vault at the landfall to the Barnstable Switching Station, will involve installation of the transmission line in the underground splice vaults and ductbanks within existing public ways and ROWs. Most excavation will be performed with typical construction equipment, including excavators and backhoes, with the exception of four railroad/state highway intersection crossings which may involve using trenchless techniques. All work will be performed in accordance with local, state, and federal safety standards.

Underground upland transition vaults will be constructed approximately every 500–1,700 feet (152.4–518 meters) (the approximate length of transmission line that can be effectively transported by truck and pulled within the manufacturer's tension specifications). These vaults will accommodate cable splicing and cross-bonding of cable metallic sheaths.

The transmission lines will be installed within a ductbank consisting of PVC conduits for the transmission lines spaced approximately 8 inches apart (on center) encased in concrete (minimum of 2,000 psi, or 13.790 kilopascals) which is backfilled with native material or suitable backfill to original grade. The trench opening will be a minimum of 10 feet wide within the roadways and a minimum of 8 feet wide within the ROW and will be supported by temporary trench boxes.

On any given day, approximately 150 feet of cable alignment will be disturbed. This phased approach will aid in limiting the potential for erosion and sedimentation during construction activities. Excavated soil from the trench and vaults will be temporarily stored adjacent to the worksite or transported off-site if on-site storage is not possible. Where soil is stored at the site, it will be stabilized with erosion and sedimentation controls. Following the completion of the installation of the transmission line, the excavation will be backfilled and repaved to Town of Yarmouth standards. Stormwater erosion and sedimentation controls will be in place prior to the initiation of construction activities. Once construction is completed, all equipment and construction debris will be removed from the site and the area will be returned to its original condition.

To minimize the potential for erosion during construction, mitigation measures, such as hay bales and silt fences will be placed, as appropriate, around disturbed areas and any stockpiled soils. Prior to commencing construction activities, erosion control devices will be installed between the work areas and downslope water bodies and wetlands to reduce the risk of soil erosion and siltation. Erosion control measures will also be installed downslope of any temporarily stockpiled soils in the vicinity of waterbodies and wetlands. These mitigation measures will incorporate applicable BMPs for erosion control and stormwater management during construction. It is possible that dewatering of the excavated trench or vault locations close to the transition point will be required because of high groundwater.

Along New Hampshire Avenue, any necessary dewatering will be done by using a frac tank. Water from the trench will be pumped into a frac tank, where any sediment will be filtered. The sediment free water will then be discharged by gravity onto the boat ramp next to Englewood Beach.

## **4.0 ASSESSMENT OF IMPACTS**

### **4.1 Activities**

The following site preparation and construction activities have the potential to affect stormwater runoff quality.

- Grading and topsoil segregation;

- Trenching;
- Direction drilling;
- Installation; and
- Backfilling and rough grading.

Site preparation activities will be designed utilizing best practical measures to prevent erosion and control sediment to avoid adverse effects on adjacent resource areas and surface water bodies.

#### **4.2 Materials**

The following materials have the potential to affect stormwater runoff quality:

- Bentonite from directional drilling;
- Oil;
- Construction equipment;
- Soil piles; and
- Other construction materials.

#### **4.3 Potential Impacts**

There will be no impacts to inland resource areas from the installation of the upland cable since the route is within roadway or maintained NSTAR Electric ROWs.

In roadway ROWs, erosion and sedimentation controls will be installed to prevent construction-related impacts to down gradient wetlands.

The proposed transmission line route within the maintained NSTAR Electric ROW will not result in any impacts to wetland resource areas. Erosion and sedimentation controls will be installed to prevent indirect impacts to down gradient wetland resource areas, as described in Section 5.0 below.

### **5.0 STORMWATER CONTROL AND CONSTRUCTION MITIGATION MEASURES**

Measures will be taken to prevent impacts from stormwater runoff generated by the project during construction. These measures will include implementing BMPs, reducing potential sources of contamination, implementing stormwater management controls, developing an inspection and maintenance plan, and sequencing activities appropriately to reduce impacts.

During construction, the SWPPP coordinator will be responsible for ensuring compliance with the precautionary measures provided in the design documents, and that construction activities are conducted in such a manner as to prevent damage or impairment to the environment. It will be the SWPPP coordinator's responsibility not to undertake, at any time or in any particular area, more than that magnitude of work that can be safely and adequately controlled by the methods at the SWPPP

coordinator's disposal. The SWPPP coordinator's approach will emphasize the control of erosion before it occurs.

To minimize the potential for erosion during construction, erosion and sedimentation control procedures will be implemented prior to and during construction activities. Erosion and sedimentation control measures implemented will include, at a minimum, a temporary cofferdam at the landfall transition, silt fence and hay bale barriers on the upgradient side of resource areas and catch basin inlet protection along the upland cable system route.

In general, no storage or refueling of machines and equipment will occur within wetland resource areas. Areas of exposed soil will be kept to a minimum, and a permanent vegetative cover or other form of stabilization will be established along the upland transmission cable route as soon as possible. If dewatering is required, sedimentation basins or other appropriate measures will be implemented.

### **5.1 Erosion Control Barriers**

Prior to commencing construction activities, erosion control barriers will be installed between the work areas and adjacent waterbodies and wetlands to reduce the risk of soil erosion and siltation. Erosion control measures will also be installed down-slope of any temporarily stockpiled soils in the vicinity of waterbodies and wetlands. The erosion control barriers will consist of toed-in silt fence and staked hay bales. Hay bale/silt fence barriers will be maintained in functioning condition and repaired or replaced as necessary, and will remain in place until all upgradient areas have been stabilized.

### **5.2 Catch Basin Inlet Protection**

Existing catch basins downgradient and within the limits of the proposed work will be protected from sediment inflow through the installation of SiltSacks, or by surrounding them with a barrier of hay bales and installing filter fabric beneath the grates. These sedimentation controls will be regularly maintained until the drainage area tributary to the catch basin has been stabilized.

### **5.3 De-Watering Measures**

Construction in New Hampshire Avenue near Englewood Beach is likely to require dewatering from the construction trench. A frac tank and pumping system will be used to maintain a channel for safe working conditions. Excess water from the trench will be pumped into the frac tank where the water will be filtered so that sediment free water leaves the tank. The tank and its discharge hose will be placed on the concrete boat ramp and allowed to enter the ocean. The discharge hose will be discharged into a line of haybales. See the frac tank detail on the Dewatering Plan Sheet CD-8 in the Project Plans.

### **5.4 Source Control and Stockpile Locations**

Proper site management during construction will decrease the risk of sediment loading during construction. If it becomes necessary to stockpile materials, stockpiles will be protected and covered when necessary with erosion and sediment controls installed around the perimeter. Stockpiles will be placed in a properly graded area so as not to be affected by, or contribute to, potential runoff areas.

Waste materials will be placed in large roll-off containers (or dumpsters) and removed by a contract hauler to a properly licensed landfill. The roll-off containers will be covered with a properly secured tarp before the hauler exits the site.

#### **5.5 Construction Vehicle Refueling Operations**

Mobile equipment such as dump trucks will be fueled at off-site locations.

#### **5.6 Dust Control**

A combination of the following dust control measures will be implemented to reduce surface and air movement of dust from exposed soil surfaces.

- Construction activities will be scheduled in such a manner so that the least area of disturbed surface is exposed at any one time.
- The site will be sprinkled with water until the surface is wet, as required.

#### **5.7 Spill Prevention, Control, and Countermeasure Plan**

40 CFR 112.3 requires the owner or operator of a subject facility to prepare in writing and implement a Spill Prevention Control and Countermeasure (SPCC) Plan in accordance with 40 CFR 112.7. A Tier 1 qualified facility is a facility that has had no single discharge exceeding 1,000 gallons, or no two discharges each exceeding 42 gallons, since becoming subject, and has no individual aboveground oil storage container with a capacity greater than 5,000 gallons. Tier 1 qualified facilities can self-certify their SPCC Plan, pursuant to 40 CFR 112.6.

The Cape Wind project qualifies as a Tier 1 qualified facility. The following SPCC Plan for the construction activities described in this SWPPP has been prepared in accordance with 40 CFR 112.7. The self-certification for the SPCC Plan has been provided in Section 8.0 of this document.

The material or substances listed below are expected to be present in varying quantities during construction.

- Asphalt
- Concrete products
- Steel and steel fabrication materials
- Acids
- Petroleum products and lubricants
- Adhesives
- Detergents
- Packaging materials
- Miscellaneous chemical additives
- Rubber and plastic products
- Cement

- Gravel and sand
- Wood products
- Sanitary wastes
- Glass products
- Paints
- Solvents
- Paper products

#### **5.7.1 Spill Prevention Measures**

The following material management practices will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff during the construction activities described in Section 3.0 of this document:

1. Only enough products required to complete the job will be stored on-site.
2. All materials stored on site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
3. Materials will be kept in their original containers with the original manufacturer's label.
4. Substances will not be mixed with one another, unless recommended by the manufacturer.
5. Manufacturer's recommendations for proper use and disposal will be followed.
6. The SWPPP coordinator will perform inspections to ensure the proper storage, use and disposal of materials.
7. Whenever possible, all of the hazardous material will be used before disposing of the container.
8. On-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage.
9. Petroleum products will be stored in tightly sealed containers that are clearly labeled.
10. Asphalt substances used on-site will be applied according to manufacturer's recommendations.
11. All containers will be tightly sealed and stored when not in use. Excess paint will be properly disposed of according to the manufacturer's instructions or state and local regulations.

The SWPPP coordinator will be responsible for preventing spills in accordance with the project specifications and applicable federal, state and local regulations and will identify an appropriately trained site employee involved with the day-to-day site operations to be the spill prevention and cleanup coordinator. The name(s) of the responsible spill personnel will be posted in the

material storage area(s) and the on-site office. Each employee will be instructed that all spills are to be reported to the spill prevention and cleanup coordinator.

### **5.7.2 Inspections**

Cape Wind will conduct inspections to assure that all equipment is in good working order to provide early detection of equipment leaks or degradation, ensure consistent compliance with the SPCC regulations, and ensure the effectiveness of the SPCC Plan. These inspections are described below. Sample inspection forms and guidelines are provided in Attachment 8.

The SWPPP coordinator will be responsible for ensuring that all inspections are conducted. The inspections will be conducted by site personnel on a regular basis. The inspections will include:

- Inspecting exterior surfaces of tanks, pipes, valves, 55-gallon drums, and other equipment for leaks.
- Identifying cracks, areas of wear, corrosion, poor maintenance and operating practices, and, malfunctioning equipment.
- Inspecting all overfill protection systems and tank gauges on any aboveground storage tanks.

Any potential issues will be noted in the inspection report and corrective action will be taken. All corrective actions will be recorded in the inspection report.

### **5.7.3 Repairs**

Construction personnel will be instructed to report any leaks or deficiencies to any containers or equipment to the SWPPP coordinator as soon as possible. The SWPPP coordinator will be responsible for immediately addressing any leak or deficiency and repairs will be made as soon as possible and/or the container will be replaced, as appropriate.

### **5.7.4 Record Keeping**

The following recordkeeping procedures will be maintained to meet the requirement of the SPCC regulations:

1. A copy of this Plan will be maintained at the site at all times.
2. Reports for each inspection will be maintained and, upon request, made available for review. The reports will include the following information:
  - Identification of equipment inspected
  - Date of inspection
  - Results of inspection including a report on the need for repair
  - Name of the inspector

### **5.7.5 Personnel Training**

Employee training will be conducted by Cape Wind to assure adequate understanding of the SPCC Plan. Personnel will be trained as appropriate for their job duties, on proper operation and maintenance of equipment, discharge procedure protocols, applicable laws, rules, and regulations, general facility operations, and SPCC Plan contents. The purpose of the training will be to ensure that discharges are prevented.

The SWPPP coordinator will be responsible for ensuring that affected facility personnel have received appropriate training. All training will be documented on the form provided in Attachment 9, or an equivalent form.

### **5.7.6 Security**

Cape Wind will maintain security measures to minimize the possibility of vandalism or oil release. Contract personnel will be informed of site emergency procedures including whom to contact in the event of an environmental emergency. The site will be secured during non-operating hours.

### **5.7.7 Emergency Response**

#### **Spill Response Equipment**

Spill control/containment equipment will be stored locally in the area of construction. Materials and equipment necessary for spill cleanup will be kept in the on-site material storage area. Equipment and materials will include, but not be limited to, absorbent booms or mats, brooms, dust pans, mops, rags, gloves, goggles, sand, and plastic and metal trash containers, specifically for this purpose. It is the responsibility of the SWPPP coordinator to ensure the inventory will be readily accessible and maintained.

Spills will be contained with granular sorbent materials, sand, sorbent pads, booms, or all of the above to prevent spreading. Spill clean up will be completed by trained, certified clean-up contractors. Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

#### **Management of Spill Debris**

Any materials or wastes generated from response actions will be managed in accordance with applicable regulations. Such requirements will include:

- Using proper containers.
- Providing secondary containment.
- Marking and labeling storage containers and areas.
- Complying with requirements for offsite shipment, including manifesting, U.S. Department of Transportation requirements, and land disposal restrictions.

- Proper on-site management.
- Using transporters and treatment/disposal facilities with appropriate licenses.

### **Notifications**

Following a spill of oil or hazardous material the SWPPP coordinator will fill out a spill report form. The spill report form is included in Attachment 2. Emergency contact information is provided in Attachment 3. Upon completion of clean-up, spill reports and appropriate completion forms shall be provided to the proper authorities.

### **5.7.8 Plan Amendments, Certifications, and Approvals**

#### **Plan Review by the Facility**

The SPCC Plan reviews will be undertaken as follows:

- If the Plan is shown to be deficient in controlling spills.
- To revise spill control measures whenever the Plan is found to be deficient.
- When there is a change in site design, construction, operation, or maintenance that materially affects the facility's potential to discharge oil or pollutants into or upon waters of the state.

The Plan will be updated as needed to include more effective prevention and control technologies, if the technology has been field proven at the time of the review and will significantly reduce the likelihood of a discharge. Each review will be documented in the log provided in Attachment 7, or an equivalent form, regardless of whether amendments to the Plan are necessary.

#### **Management Approval**

This SPCC Plan and its implementation have full approval of the management of Cape Wind. This approval is documented in Section 8.0 of this document.

### **5.8 Inspection and Maintenance Program**

The SWPPP coordinator will be responsible for inspecting the sediment and erosion controls on a regular basis to note any escape of sediments. These inspections will include disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site. Where discharge points are accessible, they will be inspected to ascertain whether erosion control measures are effective in preventing impacts to receiving waters.

Inspections will be completed by qualified personnel at least once every seven calendar days and within 24 hours of any storm event of 0.5 inches or greater. The EPA also recommends that permittees perform a "walk through" inspection of the construction site before anticipated storm

events that could possibly yield a significant amount of runoff. Where sites have been finally or temporarily stabilized, or runoff is unlikely due to winter conditions, such inspections will be conducted at least once every month.

A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, and major observations relating to the implementation of the SWPPP will be made and retained as part of the SWPPP for at least three years from the date that the site is finally stabilized. Major observations will include: the location(s) of discharges of sediment or other pollutants from the site; location(s) of BMPs that need to be maintained; location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location; and location(s) where additional BMPs are needed that did not exist at the time of inspection. The maintenance inspection report will be made after each inspection. A copy of the report form to be completed by the SWPPP coordinator is provided in Attachment 4 of this SWPPP. Completed forms will be maintained on-site during the entire construction project.

The inspection report will be signed in accordance with the certification language in the General Permit, namely:

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

## **6.0 RECORD KEEPING AND UPDATING OF SWPPP**

The following records will be maintained and attached to the SWPPP by the SWPPP coordinator:

- Dates when major grading activities occur;
- Dates when construction activities temporarily or permanently cease on a portion of the site; and
- Dates when stabilization measures are initiated.

Inspection reports will be retained as part of the SWPPP for at least three years from the date that the site is finally stabilized. Such reports will identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report will contain a certification that the facility complies with the SWPPP and the General Permit.

The SWPPP coordinator will have a copy of the SWPPP available at a central location on-site for the use of all equipment operators and those identified as having responsibilities under the SWPPP whenever they are on the construction site. This SWPPP will be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits.

- Identification of the body of water(s) which will receive runoff from the construction site, including the ultimate body of water that receives the stormwater;
- Identification of potential stormwater contaminants;
- Description of stormwater management controls and various BMPs necessary to reduce erosion, sediment, and pollutants in stormwater discharge;
- A Spill Prevention, Control, and Countermeasure Plan to minimize the potential for releases of materials and to mitigate their potential impacts during construction activities;
- Description of the facility monitoring plan and how controls will be coordinated with construction activities; and
- Description of the implementation schedule and provisions for amendment of the plan.

## **2.0 SWPPP COORDINATOR AND DUTIES**

The construction site SWPPP coordinator for the facility will be Matthew Palmer (phone number: 508-685-2406) for Cape Wind Associates, LLC, which intends to construct the proposed project. The duties of the construction site SWPPP coordinator for the project will include the following:

- Implement the SWPPP plan with the aid of the SWPPP team;
- Oversee maintenance practices identified as BMPs in the SWPPP;
- Implement and oversee employee training;
- Conduct or provide for inspection and monitoring activities;
- Identify other potential pollutant sources and make sure they are added to the plan;
- Identify any deficiencies in the SWPPP and make sure they are corrected; and
- Ensure that any changes in construction plans are addressed in the SWPPP.

## **3.0 PROJECT DESCRIPTION**

The overall project purpose for the Cape Wind Energy Project is to install, operate and maintain a commercial-scale renewable energy facility that will serve Massachusetts and New England regional energy needs via interconnection with the New England electric transmission and distribution grid. The Cape Wind Energy Project will serve to meet the demonstrated need for new regionally-significant renewable energy production by installing and operating a wind-powered electric generating facility comprised of 130 offshore wind turbine generators (WTGs), a centrally located Electrical Service Platform (ESP) and an associated transmission cable system.

### **3.1 Site Location**

Two 115 kilovolt (kV) alternating current (AC) submarine cable circuits (the transmission cable system) will enter Barnstable within coastal waters from the Town of Yarmouth and travel through

## **7.0 TERMINATION OF SWPPP**

Cape Wind will submit a completed Notice of Termination (NOT) when stormwater discharges associated with construction activity have been eliminated (i.e., regulated discharges of stormwater are being terminated or final stabilization has been completed) or it is no longer an owner and/or operator at the site.

**8.0 CERTIFICATION OF SWPPP & SPCC****8.1 Certification by a Responsible Corporate Officer**

I certify under penalty of law that this Stormwater Pollution Prevention Plan, Spill Prevention, Control, and Countermeasure Plan, and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Furthermore:

- I am familiar with the applicable regulatory requirements;
- These Plans were prepared in accordance with accepted and sound industry practices and standards;
- Procedures for required inspections and testing have been established in accordance with industry standards or recommended practices;
- I will fully implement the Plans;
- These Plans do not deviate from any applicable regulatory requirement;
- These Plans and individual(s) responsible for implementing them have the full approval of management and I have committed the necessary resources to fully implement them;
- I understand my obligation to report any discharges to navigable waters or adjoining shorelines to the appropriate authorities;
- I understand my obligation to review and amend these Plans whenever there is a material change to the site that effects the potential for an oil discharge;

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

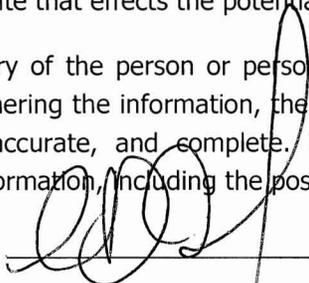
Signature: \_\_\_\_\_

Name (Printed) \_\_\_\_\_

Title: \_\_\_\_\_

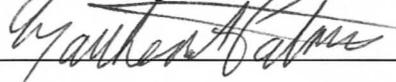
Company: \_\_\_\_\_

Date: \_\_\_\_\_

  
M. Olmsted  
VICE PRESIDENT  
CAPE WIND ASSOCIATES/ENERGY MANAGEMENT INC.  
3 FEB 2011

**8.2 Certification for Construction Activities**

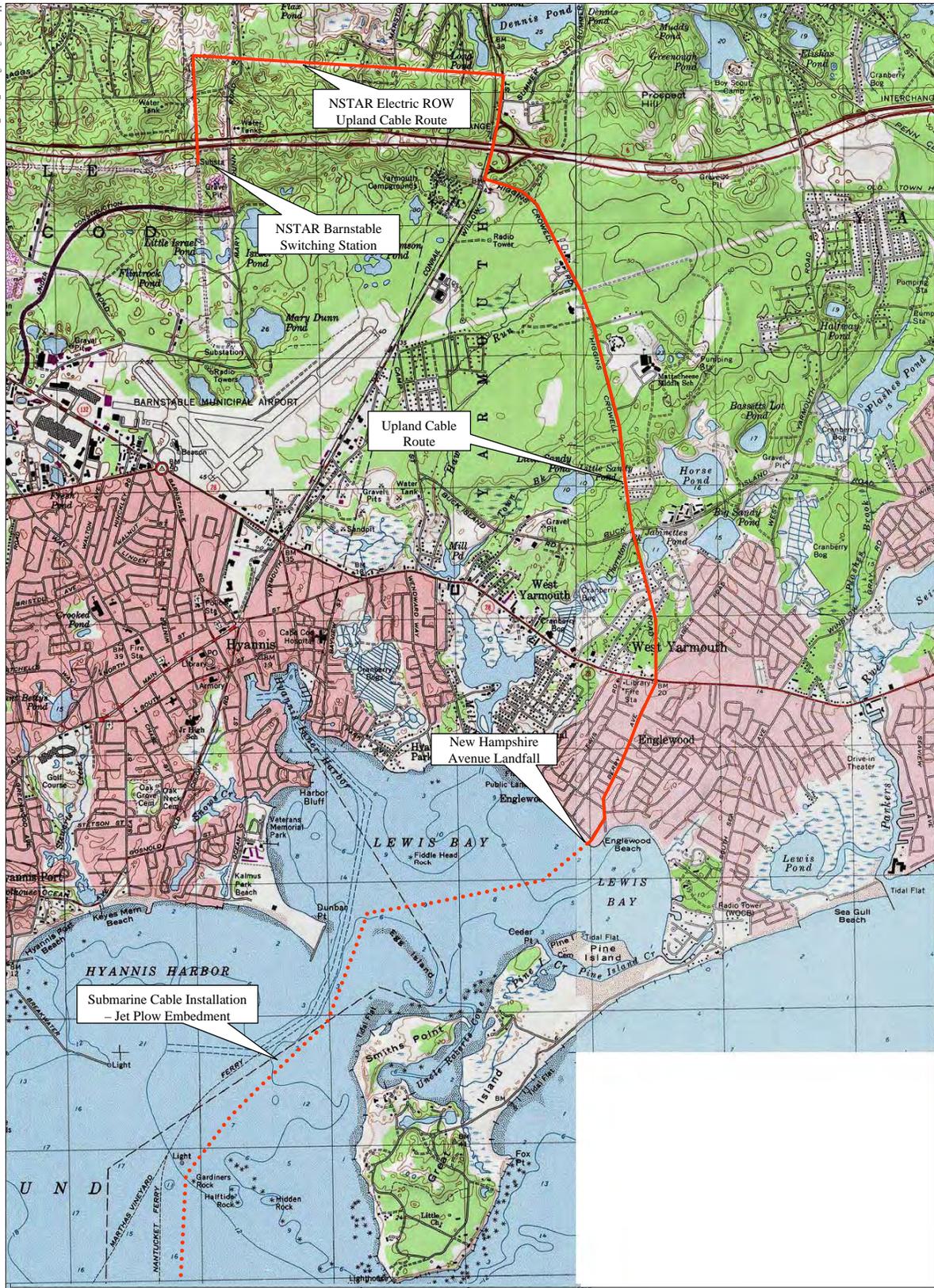
I, being the primary officer for all on-site construction activities associated with the Cape Wind Energy Project, have reviewed the Stormwater Pollution Prevention Plan and Spill Prevention, Control, and Countermeasure Plan and assume responsibility for the daily implementation of the Plans by all contractors working under the direction of Cape Wind Associates, LLC on the project site. I certify under penalty of law that I understand the terms and conditions of the general NPDES permit that authorizes the stormwater discharges from the construction site as part of this certification.

Signature:   
Name (Printed) Matthew A. Palmer  
Title: Project Manager - Engineering  
Company: Cape Wind Associates  
Date: February 3, 2011

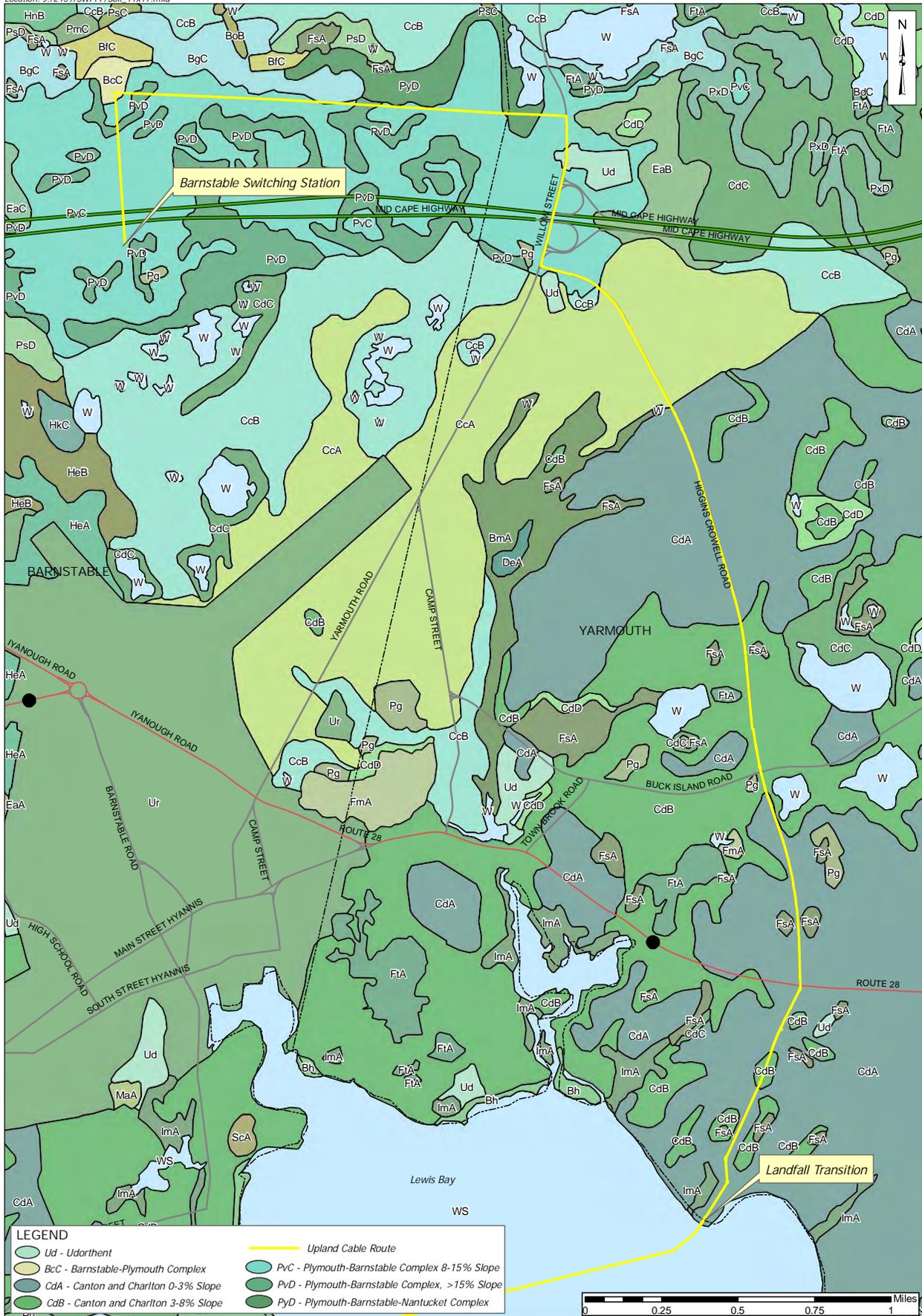
## Figures

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Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)



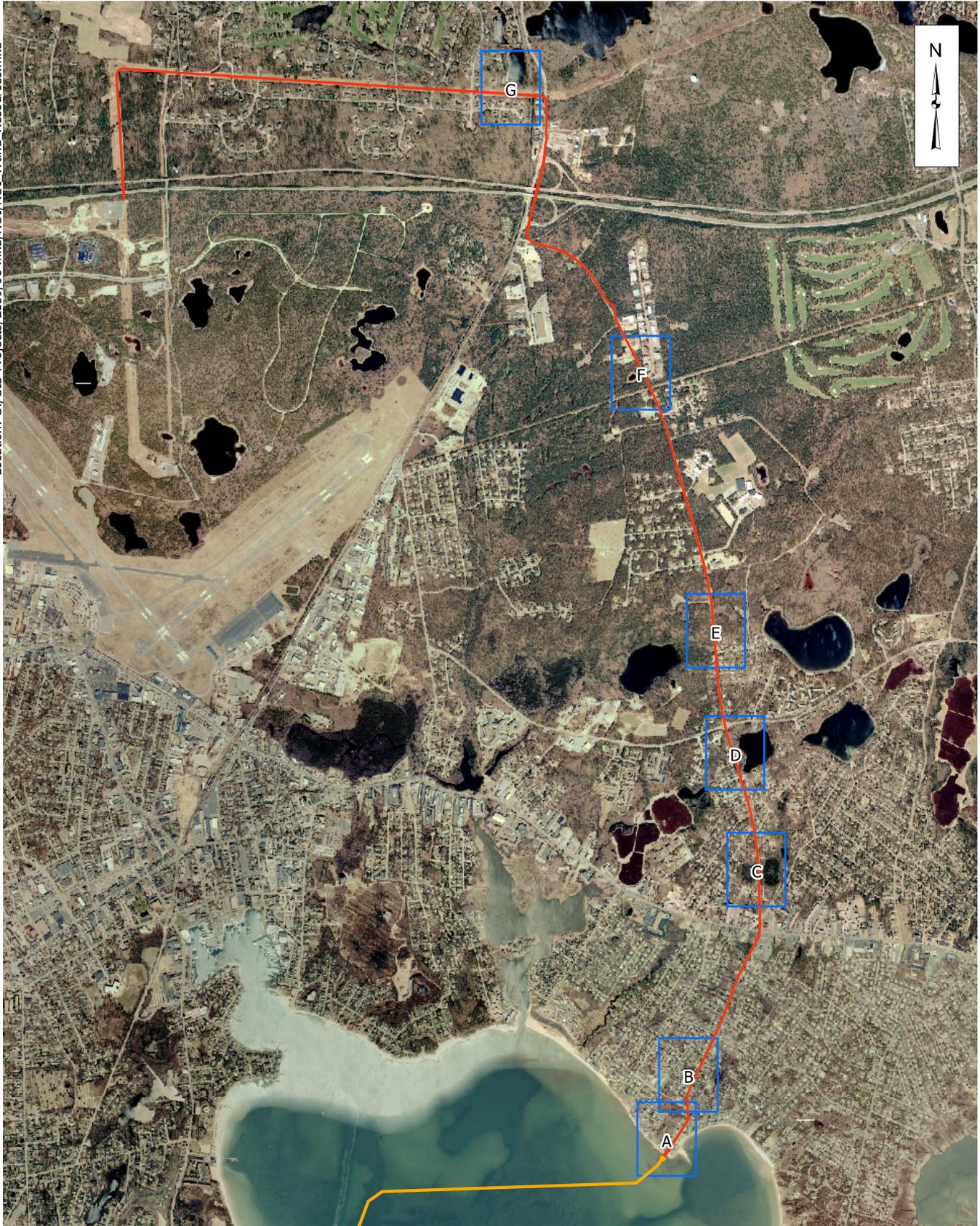
CAPE WIND PROJECT  
Yarmouth and Barnstable, Massachusetts

Engineers  
Scientists  
Consultants

Scale: 1:19,000  
Source: 1) MassGIS, USGS DRG, 1989 2) ESS, Upland Cable Route, 2006  
3) MassGIS, SSURGO Soil Datalayer for Barnstable County, 2005

Upland Cable Route  
Soils Information

Figure 2



Engineers  
Scientists  
Consultants

**CAPE WIND ENERGY PROJECT**  
Barnstable & Yarmouth, Massachusetts

Scale: 1" = 2500'

Source: 1) MassGIS, Half-Meter Resolution  
Color Orthophotography, 2001  
2) MassGIS, FEMA FIRM Map, 1997  
3) ESS, Cable Route, 2007

**Wetland Resource Areas - Index Map**

- Submarine cable
- Upland Cable

**Figure**



Engineers  
Scientists  
Consultants

**CAPE WIND ENERGY PROJECT  
Barnstable & Yarmouth, Massachusetts**

Scale: 1" = 150'

Source: 1) MassGIS, Half-Meter Resolution Color Orthophotography, 2001  
2) MassGIS, FEMA FIRM Map, 1997  
3) ESS, Cable Route, 2007

- |   |   |
|---|---|
|  Submarine cable                       |  Wetland       |
|  Upland Cable                          |  Coastal Bank  |
|  Land Subject to Coastal Storm Flowage |  Coastal Beach |

**Wetland Resource Areas**

**Figure  
2A**



Engineers  
Scientists  
Consultants

### CAPE WIND ENERGY PROJECT Barnstable & Yarmouth, Massachusetts

Scale: 1" = 150'

Source: 1) MassGIS, Half-Meter Resolution  
Color Orthophotography, 2001  
2) MassGIS, FEMA FIRM Map, 1997  
3) ESS, Cable Route, 2007

### Wetland Resource Areas

- Upland Cable
- Wetland
- Land Subject to Coastal Storm Flowage

**Figure  
2B**



Engineers  
Scientists  
Consultants

### CAPE WIND ENERGY PROJECT Barnstable & Yarmouth, Massachusetts

Scale: 1" = 150'

Source: 1) MassGIS, Half-Meter Resolution  
Color Orthophotography, 2001  
2) MassGIS, FEMA FIRM Map, 1997  
3) ESS, Cable Route, 2007

-  Upland Cable
-  Wetland

### Wetland Resource Areas

Figure  
C3

Location: G:\GIS-Projects\E159\00-mxd\NOI\NOI\_Withd\_Resources.mxd



Engineers  
Scientists  
Consultants

CAPE WIND ENERGY PROJECT  
Barnstable & Yarmouth, Massachusetts

Scale: 1" = 150'

Source: 1) MassGIS, Half-Meter Resolution  
Color Orthophotography, 2001  
2) MassGIS, FEMA FIRM Map, 1997  
3) ESS, Cable Route, 2007

— Upland Cable  
— Wetland

Wetland Resource Areas

Figure  
2D



CAPE WIND ENERGY PROJECT  
Barnstable & Yarmouth, Massachusetts

**Wetland Resource Areas**

Scale: 1" = 150'

Source: 1) MassGIS, Half-Meter Resolution Color Orthophotography, 2001  
2) MassGIS, FEMA FIRM Map, 1997  
3) ESS, Cable Route, 2007

- Upland Cable
- Wetland

**Figure 2E**



Engineers  
Scientists  
Consultants

### CAPE WIND ENERGY PROJECT Barnstable & Yarmouth, Massachusetts

Scale: 1" = 150'

Source: 1) MassGIS, Half-Meter Resolution  
Color Orthophotography, 2001  
2) MassGIS, FEMA FIRM Map, 1997  
3) ESS, Cable Route, 2007

— Upland Cable  
— Wetland

### Wetland Resource Areas

Figure  
2G



Engineers  
Scientists  
Consultants

### CAPE WIND ENERGY PROJECT Barnstable & Yarmouth, Massachusetts

Scale: 1" = 150'

- Source: 1) MassGIS, Half-Meter Resolution Color Orthophotography, 2001  
2) MassGIS, FEMA FIRM Map, 1997  
3) ESS, Cable Route, 2007

- Upland Cable
- Wetland

### Wetland Resource Areas

**Figure**  
**2F**

Attachment 1

EPA Construction  
General Permit

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# NPDES General Permit for Stormwater Discharges From Construction Activities

As modified effective January 8, 2009

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**National Pollutant Discharge Elimination System  
General Permit for Discharges from  
Large and Small Construction Activities**

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 *et. seq.*, (hereafter CWA or the Act), as amended by the Water Quality Act of 1987, P.L. 100-4, operators of large and small construction activities that are described in Part 1.3 of this National Pollutant Discharge Elimination System (NPDES) general permit, except for those activities excluded from authorization of discharge in Part 1.3.C of this permit are authorized to discharge pollutants to waters of the United States in accordance with the conditions and requirements set forth herein. Permit coverage is required from the “commencement of construction activities” until “final stabilization” as defined in Appendix A.

This permit shall become effective on June 30, 2008.

This permit and the authorization to discharge shall expire at midnight, June 30, 2010.

**Signed:**

Stephen S. Perkins, Director, Office of Ecosystem Protection  
EPA Region 1

Barbara Finazzo, Director, Division of Environmental Planning and Protection  
EPA Region 2

Carl-Axel P. Soderberg, Division Director, Caribbean Environmental Protection Division  
EPA Region 2

Jon M. Capacasa, Director, Water Protection Division  
EPA Region 3

Tinka Hyde, Director, Water Division  
EPA Region 5

Miguel I. Flores, Director, Water Quality Protection Division  
EPA Region 6

William A. Spratlin, Director, Water, Wetlands and Pesticides Division  
EPA Region 7

Stephen S. Tuber, Assistant Regional Administrator, Office of Partnerships & Regulatory Assistance  
EPA Region 8

Alexis Strauss, Director, Water Division  
EPA Region 9

Michael Gearheard, Director, Office of Water and Watersheds  
EPA Region 10

The signatures are for the permit conditions in Parts 1 through 10 and Appendices A through G, and for any additional conditions which apply to facilities located in the corresponding state, Indian country, or other area.

## **PART 1: COVERAGE UNDER THIS PERMIT**

### **1.1 Introduction**

This Construction General Permit (CGP) authorizes stormwater discharges from large and small construction activities that result in a total land disturbance of equal to or greater than one acre, where those discharges enter surface waters of the United States or a municipal separate storm sewer system (MS4) leading to surface waters of the United States subject to the conditions set forth in this permit. This permit also authorizes stormwater discharges from any other construction activity designated by EPA where EPA makes that designation based on the potential for contribution to an excursion of a water quality standard or for significant contribution of pollutants to waters of the United States. This permit replaces the permit issued in 2003 (68 FR 39087, July 1, 2003), including the modification made to that permit in 2004 (69 FR 76743, December 22, 2004).

This permit is presented in a reader-friendly, plain language format. This permit uses the terms “you” and “your” to identify the person(s) who owns or operates a “facility” or “activity” as defined in Appendix A and who must comply with the conditions of this permit. This format should allow you, the permittee and operator of a large or small construction activity, to easily locate and understand applicable requirements.

The goal of this permit is to minimize the discharge of stormwater pollutants from construction activity.

### **1.2 Permit Area**

If your large or small construction activity is located within the areas listed in Appendix B, you may be eligible to obtain coverage under this permit. Permit coverage is actually provided by legally separate and distinctly numbered permits covering each of the areas listed in Appendix B.

### **1.3 Eligibility**

Permit eligibility is limited to discharges from “large” and “small” construction activity, and to “new projects” and “unpermitted ongoing projects,” as defined in Appendix A or as otherwise designated by EPA. This general permit contains eligibility restrictions, as well as permit conditions and requirements. You may have to take certain actions to be eligible for coverage under this permit. In such cases, you must continue to satisfy those eligibility provisions to maintain permit authorization. If you do not meet the requirements that are a pre-condition to eligibility, then resulting discharges constitute unpermitted discharges. By contrast, if you are eligible for coverage under this permit and do not comply with the requirements of the general permit, you may be in violation of the general permit for your otherwise eligible discharges.

#### ***A. Allowable Stormwater Discharges***

Subject to compliance with the terms and conditions of this permit, you are authorized to discharge pollutants in:

1. Stormwater discharges associated with large and small construction activity from “new projects” and “unpermitted ongoing projects” as defined in Appendix A;
2. Stormwater discharges designated by EPA as needing a stormwater permit under 40 CFR §122.26(a)(1)(v) or §122.26(b)(15)(ii);
3. Discharges from support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided:
  - a. The support activity is directly related to the construction site required to have NPDES permit coverage for discharges of stormwater associated with construction activity;
  - b. The support activity is not a commercial operation serving multiple unrelated construction projects by different operators, and does not operate beyond the completion of the construction activity at the last construction project it supports; and
  - c. Pollutant discharges from support activity areas are minimized in compliance with Part 3.1.G; and
4. Discharges composed of allowable discharges listed in 1.3.A and 1.3.B commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

***B. Allowable Non-Stormwater Discharges***

You are authorized for the following non-stormwater discharges, provided the non-stormwater component of the discharge is in compliance with Part 5.4 (Non-Stormwater Discharges):

1. Discharges from fire-fighting activities;
2. Fire hydrant flushings;
3. Waters used to wash vehicles where detergents are not used;
4. Water used to control dust in accordance with Part 3.1.B;
5. Potable water including uncontaminated water line flushings;
6. Routine external building wash down that does not use detergents;
7. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used;
8. Uncontaminated air conditioning or compressor condensate;
9. Uncontaminated ground water or spring water;
10. Foundation or footing drains where flows are not contaminated with process materials such as solvents;
11. Uncontaminated excavation dewatering;
12. Landscape irrigation.

***C. Limitations on Coverage***

1. This permit does not authorize post-construction discharges that originate from the site after construction activities have been completed and the site has achieved final stabilization, including any temporary support activity. Post-construction

- stormwater discharges from industrial sites may need to be covered by a separate NPDES permit.
2. This permit does not authorize discharges mixed with non-stormwater. This exclusion does not apply to discharges identified in Part 1.3.B, provided the discharges are in compliance with Part 5.4 (Non-Stormwater Discharges).
  3. This permit does not authorize stormwater discharges associated with construction activity that have been covered under an individual permit or required to obtain coverage under an alternative general permit in accordance with Part 2.6.
  4. This permit does not authorize discharges that EPA, prior to authorization under this permit, determines will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. Where such a determination is made prior to authorization, EPA may notify you that an individual permit application is necessary in accordance with Part 2.6. However, EPA may authorize your coverage under this permit after you have included appropriate controls and implementation procedures in your permit designed to bring your discharge into compliance with water quality standards.
  5. *Discharging into Receiving Waters With an Approved or Established Total Maximum Daily Load Analysis*
    - a. You are not eligible for coverage under this permit for discharges of pollutants of concern to waters for which there is a total maximum daily load (TMDL) established or approved by EPA unless implement measures or controls that are consistent with the assumptions and requirements of such TMDL. To be eligible for coverage under this general permit, you must implement conditions applicable to your discharges necessary for consistency with the assumptions and requirements of such TMDL. If a specific wasteload allocation has been established that would apply to your discharge, you must implement necessary steps to meet that allocation.
    - b. In a situation where an EPA-approved or established TMDL has specified a general wasteload allocation applicable to construction stormwater discharges, but no specific requirements for construction sites have been identified in the TMDL, you should consult with the State or Federal TMDL authority to confirm that meeting the effluent limits in Part 3 of this permit will be consistent with the approved TMDL. Where an EPA-approved or established TMDL has not specified a wasteload allocation applicable to construction stormwater discharges, but has not specifically excluded these discharges, compliance with the effluent limits in Part 3 of this permit will generally be assumed to be consistent with the approved TMDL. If the EPA-approved or established TMDL specifically precludes such discharges, the operator is not eligible for coverage under the CGP.
  6. *Endangered and Threatened Species and Critical Habitat Protection*
    - a. Coverage under this permit is available only if your stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities, as defined in Appendix A, are not likely to jeopardize the continued existence of any species that are federally-listed as endangered or threatened (“listed”) under the Endangered Species Act (ESA) or result in the adverse

modification or destruction of habitat that is federally-designated as critical under the ESA (“critical habitat”).

- b. You are not eligible to discharge if the stormwater discharges, allowable non-stormwater discharges, or stormwater discharge-related activities would cause a prohibited “take” of federally-listed endangered or threatened species (as defined under section 3 of the ESA and 50 CFR 17.3), unless such takes are authorized under sections 7 or 10 of the ESA.
- c. Determining Eligibility: You must use the process in Appendix C (ESA Review Procedures) to determine eligibility *PRIOR* to submittal of the Notice of Intent (NOI). You must meet one or more of the following six criteria (A-F) for the entire term of coverage under the permit:
  - Criterion A. No federally-listed threatened or endangered species or their designated critical habitat are in the project area as defined in Appendix C; or
  - Criterion B. Formal consultation with the Fish and Wildlife Service and/or the National Marine Fisheries Service under section 7 of the ESA has been concluded and that consultation:
    - i. Addressed the effects of the project’s stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat, and
    - ii. The consultation resulted in either:
      - a. Biological opinion finding no jeopardy to federally-listed species or destruction/adverse modification of federally-designated critical habitat, or
      - b. Written concurrence from the Service(s) with a finding that the stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities are not likely to adversely affect federally-listed species or federally-designated critical habitat; or
  - Criterion C. Informal consultation with the Fish and Wildlife Service and/or the National Marine Fisheries Service under section 7 of the ESA has been concluded and that consultation:
    - i. Addressed the effects of the project’s stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat, and
    - ii. The consultation resulted in either:
      - a. Biological opinion finding no jeopardy to federally-listed species or destruction/adverse modification of federally-designated critical habitat, or
      - b. Written concurrence from the Service(s) with a finding that the stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities are

- not likely to adversely affect federally-listed species or federally-designated critical habitat; or
- Criterion D. The construction activities are authorized through the issuance of a permit under section 10 of the ESA, and that authorization addresses the effects of the stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities on federally-listed species and federally-designated critical habitat; or
- Criterion E. Stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities are not likely to adversely affect any federally-listed threatened or endangered species or result in the destruction or adverse modification of federally-designated critical habitat; or
- Criterion F. The project's stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities were already addressed in another operator's valid certification of eligibility under Criteria A-E which included your construction activities and there is no reason to believe that federally-listed species or federally-designated critical habitat not considered in the prior certification may be present or located in the project area. By certifying eligibility under this criterion, you agree to comply with any measures or controls upon which the other operator's certification was based.

You must comply with any applicable terms, conditions, or other requirements developed in the process of meeting the eligibility requirements of the criteria in this section to remain eligible for coverage under this permit.

7. *Historic Properties*  
[Reserved]

You are reminded that you must comply with applicable state, tribal and local laws concerning the protection of historic properties and places.

#### **1.4 Waivers for Certain Small Construction Activities**

Three scenarios exist under which small construction activities (see definition in Appendix A) may be waived from the NPDES permitting requirements detailed in this general permit. These exemptions are predicated on certain criteria being met and proper notification procedures being followed. Details of the waiver options and procedures for requesting a waiver are provided in Appendix D.

## **PART 2: AUTHORIZATION FOR DISCHARGES OF STORMWATER FROM CONSTRUCTION ACTIVITY**

### **2.1 How to Obtain Authorization**

To obtain coverage under this general permit, you, the operator, must prepare and submit a complete and accurate Notice of Intent (NOI), as described in this Part. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage.

## 2.2 How to Submit Your NOI

You must either use EPA's electronic NOI system (accessible at [www.epa.gov/npdes/eNOI](http://www.epa.gov/npdes/eNOI)) or use a paper form (included in Appendix E) and then submit that paper form to:

For Regular U.S. Mail Delivery:

EPA Stormwater Notice Processing  
Center  
Mail Code 4203M  
U.S. EPA  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

For Overnight/Express Mail Delivery:

EPA Stormwater Notice Processing  
Center  
Room 7420  
U.S. EPA  
1201 Constitution Avenue, NW  
Washington, DC 20004

## 2.3 Authorization to Discharge Date

You are authorized to discharge stormwater from construction activities under the terms and conditions of this permit seven (7) calendar days after acknowledgment of receipt of your complete NOI is posted on EPA's NPDES website <http://www.epa.gov/npdes/stormwater/cgp>. The exception to this 7-day timeframe is if EPA delays your authorization based on eligibility considerations of Part 1.3 (e.g., ESA concerns). Under this circumstance, you are not authorized for coverage under this permit until you receive notice from EPA of your eligibility.

## 2.4 Submission Deadlines

- A. *New Projects:* To obtain coverage under this permit, you must submit a complete and accurate NOI and be authorized consistent with Part 2.3 prior to your commencement of construction activities.
- B. *Permitted Ongoing Projects:* Permitted ongoing projects are not eligible for coverage under this permit. If you previously received authorization to discharge for your project under the 2003 CGP, your authorization will be automatically continued under that permit until the expiration of this permit and the issuance of a new CGP, or the termination of coverage by you under the 2003 CGP, whichever is earlier. Note: If you are an operator of a permitted ongoing project and you transfer ownership of the project, or a portion thereof, to a different operator, that operator will be required to submit a complete and accurate NOI for a new project in accordance with Part 2.2.
- C. *Unpermitted Ongoing Projects:* If you previously did not receive authorization to discharge for your project under the 2003 CGP and you wish to obtain coverage under this permit, you must submit an NOI within 90 days of the issuance date of this permit.

- D. *Late Notifications*: Operators are not prohibited from submitting NOIs after initiating clearing, grading, excavation activities, or other construction activities. When a late NOI is submitted, authorization for discharges occurs consistent with Part 2.3. The Agency reserves the right to take enforcement action for any unpermitted discharges that occur between the commencement of construction and discharge authorization.

## **2.5 Continuation of the Expired General Permit**

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by the continued permit until the earliest of:

- A. Reissuance or replacement of this permit, at which time you must comply with the conditions of the new permit to maintain authorization to discharge; or
- B. Your submittal of a Notice of Termination; or
- C. Issuance of an individual permit for the project's discharges; or
- D. A formal permit decision by EPA to not reissue this general permit, at which time you must seek coverage under an alternative general permit or an individual permit.

## **2.6 Requiring Coverage Under an Individual Permit or an Alternative General Permit**

- A. EPA may require you to apply for and/or obtain either an individual NPDES permit or coverage under an alternative NPDES general permit. Any interested person may petition EPA to take action under this paragraph. If EPA requires you to apply for an individual NPDES permit, EPA will notify you in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision and an application form. In addition, if you are an existing permittee covered under this permit, the notice will set a deadline to file the application, and will include a statement that on the effective date of issuance or denial of the individual NPDES permit or the coverage or denial of coverage under the alternative general permit as it applies to you, coverage under this general permit will automatically terminate. Applications must be submitted to EPA at the applicable EPA Regional offices listed in Appendix B of this permit. EPA may grant additional time to submit the application upon your request. If you are covered under this permit and you fail to submit in a timely manner an individual NPDES permit application as required by EPA, then the applicability of this permit to you is automatically terminated at the end of the day specified by EPA as the deadline for application submittal.
- B. You may request to be excluded from coverage under this general permit by applying for an individual permit. In such a case, you must submit an individual application in accordance with the requirements of 40 CFR § 122.26(c)(1)(ii), with reasons supporting the request, to EPA at the applicable EPA Regional office listed in

Appendix B of this permit. The request may be granted by issuance of an individual permit or coverage under an alternative general permit if your reasons are adequate to support the request.

- C. When an individual NPDES permit is issued to you (as an entity that is otherwise subject to this permit), or you are authorized to discharge under an alternative NPDES general permit, the applicability of this permit to you is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. If you (as an entity that is otherwise subject to this permit) are denied an individual NPDES permit or an alternative NPDES general permit, the applicability of this permit to you is automatically terminated on the date of such denial, unless otherwise specified by EPA.

### **PART 3: EFFLUENT LIMITS**

This section includes technology-based and water quality-based effluent limits that apply to all dischargers, unless otherwise specified. You must select, install, and maintain control measures (e.g., Best Management Practices (“BMPs”), controls, practices, etc.) for each major construction activity, identified in your Part 5 project description, to meet these effluent limits. All control measures must be properly selected, installed, and maintained in accordance with any relevant manufacturer specifications and good engineering practices. You must implement the control measures from commencement of construction activity until final stabilization is complete.

The term “minimize” as used in Part 3 means reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

#### **3.1 Effluent Limits to Reduce Pollutants in Stormwater Discharges**

You must implement control measures to minimize pollutants in stormwater discharges.

A. ***Sediment Controls:*** You must implement the following, where applicable:

1. **Sediment Basins:** For common drainage locations that serve an area with 10 or more acres disturbed at one time, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from the drainage area from a 2-year, 24-hour storm, or equivalent control measures, must be provided where attainable until final stabilization of the site. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, must be provided where attainable until final stabilization of the site. When computing the number of acres draining into a common location, it is not necessary to include flows from offsite areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. In determining whether installing a sediment basin is attainable, the operator may consider factors such as site soils,

- slope, available area on-site, etc. In any event, the operator must consider public safety, especially as it relates to children, as a design factor for the sediment basin, and alternative sediment controls must be used where site limitations would preclude a safe design.
2. For drainage locations which serve 10 or more disturbed acres at one time and where a temporary sediment basin or equivalent controls is not attainable, smaller sediment basins and/or sediment traps should be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions).
  3. For drainage locations serving less than 10 acres, smaller sediment basins and/or sediment traps should be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm or 3,600 cubic feet of storage per acre drained is provided.
- B. **Off-Site Sediment Tracking and Dust Control:** You must minimize off-site vehicle tracking of sediments onto paved surfaces and the generation of dust. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.
- C. **Runoff Management:** You must divert flows from exposed soils, retain/detain flows or otherwise minimize runoff and the discharge of pollutants from exposed areas of the site. You must avoid placement of structural practices in floodplains to the degree technologically and economically practicable and achievable.
- D. **Erosive Velocity Control:** You must place velocity dissipation devices at discharge locations and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water).
- E. **Post-Construction Stormwater Management:** You must comply with any applicable federal, local, state, or tribal requirements regarding the design and installation of post-construction stormwater controls. Structural measures should be placed on upland soils to the degree practicable and achievable.
- F. **Construction and Waste Materials:** You must:
1. Prevent the discharge of solid materials, including building materials, to waters of the United States, except as authorized by a permit issued under section 404 of the CWA;

2. Minimize exposure of construction and waste materials to stormwater, and the occurrence of spills, through the use of storage practices, prevention and response practices, and other controls;
3. Prevent litter, construction debris, and construction chemicals (e.g., diesel fuel, hydraulic fluids, and other petroleum products) that could be exposed to stormwater from becoming a pollutant source in stormwater discharges.

G. **Non-Construction Wastes:** You must minimize pollutant discharges from areas other than construction (including stormwater discharges from dedicated asphalt plants and dedicated concrete plants).

H. **Erosion Control and Stabilization:**

1. **General Requirements:** You must stabilize the site. You must ensure that existing vegetation is preserved where possible and that disturbed portions of the site are stabilized. You should avoid using impervious surfaces for stabilization.
2. **Initiation Deadlines:** You must initiate stabilization measures, except as provided below, as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.
  - i. Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.
  - ii. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the site.
  - iii. In arid, semiarid, and drought-stricken areas where initiating perennial vegetative stabilization measures is not possible within 14 days after construction activity has temporarily or permanently ceased, final vegetative stabilization measures must be initiated as soon as practicable.

I. **Spills / Releases in Excess of Reportable Quantities:** You are not authorized to discharge hazardous substances or oil resulting from an on-site spill. This permit does not relieve you of the federal reporting requirements of 40 CFR Part 110, 40 CFR Part 117 and 40 CFR Part 302 relating to spills or other releases of oils or hazardous substances.

Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117 or 40 CFR Part 302, occurs during a 24-hour period:

- you must provide notice to the National Response Center (NRC) (800-424-8802; in the Washington, DC, metropolitan area call 202-267-2675) in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117 and 40 CFR Part 302 as soon as site staff have knowledge of the discharge; and

- you must, within 7 calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release. You must also implement measures to prevent the reoccurrence of such releases and to respond to such releases.

### **3.2 Effluent Limits to Reduce Pollutants in Non-Stormwater Discharges**

You must minimize any non-stormwater discharges authorized by this permit.

### **3.3 Effluent Limits Related to Endangered Species**

You must protect federally-listed endangered or threatened species, or federally-designated critical habitat to maintain eligibility under Part 1.3.C.6.

### **3.4 Attainment of Water Quality Standards**

- A. You must select, install, implement and maintain control measures at your construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards. In general, except in situations explained in Part 3.4.B below, your stormwater controls developed, implemented, and updated consistent with the other provisions of Part 3 are considered as stringent as necessary to ensure that your discharges do not cause or contribute to an excursion above any applicable water quality standard.
- B. At any time after authorization, EPA may determine that your stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, EPA will require you to:
- i. Modify your stormwater controls in accordance with Part 3.6 to address adequately the identified water quality concerns;
  - ii. Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or
  - iii. Cease discharges of pollutants from construction activity and submit an individual permit application according to Part 2.6.

All written responses required under this part must include a signed certification consistent with Appendix G, Section 11.

### **3.5 Consistency with Total Maximum Daily Loads**

If you are discharging into a water with an EPA established or approved TMDL, you must implement measures to ensure that your discharge of pollutants from the site is consistent with the assumptions and requirements of the EPA-established or approved TMDL, including any specific wasteload allocation that has been established that would apply to your discharge. See Part 1.3.C.5 for further information on determining permit eligibility related to TMDLs.

### 3.6 Maintenance of Control Measures

- A. You must maintain all control measures and other protective measures in effective operating condition. If site inspections required by Part 4 identify BMPs that are not operating effectively, you must perform maintenance as soon as possible and before the next storm event whenever practicable to maintain the continued effectiveness of stormwater controls.
- B. If existing BMPs need to be modified or if additional BMPs are necessary for any reason, you must complete implementation before the next storm event whenever practicable. If implementation before the next storm event is impracticable, you must implement alternative BMPs as soon as possible.
- C. You must remove sediment from sediment traps or sedimentation ponds when design capacity has been reduced by 50 percent.
- D. You must remove trapped sediment from a silt fence before the deposit reaches 50 percent of the above-ground fence height (or before it reaches a lower height based on manufacturer's specifications).

### 3.7 Training of Employees

You must train employees and subcontractors as necessary to make them aware of the applicable control measures implemented at the site so that they follow applicable procedures.

### 3.8 Applicable State, Tribal, or Local Programs

You must ensure that the stormwater controls implemented at your site are consistent with all applicable federal, state, tribal, or local requirements for soil and erosion control and stormwater management.

## PART 4: INSPECTIONS

- A. **Inspection Frequency:** You must conduct inspections in accordance with one of the two schedules listed below. You must specify in your SWPPP which schedule you will be following.
  - 1. At least once every 7 calendar days, OR
  - 2. At least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.
- B. **Case-by-Case Reductions in Inspection Frequency:** You may reduce your inspection frequency to at least once every month if:
  - 1. The entire site is temporarily stabilized,
  - 2. Runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or the ground is frozen), or
  - 3. Construction is occurring during seasonal arid periods in arid areas and semi-arid areas.

- C. **Inspection Waiver for Frozen Conditions:** A waiver of the inspection requirements is available until one month before thawing conditions are expected to result in a discharge if all of the following requirements are met:
1. The project is located in an area where frozen conditions are anticipated to continue for extended periods of time (i.e., more than one month);
  2. Land disturbance activities have been suspended; and
  3. The beginning and ending dates of the waiver period are documented in the SWPPP.
- D. **Qualified Personnel:** Inspections must be conducted by qualified personnel (provided by the operator or cooperatively by multiple operators). “Qualified personnel” means a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact stormwater quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the construction activity.
- E. **Scope of Inspections:** Inspections must include all areas of the site disturbed by construction activity and areas used for storage of materials that are exposed to precipitation. Inspectors must look for evidence of, or the potential for, pollutants entering the stormwater conveyance system. Sedimentation and erosion control measures must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.
- F. **Reductions in Scope of Inspections for Stabilized Areas:** Once a definable area has been finally stabilized, no further inspection requirements apply to that portion of the site (e.g., earth-disturbing activities around one of three buildings in a complex are done and the area is finally stabilized, one mile of a roadway or pipeline project is done and finally stabilized, etc).
- G. **Utility Line Inspections:** Utility line installation, pipeline construction, and other examples of long, narrow, linear construction activities may limit the access of inspection personnel to the areas described in Part 4.E above. Inspection of these areas could require that vehicles compromise temporarily or even permanently stabilized areas, cause additional disturbance of soils, and increase the potential for erosion. In these circumstances, controls must be inspected on the same frequencies as other construction projects, but representative inspections may be performed. For representative inspections, personnel must inspect controls along the construction site for 0.25 mile above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the areas described above. The conditions of the controls along each inspected 0.25 mile segment may be considered as representative of the condition of controls along

that reach extending from the end of the 0.25 mile segment to either the end of the next 0.25 mile inspected segment, or to the end of the project, whichever occurs first.

- H. **Inspection Report:** For each inspection required above, you must complete an inspection report. At a minimum, the inspection report must include:
1. The inspection date;
  2. Names, titles, and qualifications of personnel making the inspection;
  3. Weather information for the period since the last inspection (or since commencement of construction activity if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred;
  4. Weather information and a description of any discharges occurring at the time of the inspection;
  5. Location(s) of discharges of sediment or other pollutants from the site;
  6. Location(s) of BMPs that need to be maintained;
  7. Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
  8. Location(s) where additional BMPs are needed that did not exist at the time of inspection; and
  9. Corrective action required including implementation dates.

The inspection report must be signed in accordance with Appendix G, Section 11 of this permit.

## **PART 5: STORMWATER POLLUTION PREVENTION PLANS (SWPPPs)**

### **5.1 Stormwater Pollution Prevention Plan Framework**

You must prepare a SWPPP before submitting your Notice of Intent (NOI) for permit coverage. At least one SWPPP must be developed for each construction project covered by this permit and the stormwater controls implemented at your site must be documented in the SWPPP. If you prepared a SWPPP for coverage under a previous NPDES permit, you must review and update the SWPPP prior to submitting your NOI.

The SWPPP does not contain effluent limitations; the technology and water quality-based effluent limitations are contained in Part 3 of this permit. The SWPPP is intended to document the selection, design, installation, and implementation of control measures that are being used to comply with the effluent limitations set forth in Part 3.

The SWPPP must:

1. Identify all potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges from the construction site; and
2. Describe control measures to be used to meet the effluent limits set forth in Part 3.

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## 5.2 SWPPP Contents: Site and Activity Description

- A. **Construction Site Operators:** The SWPPP must identify all operators for the project site, and the areas of the site over which each operator has control.
- B. **Nature of Construction Activity:** The SWPPP briefly must describe the nature of the construction activity, including:
1. The function of the project (e.g., low density residential, shopping mall, highway, etc.);
  2. The intended sequence and timing of activities that disturb soils at the site;
  3. Estimates of the total area expected to be disturbed by excavation, grading, or other construction activities, including dedicated off-site borrow and fill areas; and
  4. A general location map (e.g., USGS quadrangle map, a portion of a city or county map, or other map) with enough detail to identify the location of the construction site and waters of the United States within one mile of the site.
- C. **Site Map:** The SWPPP must contain a legible site map, showing the entire site, identifying:
1. Direction(s) of stormwater flow and approximate slopes anticipated after grading activities;
  2. Areas of soil disturbance and areas that will not be disturbed (or a statement that all areas of the site will be disturbed unless otherwise noted);
  3. Locations of major structural and nonstructural BMPs identified in the SWPPP;
  4. Locations where stabilization practices are expected to occur;
  5. Locations of off-site material, waste, borrow or equipment storage areas;
  6. Locations of all waters of the United States (including wetlands);
  7. Locations where stormwater discharges to a surface water; and
  8. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.
- D. **Construction and Waste Materials:** The SWPPP must include a description of construction and waste materials expected to be stored on-site with updates as appropriate.
- E. **Locations of Other Industrial Stormwater Discharges:** The SWPPP must describe and identify the location and description of any stormwater discharge associated with industrial activity other than construction at the site. This includes stormwater discharges from dedicated asphalt plants and dedicated concrete plants that are covered by this permit.

## 5.3 Description of Control Measures to Reduce Pollutant Discharges

- A. **Control Measures:** The SWPPP must include a description of all control measures that will be implemented to meet the effluent limits in Part 3. For each major activity identified in the project description the SWPPP must clearly document appropriate control measures, the general sequence during the construction process in which the

measures will be implemented, and which operator is responsible for the control measure's implementation.

- B. **Stabilization:** The SWPPP must include a description of interim and permanent stabilization practices for the site, including a schedule of when the practices will be implemented.
- C. **Post-Authorization Records:** The following records must be maintained with the SWPPP following authorization under this permit:
  - 1. Dates when grading activities occur;
  - 2. Dates when construction activities temporarily or permanently cease on a portion of the site; and
  - 3. Dates when stabilization measures are initiated.

#### **5.4 Non-Stormwater Discharges**

The SWPPP must identify all allowable sources of non-stormwater discharges listed in Part 1.3.B of this permit, except for flows from fire fighting activities that are combined with stormwater discharges associated with construction activity at the site. The SWPPP must also describe the pollution prevention measures used to eliminate or reduce non-stormwater discharges consistent with Part 3.2.

#### **5.5 Documentation of Permit Eligibility Related to Endangered Species**

The SWPPP must include documentation supporting a determination of permit eligibility with regard to Endangered Species, including:

- A. Information on whether federally-listed endangered or threatened species, or federally-designated critical habitat may be in the project area;
- B. Whether such species or critical habitat may be adversely affected by stormwater discharges or stormwater discharge-related activities from the project;
- C. Results of the Appendix C listed species and critical habitat screening determinations;
- D. Confirmation of delivery of NOI to EPA or to EPA's electronic NOI system. This may include an overnight, express or registered mail receipt acknowledgment; or electronic acknowledgment from EPA's electronic NOI system;
- E. Any correspondence for any stage of project planning between the U.S. Fish and Wildlife Service (FWS), EPA, the U.S. National Marine Fisheries Service (NMFS), or others and you regarding listed species and critical habitat, including any notification that delays your authorization to discharge under this permit; and
- F. A description of measures necessary to protect federally-listed endangered or threatened species, or federally-designated critical habitat.

## **5.6 Documentation of Permit Eligibility Related to Total Maximum Daily Loads**

The SWPPP must include documentation supporting a determination of permit eligibility with regard to waters that have an EPA-established or approved TMDL, including:

- A. Identification of whether your discharge is identified, either specifically or generally, in an EPA-established or approved TMDL and any associated allocations, requirements, and assumptions identified for your discharge;
- B. Summaries of consultation with State or Federal TMDL authorities on consistency of SWPPP conditions with the approved TMDL, and
- C. Measures taken by you to ensure that your discharge of pollutants from the site is consistent with the assumptions and requirements of the EPA-established or approved TMDL, including any specific wasteload allocation that has been established that would apply to your discharge.

See Part 1.3.C.5 for further information on determining permit eligibility related to TMDLs.

## **5.7 Copy of Permit Requirements**

Copies of this permit and of the signed and certified NOI form that was submitted to EPA must be included in the SWPPP. Also, upon receipt, a copy of the letter from the EPA Stormwater Notice Processing Center notifying you of their receipt of your administratively complete NOI must also be included as a component of the SWPPP.

## **5.8 Applicable State, Tribal, or Local Programs**

The SWPPP must be updated as necessary to reflect any revisions to applicable federal, state, tribal, or local requirements that affect the stormwater controls you implement at your site.

## **5.9 Inspections**

A record of each inspection and of any actions taken in accordance with Part 4 must be retained with the SWPPP for at least three years from the date that permit coverage expires or is terminated. The inspection reports must identify any incidents of non-compliance with the permit conditions. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the construction project or site is in compliance with this permit.

## **5.10 Maintaining an Updated Plan**

The SWPPP must be modified:

- A. To reflect modifications to stormwater control measures made in response to a change in design, construction, operation, or maintenance at the construction site that has or could have a significant effect on the discharge of pollutants to the waters of the United States that has not been previously addressed in the SWPPP.

- B. If during inspections or investigations by site staff, or by local, state, tribal or federal officials, it is determined that the existing stormwater controls are ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the construction site.
- C. Based on the results of an inspection, as necessary to properly document additional or modified BMPs designed to correct problems identified. Revisions to the SWPPP must be completed within seven (7) calendar days following the inspection.

### 5.11 Signature, Plan Review and Making Plans Available

- A. **Retention of SWPPP:** A copy of the SWPPP (including a copy of the permit), NOI, and acknowledgement letter from EPA must be retained at the construction site (or other location easily accessible during normal business hours to EPA, a state, tribal or local agency approving sediment and erosion plans, grading plans, or stormwater management plans; local government officials; the operator of a municipal separate storm sewer receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service) from the date of commencement of construction activities to the date of final stabilization. If you have day-to-day operational control over SWPPP implementation, you must have a copy of the SWPPP available at a central location on-site for the use of all those identified as having responsibilities under the SWPPP whenever they are on the construction site. If an on-site location is unavailable to store the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance at the construction site.
- B. **Main Entrance Signage:** A sign or other notice must be posted conspicuously near the main entrance of the construction site. If displaying near the main entrance is infeasible, the notice can be posted in a local public building such as the town hall or public library. The sign or other notice must contain the following information:
  - 1. A copy of the completed Notice of Intent as submitted to the EPA Stormwater Notice Processing Center; and
  - 2. If the location of the SWPPP or the name and telephone number of the contact person for scheduling SWPPP viewing times has changed (i.e., is different than that submitted to EPA in the NOI), the current location of the SWPPP and name and telephone number of a contact person for scheduling viewing times.For linear projects, the sign or other notice must be posted at a publicly accessible location near the active part of the construction project (e.g., where a pipeline project crosses a public road).
- C. **Availability of SWPPP:** SWPPPs must be made available upon request by EPA; a state, tribal or local agency approving sediment and erosion plans, grading plans, or stormwater management plans; local government officials; the operator of a municipal separate storm sewer receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service to the requestor. The copy of the SWPPP that is required to be kept on-site or

locally available must be made available, in its entirety, to the EPA staff for review and copying at the time of an on-site inspection.

- D. **Signature and Certification:** All SWPPPs must be signed and certified in accordance with Appendix G, Section 11.

### 5.12 Requirements for Different Types of Operators

You may meet one or both of the operational control components in the definition of operator found in Appendix A. Part 5.12.C applies to all permittees having control over only a portion of a construction site.

- A. If you have operational control over construction plans and specifications, you must ensure that:
1. The project specifications meet the minimum requirements of this Part and all other applicable permit conditions;
  2. The SWPPP indicates the areas of the project where the operator has operational control over project specifications, including the ability to make modifications in specifications;
  3. All other permittees implementing portions of the SWPPP (or their own SWPPP) who may be impacted by a change to the construction plan are notified of such changes in a timely manner; and
  4. The SWPPP indicates the name of the party(ies) with day-to-day operational control of those activities necessary to ensure compliance with the SWPPP or other permit conditions.
- B. If you have operational control over day-to-day activities, you must ensure that:
1. The SWPPP meets the minimum requirements of this Part and identifies the parties responsible for implementation of control measures identified in the plan;
  2. The SWPPP indicates areas of the project where you have operational control over day-to-day activities;
  3. The SWPPP indicates the name of the party(ies) with operational control over project specifications (including the ability to make modifications in specifications).
- C. If you have operational control over only a portion of a larger project (e.g., one of four homebuilders in a subdivision), you are responsible for compliance with all applicable effluent limits, terms, and conditions of this permit as it relates to your activities on your portion of the construction site, including protection of endangered species, critical habitat, and historic properties, and implementation of control measures described in the SWPPP. You must ensure either directly or through coordination with other permittees, that your activities do not render another party's pollutant discharge controls ineffective. You must either implement your portion of a common SWPPP or develop and implement your own SWPPP. For more effective coordination of BMPs and opportunities for cost sharing, a cooperative effort by the different operators at a site to prepare and participate in a comprehensive SWPPP is encouraged. Individual operators at a site may, but are not

required to, develop separate SWPPPs that cover only their portion of the project provided reference is made to other operators at the site. In instances where there is more than one SWPPP for a site, cooperation between the permittees is encouraged to ensure the stormwater discharge control measures are consistent with one another (e.g., provisions to protect listed species and critical habitat).

## **PART 6: TERMINATION OF COVERAGE**

### **6.1 Submitting a Notice of Termination**

Submit a complete and accurate Notice of Termination (NOT) either electronically (strongly encouraged) at [www.epa.gov/npdes/eNOI](http://www.epa.gov/npdes/eNOI) or by completing the paper Notice of Termination form included in Appendix F of this permit and submitting that form to the address listed in Part 2.2.

### **6.2 When to Submit a Notice of Termination**

You may only submit a Notice of Termination (NOT) after one or more of the following conditions have been met:

- A. Final stabilization has been achieved on all portions of the site for which you are responsible;
- B. Another operator has assumed control according to Appendix G, Section 11.C over all areas of the site that have not been finally stabilized;
- C. Coverage under an individual or alternative general NPDES permit has been obtained; or
- D. For residential construction only, temporary stabilization has been completed and the residence has been transferred to the homeowner.

The NOT must be submitted within 30 days of one of the above conditions being met. Authorization to discharge terminates at midnight of the day the NOT is signed.

## **PART 7: RETENTION OF RECORDS**

Copies of the SWPPP and all documentation required by this permit, including records of all data used to complete the NOI to be covered by this permit, must be retained for at least three years from the date that permit coverage expires or is terminated. This period may be extended by request of EPA at any time.

## **PART 8: REOPENER CLAUSE**

### **8.1 Procedures for Modification or Revocation**

Permit modification or revocation will be conducted according to 40 CFR §122.62, §122.63, §122.64 and §124.5.

## 8.2 Water Quality Protection

If there is evidence indicating that the stormwater discharges authorized by this permit cause, have the reasonable potential to cause or contribute to an excursion above any applicable water quality standard, you may be required to obtain an individual permit in accordance with Part 2.6 of this permit, or the permit may be modified to include different limitations and/or requirements.

## 8.3 Timing of Permit Modification

EPA may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements, such as for effluent limitation guidelines that may be promulgated in the course of the current permit cycle.

## PART 9: STANDARD PERMIT CONDITIONS

The federal regulations require that the Standard Conditions provisioned at 40 CFR §122.41 be applied to all NPDES permits. You are required to comply with those Standard Conditions, details of which are provided in Appendix G.

## PART 10: PERMIT CONDITIONS APPLICABLE TO SPECIFIC STATES, INDIAN COUNTRY, OR TERRITORIES

The provisions of this Part provide modifications or additions to the applicable conditions of this permit to reflect specific additional conditions required as part of the state or tribal CWA Section 401 certification process, or the Coastal Zone Management Act (CZMA) certification process, or as otherwise established by the permitting authority. The specific additional revisions and requirements only apply to activities in those specific states, Indian country, and federal facilities. States, Indian country, and federal facilities not included in this Part do not have any modifications or additions to the applicable conditions of this permit.

### A. Region 1

1. MAR100000: Commonwealth of Massachusetts, except Indian country
  - a. State Water Quality Statutes, Regulations, and Policies:
    - i. You must comply with the Massachusetts Clean Waters Act (Ch. 21, ss. 26-53).
    - ii. You must comply with the conditions in 314 CMR 4.00 - Surface Water Quality Standards.
    - iii. You must comply with the conditions in 314 CMR 3.00 - Surface Water Discharge Permit Program.
    - iv. You must comply with the Wetlands Protection Act, Ch. 131, s. 40 and its regulations, 310 CMR 10.00 and any order of Conditions issued by a Conservation Commission or a Superseding Order of Conditions issued by the Massachusetts Department of Environmental Protection.

- b. Department of Environmental Protection Storm Water Management Policy:
  - i. You must comply with the Massachusetts Storm Water Management Policy, and applicable Storm Water Performance Standards, as prescribed by state regulations promulgated under the authority of the Massachusetts Clean Waters Act, MGL Ch. 21, ss. 26-53 and the Wetlands Protection Act Ch. 131, s. 40.
- c. Other State Environmental Laws, Regulations, Policies:
  - i. You must comply with the Massachusetts Endangered Species Act [MESA] (MGL Ch. 313A and regulations at 321 CMR 10.00) and any actions undertaken to comply with this storm water permit, shall not result in non-compliance with the MESA.
  - ii. You must not conduct activities under this permit that will interfere with implementation of mosquito control work conducted in accordance with Chapter 252 including, s. 5A thereunder and MassDEP Guideline Number BRP G01-02, West Nile Virus Application of Pesticides to Wetland Resource Areas and Buffer Zones, and Public Water Systems.
- d. Other Department Directives:
  - i. The Department may require you to perform water quality monitoring during the permit term if monitoring is necessary for the protection of public health or the environment as designated under the authority at 314 CMR 3.00.
  - ii. The Department may require you to provide measurable verification of the effectiveness of BMPs and other control measures in your management program, including water quality monitoring.
  - iii. The Department has determined that compliance with this permit does not protect you from enforcement actions deemed necessary by the Department under its associated regulations to address an imminent threat to the public health or a significant adverse environmental impact which results in a violation of the Massachusetts Clean Waters Act, Ch. 21, ss. 26-53.
  - iv. The Department reserves the right to modify the 401 Water Quality Certification if any changes, modifications or deletions are made to the general permit. In addition, the Department reserves the right to add and/or alter the terms and conditions of its 401 Water Quality Certification to carry out its responsibilities during the term of this permit with respect to water quality, including any revisions to 314 CMR 4.00, Surface Water Quality Standards.
- e. Permit Compliance
  - i. Should any violation of the Massachusetts Surface Water Quality Standards (314 CMR 4.00) or the conditions of this certification occur, the Department will direct you to correct the violations(s). The Department has the right to take any action as authorized by the General Laws of the Commonwealth to address the violation of this permit or the MA Clean Waters Act and the regulations promulgated thereunder. Substantial civil and criminal penalties are authorized under MGL Ch. 21, s. 42 for discharging into Massachusetts' waters in violation of an order or permit issued by this Department. This

certification does not relieve you of the duty to comply with other applicable Massachusetts statutes and regulations.

2. NHR100000: State of New Hampshire
  - a. If you disturb 100,000 square feet or more of contiguous area, you must also apply for a “Significant Alteration of the Terrain Permit from DES pursuant to RSA 485-A:17 and Env-Ws 415. This requirement applies to the disturbances of only 50,000 square feet when construction occurs within the protected shoreline (see RSA 483-B and Env-Ws 1400).
  - b. You must determine that any excavation dewatering discharges are not contaminated before they will be authorized as an allowable non-storm water discharge under this permit (see Subpart 1.3.B). The water is considered uncontaminated if there is no groundwater contamination within 1,000 feet of the discharge. Information on groundwater contamination can be generated over the Internet via the NHDES web site <http://www.des.state.nh.us> (One Stop Data Retrieval, Onestop Master Site Table). The web site also provides E-mail access to an NHDES Site Remediation Contact to answer questions about using the Web site.
  - c. You must treat any uncontaminated excavation dewatering discharges as necessary to remove suspended solids and turbidity. The discharges must be sampled at a location prior to mixing with storm water at least once per week during weeks when discharges occur. The samples must be analyzed for total suspended solids (TSS) and must meet monthly average and maximum daily TSS limitations of 50 milligrams per liter (mg/L) and 100 mg/L, respectively. TSS (a.k.a. Residue, Nonfilterable) analysis and sampling must be performed in accordance with Tables IB (parameter, units and method) and II (required containers, preservation techniques and holding times) in 40 CFR 136.3 (see: [http://www.access.gpo.gov/nara/cfr/waisidx\\_02/40cfr136\\_02.html](http://www.access.gpo.gov/nara/cfr/waisidx_02/40cfr136_02.html)). Records of any sampling and analysis must be maintained and kept with the SWPPP for at least three years after final site stabilization.
  - d. During site design and preparation of the storm water pollution prevention plan (SWPPP), you must consider opportunities for groundwater recharge using on-site infiltration. The SWPPP must include a description of any on-site infiltration that will be installed as a post construction storm water management measure (see Subpart 3.4.E) or reasons for not employing such measures. For design considerations for infiltration measures see the September 2001 DES publication titled “Managing Storm Water as a Valuable Resource” which is available online at: <http://www.des.state.nh.us/StormWater/construction.htm>. Loss of annual recharge to groundwater should be minimized through the use of infiltration measures wherever feasible.
- B. Region 2 – No additional requirements.
- C. Region 5
  1. MNR100000: Indian Country within the State of Minnesota

a. *Fond du Lac Band of Lake Superior Chippewa*

- i. A copy of the Storm Water Pollution Prevention Plan must be submitted to the following office at least thirty (30) days in advance of sending the Notice of Intent (NOI) to EPA:

Fond du Lac Reservation  
Office of Water Protection  
1720 Big Lake Road  
Cloquet, MN 55720

CGP applicants are encouraged to work with the FDL Office of Water Protection in the identification of all proposed receiving waters.

- ii. Copies of the NOI and the Notice of Termination (NOT) must be sent to the Fond du Lac Office of Water Protection at the same time they are submitted to EPA.
- iii. This certification does not pertain to any new discharge to Outstanding Reservation Resource Waters (ORRW) as described in §105 b.3 of the Fond du Lac Water Quality Standards (Ordinance #12/98). Although additional waters may be designated in the future, currently Perch Lake, Rice Portage Lake, Miller Lake, Deadfish Lake and Jaskari Lake are designated as ORRWs. New dischargers wishing to discharge to an ORRW must obtain an individual permit for stormwater discharges from large and small construction activities.
- iv. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in the Water Quality Standards of the Fond du Lac Reservation, Ordinance 12/98 as amended. This includes, but is not limited to, the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of water of the Fond du Lac Reservation for any of the uses designated in the Water Quality Standards of the Fond du Lac Reservation. These uses include wildlife, aquatic life, warm and cold water fisheries, subsistence fishing (netting), primary contact recreation, cultural, wild rice areas, aesthetic waters, agriculture, navigation and commercial.
- v. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the Fond du Lac Reservation. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the Fond du Lac reservation, including groundwater.
- vi. This certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for such listing.

b. *Grand Portage Band of Lake Superior Chippewa* [Coverage not yet available]

2. WIR100000: Indian Country within the State of Wisconsin, except the Sokaogon Chippewa Community.
  - a. No additional requirements

Note: Facilities within the Sokaogon Chippewa Community are not eligible for stormwater discharge coverage under this permit. Contact the Region 5 office for an individual permit application.

D. Region 6

1. NMR100000: The State of New Mexico, except Indian country
  - a. In addition to all other provisions of this permit, operators who intend to obtain authorization under this permit for all new stormwater discharges must satisfy the conditions in Part 10.C.1.b., unless a TMDL has been established for the receiving stream which specifies a waste load allocation (WLA) for construction stormwater discharges or the receiving stream is a Tier 3 water, in which case Part 10.C.1.c. applies.
  - b. The SWPPP must include site-specific interim and permanent stabilization, managerial, and structural solids, erosion, and sediment control best management practices (BMPs) and/or other controls that are designed to prevent to the maximum extent practicable an increase in the sediment yield and flow velocity from pre-construction, pre-development conditions to assure that applicable standards in 20.6.4 NMAC, including the antidegradation policy, or WLAs are met. This requirement applies to discharges both during construction and after construction operations have been completed. The SWPPP must identify, and document the rationale for selecting these BMPs and/or other controls. The SWPPP must also describe design specifications, construction specifications, maintenance schedules (including a long term maintenance plan), criteria for inspections, as well as expected performance and longevity of these BMPs. BMP selection must be made based on the use of appropriate soil loss prediction models (such as SEDCAD 4.0, RUSLE, SEDIMOT II, MULTISED, etc.), or equivalent, generally accepted (by professional erosion control specialists), soil loss prediction tools. The operator(s) must demonstrate, and include documentation in the SWPPP, that implementation of the site-specific practices will assure that the applicable standards or WLAs are met, and will result in sediment yields and flow velocities that, to the maximum extent practicable, will not be greater than the sediment yield levels and flow velocities from pre-construction, pre-development conditions. The SWPPP must be prepared in accordance with good engineering practices by qualified (e.g., CPESC certified, engineers with appropriate training, etc.) erosion control specialists familiar with the use of soil loss prediction models and design of erosion and sediment control systems based on these models (or equivalent soil loss prediction tools). The operator(s) must design, implement, and maintain BMPs in the manner specified in the SWPPP.
  - c. Operators are not eligible to obtain authorization under this permit for all new stormwater discharges to outstanding national resource waters (ONRWs) (also referred to as “Tier 3: waters). According to the Antidegradation Policy at Paragraph 3 of Subsection A of 20.6.4.8 NMAC, in part, “ONRWs may include, but are not limited to, surface waters of the state within national and state monuments, parks, wildlife refuges, waters of exceptional recreational or

- ecological significance, and waters identified under the Wild and Scenic Rivers Act.” No ONRWs exist at the time this permit is being finalized; however, during the term of the permit, if a receiving water is designated as an ONRW, the operator must obtain an individual permit for stormwater discharges from large and small construction activities.
- d. Stormwater discharges associated with construction activity that the State has determined to be or may reasonably be expected to be contributing to a violation of an applicable standard, including the antidegradation policy, are not authorized by this permit. *Note: Upon receipt of this determination, NMED anticipates that, within a reasonable period of time, EPA will notify the general permittee to apply for and obtain an individual NPDES permit for these discharges per 40 CFR Part 122.28(b)(3).*
  - e. Inspections required under Part 4 must be conducted at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater. The option for inspections at least once per 7 calendar days is not available. The Inspection Waivers provided in Part 4.B and C still apply.
  - f. Permittees can use temporary erosion controls as described in item 3 of the Appendix A definition of “Final Stabilization” as a method for final stabilization under the permit only under the following conditions:

If this option is selected, you must notify SWQB at the address listed in item g. below at the time the NOT is submitted to EPA. The information to be submitted includes:

- A copy of the NOT;
- Contact information, including individual name or title, address, and phone number for the qualified (see CGP Part 4.10.D) party responsible for implementing the final stabilization measures; and
- The date that the temporary erosion control practice was implemented (this is always prior to, and sometimes significantly prior to, submission of an NOT) and the projected timeframe that the 70% native vegetative cover requirements are expected to be met. (Note that if more than three years is required to establish 70 percent of the natural vegetative cover, this technique cannot be used or cited for fulfillment of the final stabilization requirement – you remain responsible for establishment of final stabilization)

SWQB also requires that you periodically (minimum once/year) inspect and properly maintain the area until the criteria for final stabilization, as defined in Appendix A, item 3 of the CGP, have been met. You must prepare an inspection report documenting the findings of these inspections and signed in accordance with Appendix G, Section 11 of the CGP. This inspection record must be retained along with the SWPPP for three years after the NOT is submitted for the site and additionally submitted to SWQB at the address listed in item g. below. The inspections must at a minimum include the following:

- Observations of all areas of the site disturbed by construction activity;

- Best Management Practices (BMPs)/post-construction storm water controls must be observed to ensure they are effective;
- An assessment of the status of vegetative re-establishment; and
- Corrective actions required to ensure vegetative success within three years, and control of pollutants in storm water runoff from the site, including implementation dates.

Signed copies of discharge monitoring reports, individual permit applications, and all other reports required by the permit to be submitted, shall also be sent to:

Program Manager  
Point Source Regulation Section  
Surface Water Quality Bureau  
New Mexico Environment Department  
P.O. Box 26110  
Santa Fe, NM 87502

2. NMR10000I: Indian country within the State of New Mexico, except Navajo Reservation Lands that are covered under Arizona permit AZR10000I and Ute Mountain Reservation Lands that are covered under Colorado permit COR10000I
  - a. *Pueblo of Acoma*. The following conditions apply only to facilities on or bordering the Pueblo of Acoma with discharges into or flowing into waters of the Pueblo.
    - i. A copy of the Notice of Intent and Notice of Termination must be submitted to the Haaku Water Office at the address below at the same time they are submitted to EPA. A copy of the storm water pollution prevention plan must be provided to the Haaku Water Office upon request.
    - ii. HAAKU WATER OFFICE  
PO Box 309  
Pueblo of Acoma, NM 87034
  - b. *Pueblo of Isleta*. The following conditions apply only to discharges on the Pueblo of Isleta.
    - i. Subpart 1.3.C.4, (Eligibility, Limitations on Coverage) first sentence, is revised to read: “This permit does not authorize discharges that EPA or the Pueblo of Isleta, prior to authorization under this permit, determines will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard or impairment of a designated use of receiving waters.”
    - ii. Subpart 2.2. (How to Submit) is amended to require: Copies of all Notices of Intent submitted to EPA must also be sent concurrently to the Pueblo of Isleta at the following address. Discharges are not authorized by this permit unless an accurate and complete Notice of Intent has been submitted to the Pueblo of Isleta.

Regular U.S. Mail Delivery  
Natural Resources Department  
Pueblo of Isleta

P.O. Box 1270  
Isleta, NM 87022

Overnight/Express Mail Delivery

Natural Resources Department  
Building L  
11000 Broadway, SE  
Albuquerque, NM 87105

- iii. Part 2 (Authorizations for Discharges of Storm Water from Construction Activity), second sentence, is amended to read: “Discharges are not authorized if your NOI is incomplete or inaccurate, if you failed to submit a copy of the NOI to the Pueblo of Isleta, or if you were never eligible for permit coverage.
- iv. Subpart 5.3 (Description of Control Measures to Reduce Pollutant Discharges), section A, last sentence, is amended to read: “For each major activity identified in the project description the SWPPP must clearly describe appropriate control measures, the general sequence during the construction process in which the measures will be implemented, and which operator is responsible for the control measure’s implementation and maintenance.”
- v. Subpart 5.7 (Copy of Permit Requirements), first sentence, is revised to read “Copies of this permit and of the signed and certified NOI form that was submitted to the Pueblo of Isleta and EPA must be included in the SWPPP.”
- vi. Subpart 4. (Inspections), section A is revised to read “Inspections must be conducted at least once every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.”
- vii. Subpart 4. (Inspections), section H, last paragraph, is amended to add: “Copies of inspection reports that identify incidents of noncompliance shall be sent to Pueblo of Isleta at the address listed in Subpart 2.2.” (See above)
- viii. Subpart 5.11. (Signature, Plan Review and Making Plans Available), section A, first sentence is amended to read:

“A copy of the SWPPP (including a copy of the permit), NOI, and acknowledgement letter from EPA must be retained at the construction site (or other location easily accessible during normal business hours to the Pueblo of Isleta’s Natural Resources Department, EPA, a state, tribal or local agency approving sediment and erosion plans, grading plans, or storm water management plans; local government officials; the operator of a municipal separate storm sewer receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service) from the date of commencement of construction activities to the date of final stabilization.”
- ix. Subpart 5.11. (Signature, Plan Review and Making Plans Available), section C. is amended to read: “SWPPPs must be made available upon request by EPA; representatives of the Pueblo of Isleta Natural Resources Department, a state, tribal or local agency approving sediment and erosion plans, grading

plans, or storm water management plans; local government officials; the operator of a municipal separate storm sewer receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service to the requestor. The copy of the SWPPP that is required to be kept on-site or locally available must be made available, in its entirety, to the EPA staff and the Pueblo of Isleta's Natural Resources Department staff for review and copying at the time of an on-site inspection.

- x. Subpart 3.1.A (Sediment Controls), is amended to add: "Erosion and sediment controls shall be designed to retain sediment on-site."
  - xi. Subpart 3.1.I (Spills/Releases in Excess of Reportable Quantities), first bullet is amended to read: "you must provide notice to the Pueblo of Isleta Natural Resources Department (505-869-5748) and the National Response Center (NRC) (800-424-8802; in the Washington, DC, metropolitan area call 202-426-2675) in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117 and 40 CFR Part 302 as soon as site staff have knowledge of the discharge; and"
  - xii. Subpart 3.4.B (Attainment of Water Quality Standards After Authorization), is amended to add: "You must provide the Pueblo of Isleta, at the address listed in Subpart 2.2, with a copy of the EPA notification, modifications to your storm water controls, data and certification required by EPA."
  - xiii. Subpart 6.1. (Submitting a Notice of Termination) is amended to add: Copies of all Notices of Termination submitted to EPA must also be sent concurrently to the Pueblo of Isleta at the following address in Subpart 2.2.
  - xiv. Any correspondence, other than NOIs and NOTs, with the Pueblo of Isleta concerning storm water discharges authorized by this permit shall sent one of the addresses in Subpart 2.2.
  - xv. Appendix G, Section 9, first sentence is amended to read: "You must allow the Pueblo of Isleta's Natural Resources Department, EPA, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:..."
  - xvi. Appendix G, Section 12, subsections A- H are amended to require that when you must notify EPA of an event (e.g., planned changes, anticipated noncompliance, transfers, required reporting due to potential adverse effects or environmental impacts or other noncompliance matters), the Pueblo of Isleta must also be notified.
  - xvii. Parties wishing to apply for an Equivalent Analysis Waiver (see Appendix D, Section C) must provide a copy of the waiver analysis to the Pueblo of Isleta at the address specified in Subpart 2.2 at the time it is submitted to EPA.
- c. *Ohkay Owingeh (San Juan Pueblo)*. The following conditions apply only to discharges on Ohkay Owingeh.

- i. Copies of the Notice of Intent (NOI) and Notice of Termination (NOT) must be provided to the Pueblo at the time it is provided to the Environmental Protection Agency, at the following address. A copy of the Storm Water Pollution Prevention Plan must be provided to the Pueblo upon request.

Office of Environmental Affairs  
P.O. Box 717  
Ohkay Owingeh, NM 87566

- ii. Appendix G, Section 10 (Monitoring and records), item D is amended to add: “All monitoring must be conducted in accordance with the Pueblo of San Juan’s Quality Assurance Project Plan.”
- d. *Pueblo of Nambé*. The following conditions apply only to discharges on the Pueblo of Nambé.
  - i. Copies of the Notice of Intent (NOI), Notice of Termination (NOT), and any analytical data must be provided to the Nambé Pueblo Department of Environment and Natural Resources (DENR) at the time it is provided to the Environmental Protection Agency, at the following address. A copy of the Storm Water Pollution Prevention Plan must be provided to the Pueblo upon request.
  - ii. All correspondence shall be sent to:

Pueblo of Nambé  
Department of Environment and Natural Resources  
Rt. 1 Box 117-BB  
Santa Fe, NM 87506  
505-455-2036 ext. 120 fax: 505-455-8873
- e. *Pueblo of Picuris*. The following conditions apply only to discharges on the Pueblo of Picuris.
  - i. Copies of the Notice of Intent (NOI), Notice of Termination (NOT), and any analytical data (e.g. Discharge Monitoring Reports, etc.) or any other reports must be provided to the Pueblo at the time it is provided to the Environmental Protection Agency. A copy of the Storm Water Pollution Prevention Plan must be provided to the Pueblo upon request.
  - ii. All correspondence shall be sent to:

Cordell Arellano  
Director, Environment Department  
Pueblo of Picuris  
PO Box 158  
Penasco, NM 87553
- f. *Pueblo of Pojoaque*. The following conditions apply only to discharges on the Pueblo of Pojoaque.
  - i. Copies of the Notice of Intent (NOI), Notice of Termination (NOT), and any analytical data (e.g. Discharge Monitoring Reports, etc.) or any other reports must be provided to the Pueblo at the time it is provided to the Environmental Protection Agency. A copy of documents related to the

Storm Water Pollution Prevention Plan must be provided to the Pueblo upon request.

- ii. All correspondence shall be sent to:

Luke Mario Duran  
Director, Environment Department  
Pueblo of Pojoaque  
5 West Gutierrez, Suite 2b  
Santa Fe, NM 87506

- g. *Pueblo of Taos*. The following conditions apply only to discharges on the Pueblo of Taos.
  - i. Copies of the Notice of Intent (NOI) and Notice of Termination (NOT) must be provided to the Taos Pueblo Governor's Office and the Taos Pueblo Environmental Office at the same time as or prior to submission to the Environmental Protection Agency. A copy of the Storm Water Pollution Prevention Plan must be provided to Pueblo environmental personnel upon request.
  - ii. All correspondence for both the Taos Pueblo Governor's Office and the Taos Pueblo Environmental Office (same address) shall be sent to:

Governor/ Taos Pueblo Environmental Office (as applicable)  
Taos Pueblo  
PO Box 1846  
Taos, NM 87571

- h. *Pueblo of Sandia*. The following conditions apply only to discharges on the Pueblo of Sandia.
  - i. A copy of the Notice of Intent (NOI) must be provided to the Pueblo at the same, (or prior to) the time it is submitted to the Environmental Protection Agency.
  - ii. The Pueblo of Sandia objects to use of Low Rainfall Erosivity Waivers (see Appendix D, Part A) for any small construction activities on the Pueblo, so this waiver will not be available for construction projects on the Pueblo. Permittees wishing to apply for all other waivers (see Appendix D) must provide a copy of the waiver certification or analysis to the Pueblo of Sandia Environment Department.
  - iii. The Storm Water Pollution Prevention Plan (SWPPP) must be available to the Pueblo of Sandia either electronically or hard copy upon request for review. The SWPPP must be made available at least fourteen (14) days before construction begins. The fourteen (14) day period will give Tribal staff time to become familiar with the project site, prepare for construction inspections, and determine compliance with the Pueblo of Sandia Water Quality Standards. Failure to provide a SWPPP to the Pueblo of Sandia may result in denial of the discharge or construction delay.
  - iv. Discharges are not authorized by this permit unless and until:
    - a. An accurate and complete NOI has been submitted to the Pueblo;  
AND

- b. An “Authorization to Proceed Letter” with any site specific mitigation requirements has been received from the Pueblo of Sandia following their review of the NOI and SWPPP and the permittee complies with all applicable requirements therein.
- v. Before submitting a Notice of Termination (NOT), permittees must clearly demonstrate to the Pueblo of Sandia Environment Department through a site visit or documentation that requirements for site stabilization have been met and any temporary erosion control structures have been removed (or operational control is being passed to another operator). A short letter concurring that conditions for submittal of an NOT have met will be sent to the permittee by the Pueblo. Upon receipt of this letter, and provided the all other applicable requirements of the permit are met, the permittee will be eligible to submit and NOT.
- vi. You must telephone the Pueblo of Sandia Environment Department at (505) 867-4533 of any noncompliance that may endanger human health or the environment within ten (10) hours of becoming aware of the circumstance.
- vii. All correspondence shall be sent to:

Scott Bulgrin, Water Quality Manager  
Pueblo of Sandia  
481 Sandia Loop  
Bernalillo, NM 87004

- i. *Santa Clara Pueblo*. The following conditions apply only to discharges on the Santa Clara Pueblo.
  - i. Copies of the Notice of Intent (NOI) and Notice of Termination (NOT) must be provided to the Pueblo of Santa Clara Office of Environmental Affairs when they are submitted to the Environmental Protection Agency.
  - ii. A copy of the storm water pollution prevention plan must be made available to the Pueblo of Santa Clara Office of Environmental Affairs upon request.
  - iii. Construction site operators must notify the Pueblo of Santa Clara Office of Environmental Affairs by telephone at (505) 753-7326 of any non-compliance discharges that may endanger human health or the environment within twenty-four (24) hours of becoming aware of the discharge.
  - iv. All correspondence shall be sent to:

Santa Clara Office of Environmental Affairs Taos Pueblo  
One Kee Street  
PO Box 580  
Española, NM 87532  
505-753-7326 Tel  
505-747-2728 Fax

- j. *Pueblo of Tesuque*. The following conditions apply only to discharges on the Pueblo of Tesuque.
  - i. Copies of the Notice of Intent (NOI), Notice of Termination (NOT), and any analytical data (e.g. Discharge Monitoring Reports, etc.) or any other

reports must be provided to the Pueblo at the time it is provided to the Environmental Protection Agency.

- ii. A copy of documents related to the Storm Water Pollution Prevention Plan must be provided to the Pueblo upon request.
- iii. All correspondence shall be sent to:

Ryan Swazo-Hinds  
Sr. Environmental Technician  
Pueblo of Tesuque  
Environment Department  
Rt. 42, Box 360-T  
Santa Fe, NM 87506

- 3. OKR10000F: Discharges in the State of Oklahoma that are not under the authority of the Oklahoma Department of Environmental Quality, including activities associated with oil and gas exploration, drilling, operations, and pipelines (includes SIC Groups 13 and 46, and SIC codes 492 and 5171), and point source discharges associated with agricultural production, services, and silviculture (includes SIC Groups 01, 02, 07, 08, 09).

- a. In accordance with Oklahoma's Water Quality Standards (OAC 785:45-5-25), Subpart 1.3.C. (Limitations on Coverage) is modified to add paragraphs 8 and 9 as follows:

"8. For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated "ORW" (Outstanding Resource Water) in Oklahoma's Water Quality Standards, this permit may only be used to authorize discharges from temporary construction activities. Discharges from any on-going activities such as sand and gravel mining or any other mineral mining are not authorized.

9. For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated "ORW" (Outstanding Resource Water) in Oklahoma's Water Quality Standards, this permit may not be used to authorize discharges from support activities, including concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, or borrow areas."

- 4. OKR10000I: Indian country within the State of Oklahoma.

- a. In order to protect downstream waters subject to the state of Oklahoma's Water Quality Standards (OAC 785:45-5-25) where receiving waters flow from Indian Country to State waters, Subpart 1.3.C. (Limitations on Coverage) is modified to add paragraphs 8 and 9 as follows:

"8. For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated

“ORW” (Outstanding Resource Water) in Oklahoma’s Water Quality Standards, this permit may only be used to authorize discharges from temporary construction activities. Discharges from any on-going activities such as sand and gravel mining or any other mineral mining are not authorized.

9. For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated “ORW” (Outstanding Resource Water) in Oklahoma’s Water Quality Standards, this permit may not be used to authorize discharges from support activities, including concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, or borrow areas.”

- b. *Pawnee Nation of Oklahoma*. The following conditions apply only to discharges on the Pawnee Nation of Oklahoma.
  - i. Copies of the Notice of Intent (NOI) and Notice of Termination (NOT) must be provided to the Pawnee Nation at the same time they are submitted to the Environmental Protection Agency.
  - ii. A copy of the storm water pollution prevention plan must be made available to Pawnee Nation Department of Environmental Conservation and Safety upon request.
  - iii. Construction site operators must notify the Pawnee Nation Department of Environmental Conservation and Safety by telephone at (918) 762-3655 immediately of any non-compliance with any provision of the permit conditions.
  - iv. All correspondence shall be sent to:

Pawnee Nation  
Department of Environmental Conservation and Safety  
PO Box 470  
Pawnee, OK 74058

- 5. TXR10000F: Discharges in the State of Texas that are not under the authority of the Texas Commission on Environmental Quality, including activities associated with the exploration, development, or production of oil or gas or geothermal resources, including transportation of crude oil or natural gas by pipeline.

NOTE: This permit does not create an obligation to obtain a permit where such obligation does not already exist under federal statute or regulation. For more information on the Clean Water Act §§ 402(1)(2) permitting exemption for uncontaminated discharges of storm water from oil and gas exploration, production, processing, or treatment operations or transmission facilities, visit:

<http://cfpub.epa.gov/npdes/stormwater/oilgas.cfm>

D. Region 8

1. MTR10000I:

- a. Confederated Salish and Kootenai Tribes. The following conditions only apply for projects on the Flathead Indian Reservation:

- i. Permittees must send a Stormwater Pollution Prevention Plan (SWPPP) to the Tribe at least 30 days before construction starts;
  - ii. Before submitting a Notice of Termination (NOT), permittees must clearly demonstrate to an appointed tribal staff person during an on-site inspection that requirements for site stabilization have been met;
  - iii. Permittees submitting electronic Notices of Intent (eNOI's) to USEPA must cc a copy to [NRD-EPD@cskt.org](mailto:NRD-EPD@cskt.org); and
  - iv. Written NOIs, SWPPPs, and NOTs shall be mailed to:  
  
Confederated Salish and Kootenai Tribes  
National Resources Department  
Department Head  
P.O. Box 278  
Pablo, MT 59855  
  
Permittees may also submit their SWPPP and NOT to  
[NRD-EPD@cskt.org](mailto:NRD-EPD@cskt.org)
- b. Fort Peck Tribes. The following conditions only apply for projects on the Fort Peck Indian Reservation:
- i. The permittee must send a copy of the Notice of Intent (NOI) and the Notice of Termination (NOT) to the Tribes at the same time that the NOI and NOT is submitted to EPA. Copies of the NOI and NOT shall be accepted either electronically or hard copy format and should be sent to:  
  
Deb Madison  
Environmental Programs Manager  
Fort Peck Assiniboine & Sioux Tribes  
P.O. Box 1027  
Poplar, MT 59255  
Tel: 406.768.2389 Fax: 406.768.5606  
E-mail: [2horses@nemont.net](mailto:2horses@nemont.net)
  - ii. A copy of the proposed SWPPP at the time of NOI/NOT submissions must be sent to the Tribes to ensure that upon closure of the site and/or activities all environmental commitments have been met.
- c. Northern Cheyenne Reservation. The following conditions only apply for projects on the Northern Cheyenne Indian Reservation:
- i. Permittees must contact the Northern Cheyenne Environmental Protection Department at (406) 477-6506 prior to authorization to discharge under the general permit;
  - ii. The Tribe shall review and approve SWPPPs prior to approval; and
  - iii. The Tribe shall review and improve BMPs on site to ensure that Tribal water quality standards are protected.

E. Region 9

1. ASR100000: The Island of American Samoa
  - a. Discharges authorized by the general permit shall meet all applicable American Samoa water quality standards.
  - b. Permittees discharging under the general permit shall comply with all conditions of the permit.
3. AZR10000I: Indian country lands within the State of Arizona, including Navajo Reservation lands in New Mexico and Utah
  - a. White Mountain Apache Tribe. The following condition applies only for projects on the White Mountain Apache Reservation: All NOIs for proposed stormwater discharge coverage shall be provided to the following address:  

Tribal Environmental Planning Office  
P.O. Box 2109  
Whiteriver, AZ 85941
  - b. Hoopa Valley Tribe. The following conditions apply only for projects on the Hoopa Valley Reservation:
    - i. All notices of intent submitted for stormwater discharges under the general permit in Hoopa Valley Indian Reservation (HVIR) shall be submitted to the Tribal Environmental Protection Agency (TEPA); and
    - ii. All pollution prevention plans for stormwater discharge in HVIR shall be submitted to TEPA for review and approval.
  - c. 29 Palms Band of Mission Indians. The following conditions apply only for projects on the 29 Palms Band of Mission Indians Reservation:
    - i. The 29 Palms Tribal EPA is informed of any future changes made to the proposed CGP;
    - ii. For each permitted activity, the U.S. EPA will ensure that all terms and conditions of the proposed CGP are complied with;
    - iii. Notices of intent must be submitted to the 29 Palms Tribal EPA for review, comment and tracking;
    - iv. Copies of stormwater pollution prevention plans (SWPPPs) and supporting Best Management Practices (BMPs) must be submitted to the 29 Palms Tribal EPA for review and compliance;
    - v. Copies of all monitoring reports must be provided to the 29 Palms Tribal EPA;
    - vi. Depending on the permitted activity, the 29 Palms Tribal EPA reserves the right to stipulate additional monitoring requirements; and
    - vii. In order to meet the requirements of Tribal law, including water quality standards, each of the conditions cited in the proposed CGP and the Twenty-Nine Palms Band of Mission Indians certification shall not be made any less stringent.

- d. Hualapai Tribe. The following conditions apply only for projects on the Hualapai Reservation:
    - i. All notices of intent for proposed stormwater discharges under the CGP and all pollution prevention plans for stormwater discharges on Hualapai Tribal lands shall be submitted to the Water Resource Program through the Tribal Chairman for review and approval, P.O. Box 179, Peach Springs, AZ 86434.
  - e. Pyramid Lake Paiute Tribe. The following conditions apply only for projects on the Pyramid Lake Paiute Reservation:
    - i. All notices of intent (NOIs) must be submitted to the Tribe for review, comments and tracking;
    - ii. copies of all Stormwater Pollution Prevention Plan (SWPPPs) and supporting Best Management Practices (BMPs) must be submitted to the Pyramid Lake Paiute Tribe for review and concurrence;
    - iii. copies of the criteria for Effluent Limitations Guidelines (ELGs) and the criteria for proposed Qualifying Local Programs (QLPs) to be used for sediment and erosion control pursuant to 40 CFR 122.44(s) be provided to the Pyramid Lake Paiute Tribe; and
    - iv. copies of all monitoring reports must be provided to the Pyramid Lake Paiute Tribe.
4. MPR100000: Commonwealth of the Northern Mariana Islands (CNMI)
- a. An Earthmoving and Erosion Control Permit shall be obtained from the CNMI DEQ prior to any construction activity covered under the NPDES general permit.
  - b. All conditions and requirements set forth in the USEPA NPDES general permit for discharges from large and small construction must be complied with.
  - c. A SWPPP for storm water discharges from construction activity must be approved by the Director of the CNMI DEQ prior to the submission of the NOI to USEPA. The CNMI address for the submittal of the SWPPP for approval is:

Commonwealth of the Northern Mariana Islands  
Office of the Governor  
Director, Division of Environmental Quality (DEQ)  
P.O. Box 501304 C.K.  
Saipan, MP 96950-1304
  - d. An NOI to be covered by the general permit for discharges from large and small construction sites must be submitted to CNMI DEQ (use above address) and USEPA, Region 9, in the form prescribed by USEPA, accompanied by a SWPPP approval letter from CNMI DEQ.
  - e. The NOI must be postmarked seven (7) calendar days prior to any storm water discharges and a copy must be submitted to the Director of CNMI DEQ (use above address) no later than seven (7) calendar days prior to any stormwater discharges.

- f. Copies of all monitoring reports required by the NPDES general permit must be submitted to CNMI DEQ (use above address).
- g. In accordance with section 10.3(h) and (i) of the CNMI water quality standards, CNMI DEQ reserves the right to deny coverage under the general permit and to require submittal of an application for an individual NPDES permit based on a review of the NOI or other information made available to the Director.

F. Region 10

1. AKR100000: The State of Alaska, except Indian country

a. For Storm Water Pollution Prevention Plans

- i. Operators of construction projects disturbing at least one acre of land but less than five acres of land shall submit a copy of the Notice of Intent (NOI) to the Alaska Department of Environmental Conservation (ADEC) at the same time it is submitted to the EPA. Submittals to ADEC shall be made to the following address  
 Alaska Department of Environmental Conservation  
 Wastewater Discharge/Storm Water  
 555 Cordova St.  
 Anchorage, AK 99501
- ii. Operators of construction projects that disturb five or more acres of land and that are located outside the areas of the local governments described in numbers iii, iv, v, or vi below, shall submit a copy of the Storm Water Pollution Prevention Plan (SWPPP) and a copy of the NOI to ADEC for review. The SWPPP shall be accompanied by the state-required plan review fee (see 18 AAC 72.955).
- iii. Within the Municipality of Anchorage
  - (1) Operators of construction projects disturbing one or more acres of land shall submit a copy of the SWPPP to either ADEC or the Municipality based on the project type and operator as shown in the following table

Project Type	Submit SWPPP to
Government (federal, state, municipal) road projects and other government transportation projects such as ports, railroads or airports	ADEC
Utility projects for which the utility is initiating the work	Municipality
Work that requires a Building Permit	Municipality
Non-publicly funded transportation projects	Municipality

- (2) Submittal of the SWPPP to the Municipality should be made before or at the same time the NOI is submitted to the EPA and ADEC and shall be accompanied by any Municipality-required fee. Copies of the SWPPP shall be submitted to the Municipality at the following address

Municipality of Anchorage  
 Office of Planning Development and Public Works  
 4700 South Elmores Rd.  
 PO Box 196650  
 Anchorage, AK 99519-6650

- (3) Submittals to ADEC shall include a copy of the SWPPP and a copy of the NOI for review and shall be accompanied by the state-required plan review fee (see 18 AAC 72.995).
- iv. Within the urbanized area boundary of the Fairbanks North Star Borough check with the Borough for the latest requirements.
  - Fairbanks North Star Borough
  - Department of Public Works
  - PO Box 71267
  - Fairbanks, AK 99707
- v. Within the urbanized area boundary of the City of Fairbanks
  - (1) Operators of privately-funded construction projects disturbing one or more acres of land shall submit a copy of the SWPPP to the City of Fairbanks.
  - (2) Submittal of the SWPPP to the City of Fairbanks should be made before or at the same time the NOI is submitted to the EPA and ADEC and shall be accompanied by any City-required fee. Copies of the SWPPP shall be submitted to the City of Fairbanks at the following address
    - City of Fairbanks
    - Engineering Division
    - 800 Cushman St
    - Fairbanks, AK 99701
  - (3) Operators of publicly-funded projects disturbing one or more acres of land shall submit a copy of the SWPPP and a copy of the NOI to ADEC for review, and shall be accompanied by the state-required plan review fee (see 18 AAC 72.995).
- vi. Within the urbanized area boundary of the City of North Pole
  - (1) Operators of privately-funded construction projects disturbing one or more acres of land shall submit a copy of the SWPPP to the City of North Pole.
  - (2) Submittal of the SWPPP to the City of North Pole should be made before or at the same time the NOI is submitted to the EPA and ADEC and shall be accompanied by any City-required fee. Copies of the SWPPP shall be submitted to the City of North Pole at the following address
    - City of North Pole
    - Department of Public Works
    - 125 Snowman Lane
    - North Pole, AK 99705
  - (3) Operators of publicly-funded projects disturbing one or more acres of land shall submit a copy of the SWPPP and a copy of the NOI to ADEC for review, and shall be accompanied by the state-required plan review fee (see 18 AAC 72.995).
- vii. For hardrock mines that are designed to process 500 or more tons per day and intend to file a Notice of Intent to begin construction under this permit

- (1) The operator shall submit their SWPPP to ADEC for review at least 90 days before the start of construction,
  - (2) Representatives of the operator and the prime site construction contractor shall meet with ADEC representatives in a pre-construction conference at least 20 days before the start of construction to discuss the details of the SWPPP and stormwater management during construction,
  - (3) The operator shall submit to ADEC addendums to the SWPPP that address any planned physical alterations, additions to the permitted facility, or unanticipated conditions that arise during planned construction that could significantly change the nature, or increase the quantity, of pollutants discharged from the facility, and
  - (4) The operator shall have at least one person on-site during construction who is qualified and trained in the principles and practices of erosion and sediment control and has the authority to direct the maintenance of storm water best management practices.
- b. For Post-Construction (Permanent) Storm Water Control Measures (Section 3.1.E [*Post-Construction Stormwater Management*] of the CGP)
- i. Operators of construction projects who construct, alter, install, modify, or operate any part of a storm water treatment system and are located outside the Municipality of Anchorage, shall submit a copy of the engineering plans to ADEC for review at the address given above (see 18 AAC 72.600).
  - ii. Operators of construction projects who construct, alter, install, modify, or operate any part of a storm water treatment system and are located inside the Municipality of Anchorage, shall submit a copy of the engineering plans to the respective government agency based on project type, as indicated in the table in a.iii.(1) above, for review at the addresses given in a.i. or a.iii.(2) above.
2. IDR100000: The State of Idaho, except Indian country
- a. *303(d)-listed Water Bodies with Approved TMDLs.*  
Discharges of storm water will be consistent with load allocations established by the applicable TMDL.
  - b. *303(d)-listed Water Bodies without Approved TMDLs (High Priority)*  
If a TMDL has not been established for a high priority 303(d)-listed water body, then discharges of storm water may not cause an increase in the total load of listed pollutant(s) in the receiving water body.
  - c. *303(d)-listed Water Bodies without Approved TMDLs (Medium or Low Priority)*  
If a TMDL has not been established for a medium or low priority 303(d)-listed water body, then best management practices shall be employed as necessary to prohibit further impairment of the designated or existing beneficial uses in the receiving water body.
  - d. *Best Management Practices (BMPs)*  
BMPs must be designed, implemented, and maintained by the permittee to fully protect and maintain the beneficial uses of the receiving water body. The permittee should select appropriate BMPs that are either authorized by the

- appropriate designated agency as defined in Idaho Water Quality Standards (IDAPA 58.01.02), recommended in IDEQ's *Catalog of Stormwater BMPs for Idaho Cities and Counties*, or recommended by other local government entities or guidance documents.
- e. *Equivalent Analysis Waiver* - Use of the "Equivalent Analysis Waiver" in Appendix D of the permit is not authorized.
  - f. Operators may contact the Idaho Department of Environmental Quality regional office nearest the construction activity for more information about impaired waterways:

Boise Regional Office:

1445 N. Orchard  
Boise ID 83706-2239  
Tel: (208)373-0550  
Fax: (208)373-0287

Grangeville Satellite Office:

300 W. Main  
Grangeville ID 83530  
Tel: (208)983-0808  
Fax: (208)983-2873

Pocatello Regional Office:

444 Hospital Way #300  
Pocatello ID 83201  
Tel: (208)236-6160  
Fax: (208)236-6168

McCall Satellite Office:

502 N. 3<sup>rd</sup> Street #9A  
P.O. Box 4654  
McCall, ID 83638  
Tel: (208)634-4900  
Fax: (208)634-9405

Idaho Falls Regional Office:

900 N. Skyline, Suite B  
Idaho Falls, ID 83402  
Tel: (208)528-2650  
Fax: (208)528-2695

Twin Falls Regional Office:

1363 Fillmore  
Twin Falls, ID 83301  
Tel: (208)736-2190  
Fax: (208)736-2194

Coeur d'Alene Regional Office:

2110 Ironwood Parkway  
Coeur d'Alene ID 83814  
Tel: (208)769-1422  
Fax: (208)769-1404

Lewiston Regional Office:

1118 "F" Street  
Lewiston, ID 83501  
Tel: (208)799-4370  
Toll Free: 1-877-541-3304  
Fax: (208)799-3451

3. ORR10000I: Indian country within the State of Oregon, except Fort McDermitt Reservation lands (see Region 9):

a. Confederated Tribes of the Umatilla Indian Reservation.

The following conditions apply only for projects within the exterior boundaries of the Umatilla Indian Reservation:

- i. The operator shall be responsible for achieving compliance with the Confederated Tribes of the Umatilla Indian Reservation's (CTUIR) Water Quality Standards.
- ii. The operator must submit all Storm Water Pollution Prevention Plans required under this general permit to the CTUIR Water Resources Program for review and determination that the SWPPP is sufficient to meet Tribal Water Quality Standards prior to the beginning of any discharge activities taking place.
- iii. The operator must submit a copy of the Notice of Intent (NOI) to be covered by this general permit to the CTUIR Water Resources Program at the address below, at the same time it is submitted to EPA.
- iv. The operator shall be responsible for reporting an exceedance of Tribal Water Quality Standards to the CTUIR Water Resources Program at the same time it is reported to EPA.

Confederated Tribes of the Umatilla Indian Reservation  
Water Resources Program  
P.O. Box 638  
Pendleton, OR 97801  
(541) 966-2420

- v. At least 45 days prior to beginning any discharge activities, the operator must submit a copy of the Notice of Intent to be covered under this general permit and an assessment of whether the undertaking has the potential to affect historic properties to CTUIR Tribal Historic Preservation Office (THPO) at the address below. If the project has potential to affect historic properties, the operator must define the area of potential effect (APE). The operator must provide the THPO at least 30 days to comment on the APE as defined.

- vi. If the project is an undertaking, the operator must conduct a cultural resource investigation. All fieldwork must be conducted by qualified personnel (as outlined by the Secretary of the Interior's Standards and Guidelines found at [http://www.nps.gov/history/local-law/arch\\_stnds\\_0.htm](http://www.nps.gov/history/local-law/arch_stnds_0.htm)). All fieldwork must be documented using Oregon Reporting Standards (as outlined at [http://egov.oregon.gov/OPRD/HCD/ARCH/arch\\_pubsandlinks.shtml](http://egov.oregon.gov/OPRD/HCD/ARCH/arch_pubsandlinks.shtml)). The resulting report must be submitted to the THPO for concurrence before any ground disturbing work can occur. The operator must provide the THPO at least 30 days to review and respond to all reports. The operator must obtain THPO concurrence in writing. If historic properties are present, this written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties.

Confederated Tribes of the Umatilla Indian Reservation  
Cultural Resources Protection Program  
Tribal Historic Preservation Office  
P.O. Box 638  
Pendleton, OR 97801  
(541) 966-2340

- b. Confederated Tribes of Warm Springs.  
The following conditions apply only for projects on the Warm Springs Indian Reservation:
  - i. All activities covered by this NPDES general permit occurring within a designated riparian buffer zone as established in Ordinance 74 (Integrated Resource Management Plan or IRMP) must be reviewed, approved and permitted through the Tribe's Hydraulic Permit Application process, including payment of any applicable fees.
  - ii. All activities covered by this NPDES general permit must follow all applicable land management and resource conservation requirements specified in the IRMP.
  - iii. Operators of activities covered by this NPDES general permit must submit a Storm Water Pollution Prevention Plan to the Tribe's Water Control Board at the following address for approval at least 30 days prior to beginning construction activity:

Chair, Warm Springs Water Control Board  
P.O. Box C  
Warm Springs, Oregon 97761

4. WAR10000F: Federal Facilities in the State of Washington, except those located on Indian Country

- a. Discharges shall not cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR Part 131.36). Discharges that are not in compliance with these standards are not authorized.

- b. Prior to the discharge of stormwater and non-stormwater to waters of the state, the Permittee shall apply all known, available, and reasonable methods of prevention, control, and treatment (AKART). This includes the preparation and implementation of an adequate Stormwater Pollution Prevention Plan (SWPPP), with all appropriate best management practices (BMPs) installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.
- c. Sampling & Numeric Effluent Limitations – For Sites Discharging to Certain Waterbodies on the 303(d) List or with an Applicable TMDL
  - i. Permittees that discharge to water bodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH or phosphorus, shall conduct water quality sampling according to the requirements of this section.
    - (1) The operator must retain all monitoring results required by this section as part of the SWPPP. All data and related monitoring records must be provided to EPA or the Washington Department of Ecology upon request.
    - (2) The operator must notify EPA when the discharge turbidity or discharge pH exceeds the water quality standards as defined in Parts 10.F.4.d.ii and e.ii below, in accordance with the reporting requirements of Part G.12.F of this permit. All reports must be submitted to EPA at the following address:  
 U.S EPA Region 10  
 NPDES Compliance Unit - Attn: Federal Facilities Compliance Officer  
 1200 6th Avenue, Suite 900  
 OCE-133  
 Seattle, WA 98101  
 (206) 553-1846
  - ii. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current listing by Ecology of impaired waters that exists on November 16, 2005, or the date when the operator’s complete NOI is received by EPA, whichever is later.

Parameter identified in 303(d) listing	Parameter/Units	Analytical Method	Sampling Frequency	Water Quality Standard
Turbidity Fine Sediment Phosphorus	Turbidity/NTU	SM2130 or EPA180.1	Weekly, if discharging	If background is 50 NTU or less: 5 NTU over background; or If background is more than 50 NTU: 10% over background
High pH	pH/Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5

- d. Discharges to waterbodies on the 303(d) list for turbidity, fine sediment, or phosphorus
  - i. Permittees which discharge to waterbodies on the 303(d) list for turbidity, fine sediment, or phosphorus shall conduct turbidity sampling at the

following locations to evaluate compliance with the water quality standard for turbidity:

- (1) Background turbidity shall be measured in the 303(d) listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge; and
  - (2) Discharge turbidity shall be measured at the point of discharge into the 303(d) listed receiving waterbody, inside the area of influence of the discharge; **or**  
Alternatively, discharge turbidity may be measured at the point where the discharge leaves the construction site, rather than in the receiving waterbody.
- ii. Based on sampling, if the discharge turbidity ever exceeds the water quality standard for turbidity (more than 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or more than a 10% increase in turbidity when the background turbidity is more than 50 NTU), all future discharges shall comply with a numeric effluent limit which is equal to the water quality standard for turbidity. If a future discharge exceeds the water quality standard for turbidity, the permittee shall:
- (1) Review the SWPPP for compliance with the permit and make appropriate revisions within 7 days of the discharge that exceeded the standard;
  - (2) Fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, but no later than 10 days of the discharge that exceeded the standard;
  - (3) Document BMP implementation and maintenance in the site log book;
  - (4) Continue to sample daily until discharge turbidity meets the water quality standard for turbidity.
- e. Discharges to waterbodies on the 303(d) list for High pH
- i. Permittees which discharge to waterbodies on the 303(d) list for high pH shall conduct sampling at one of the following locations to evaluate compliance with the water quality standard for pH (in the range of 6.5 – 8.5):
    - (1) pH shall be measured at the point of discharge into the 303(d) listed waterbody, inside the area of influence of the discharge; or
    - (2) Alternatively, pH may be measured at the point where the discharge leaves the construction site, rather than in the receiving water.
  - ii. Based on the sampling set forth above, if the pH ever exceeds the water quality standard for pH (in the range of 6.5 – 8.5), all future discharges shall comply with a numeric effluent limit which is equal to the water quality standard for pH. If a future discharge exceeds the water quality standard for pH, the permittee shall:
    - (1) Review the SWPPP for compliance with the permit and make appropriate revisions within 7 days of the discharge;

- (2) Fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, but no later than 10 days of the discharge that exceeded the standards;
  - (3) Document BMP implementation and maintenance in the site log book;
  - (4) Continue to sample daily until discharge meets the water quality standard for pH (in the range of 6.5 – 8.5).
- f. Sampling & Limitations – For Sites Discharging to TMDLs
- i. Discharges to waterbodies subject to an applicable Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus, shall be consistent with the assumptions and requirements of the TMDL.
    - (1) Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges shall be consistent with any specific waste load allocations or requirements established by the applicable TMDL.
      - a. Discharges shall be sampled weekly, or as otherwise specified by the TMDL, to evaluate compliance with the specific waste load allocations or requirements.
      - b. Analytical methods used to meet the monitoring requirements shall conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136.
    - (2) Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but no specific requirements have been identified, compliance with this permit will be assumed to be consistent with the approved TMDL.
    - (3) Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with this permit will be assumed to be consistent with the approved TMDL.
    - (4) Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.
  - ii. Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which has been completed and approved by EPA prior to November 16, 2005, or prior to the date the operator’s complete NOI is received by EPA, whichever is later.  
Information on impaired waterways is available from the Department of Ecology website at:  
<http://www.ecy.wa.gov/programs/wq/stormwater/construction/impaired.html>  
or by phone: 360-407-6460.

5. WAR10000I: Indian country within the State of Washington

a. Kalispel Tribe.

The following conditions apply only for projects on the Kalispel Reservation:

- i. The permittee shall be responsible for achieving compliance with the Kalispel Tribe's Water Quality Standards.
- ii. The permittee shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the Kalispel Tribe Natural Resources Department at the same time as it submitted to the U.S. EPA
- iii. The permittee shall submit all Storm Water Prevention Plans (SWPP) to the Kalispel Tribe Natural Resources Department thirty (30) days prior to beginning any discharge activities for review.
- iv. Prior to any land disturbing activities on the Kalispel Indian Reservation and its dependent communities, the permittee shall obtain a cultural resource clearance letter from the Kalispel Natural Resource Department.
- v. All tribal correspondence pertaining to the general permit for discharges of construction stormwater shall be sent to:

Kalispel Tribe Natural Resources Department  
PO Box 39  
Usk, WA 99180

b. Lummi Nation

The following conditions apply only for projects on the Lummi Reservation:

- i. Pursuant to Lummi Code of Laws (LCL) 17.05.020(a), the operator must obtain a land use permit from the Lummi Planning Department as provided in Title 15 of the Lummi Code of Laws and regulations adopted thereunder.
- ii. Pursuant to LCL 17.05.020(a), each operator shall develop and submit a Storm Water Pollution Prevention Plan to the Lummi Water Resources Division for review and approval by the Water Resources Manager prior to beginning any discharge activities.
- iii. Pursuant to LCL Title 17, each operator shall be responsible for achieving compliance with the Water Quality Standards for Surface Waters of the Lummi Indian Reservation (Lummi Administrative Regulations [LAR] 17 LAR 07.010 through 17 LAR 07.210).
- iv. Each operator shall submit a copy of the Notice of Intent to the Lummi Water Resources Division at the same time it is submitted to the Environmental Protection Agency (EPA).
- v. Storm Water Pollution Prevention Plans and Notices of Intent shall be submitted to:

Lummi Natural Resources Department  
ATTN: Water Resources Manager  
2616 Kwina Road  
Bellingham, WA 98226

- vi. Refer to the Lummi Nation website at <http://www.lummi-nsn.gov> to review a copy of Title 17 of the Lummi Code of Laws and the references upon which the conditions identified above are based.

c. Makah Tribe

The following conditions apply only for projects on the Makah Reservation:

- i. The operator shall be responsible for achieving compliance with the Makah Tribe's Water Quality Standards.
- ii. The operator shall submit a Storm Water Pollution Prevention Plan to the

Makah Tribe Water Quality Program and Makah Fisheries Habitat Division for review and approval at least thirty (30) days prior to beginning any discharge activities.

- iii. The operator shall submit a copy of the Notice of Intent to the Makah Tribe Water Quality Program and Makah Fisheries Habitat Division at the same time it is submitted to EPA.
- iv. Storm Water Pollution Prevention Plans and Notices of Intent shall be submitted to:

Makah Fisheries Water Quality and Habitat Division  
PO Box 115  
Neah Bay, WA 98357

d. Puyallup Tribe of Indians.

The following conditions apply only to stormwater discharges from large and small construction activities that result in a total land disturbance of equal to or greater than one acre, where those discharges enter surface waters of the Puyallup Tribe:

- i. Each permittee shall be responsible for achieving compliance with the Puyallup Tribe's Water Quality Standards, including antidegradation provisions. The Puyallup Natural Resources Department will conduct an antidegradation review for permitted activities that have the potential to affect water quality. The antidegradation review will be consistent with the Tribe's Antidegradation Implementation Procedures.
- ii. The permittee shall be responsible for meeting any additional permit requirements imposed by EPA necessary to comply with the Puyallup Tribe's antidegradation policies if the discharge point is located within 1 linear mile upstream of waters designated by the Tribe.
- iii. Each permittee shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the Puyallup Tribal Natural Resources Department at the address listed below at the same time it is submitted to EPA.

Puyallup Tribe of Indians  
3009 E. Portland Avenue  
Tacoma, WA 98404  
ATTN: Natural Resources Department

- iv. All supporting documentation and certifications in the NOI related to coverage under the general permit for Endangered Species Act purposes shall be submitted to the Puyallup Tribal Natural Resources Department for review.
- v. If EPA requires coverage under an individual or alternative permit, the permittee shall submit a copy of the permit to the Puyallup Tribal Natural Resources Department at the address listed above.
- vi. The permittee shall submit all stormwater pollution prevention plans to the Puyallup Tribal Natural Resources Department for review and approval prior to beginning any activities resulting in a discharge to tribal waters.

## Appendix A - Definitions and Acronyms

### Definitions

“Arid Areas” means areas with an average annual rainfall of 0 to 10 inches.

“Best Management Practices” (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practice to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

“Commencement of Construction Activities” means the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction-related activities (e.g., stockpiling of fill material).

“Control Measure” as used in this permit, refers to any BMP or other method used to prevent or reduce the discharge of pollutants to waters of the United States.

“CWA” means the Clean Water Act or the Federal Water Pollution Control Act, 33 U.S.C. section 1251 et seq.

“Discharge” when used without qualification means the “discharge of a pollutant.”

“Discharge of Stormwater Associated with Construction Activity” as used in this permit, refers to a discharge of pollutants in stormwater from areas where soil disturbing activities (e.g., clearing, grading, or excavation), construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck chute washdown, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located.

“Eligible” means qualified for authorization to discharge stormwater under this general permit.

“Facility” or “Activity” means any “point source” or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

“Federal Facility” means any buildings, installations, structures, land, public works, equipment, aircraft, vessels, and other vehicles and property, owned by, or constructed or manufactured for the purpose of leasing to, the Federal government.

“Final Stabilization” means that:

1. All soil disturbing activities at the site have been completed and either of the two following criteria are met:
  - a. a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background

- vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
- b. equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.
2. When background native vegetation will cover less than 100 percent of the ground (e.g., arid areas, beaches), the 70 percent coverage criteria is adjusted as follows: if the native vegetation covers 50 percent of the ground, 70 percent of 50 percent ( $0.70 \times 0.50 = 0.35$ ) would require 35 percent total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.
  3. In arid and semi-arid areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:
    - a. Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by you,
    - b. The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.
  4. For individual lots in residential construction, final stabilization means that either:
    - a. The homebuilder has completed final stabilization as specified above, or
    - b. The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.
  5. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land, staging areas for highway construction, etc.), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to “water of the United States,” and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization criteria (1) or (2) or (3) above.

“Indian country” is defined at 40 CFR §122.2 to mean:

1. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
2. All dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and
3. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-ways running through the same.

“Large Construction Activity” is defined at 40 CFR §122.26(b)(14)(x) and incorporated here by reference. A large construction activity includes clearing, grading, and excavating resulting in a land disturbance that will disturb equal to or greater than five acres of land or will disturb less than five acres of total land area but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than five acres. Large

construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site.

“Municipal Separate Storm Sewer System” or “MS4” is defined at 40 CFR §122.26(b)(8) to mean a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

1. Owned and operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
2. Designed or used for collecting or conveying stormwater;
3. Which is not a combined sewer; and
4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

“New Project” means the “commencement of construction activities” occurs after the effective date of this permit.

“Ongoing Project” means the “commencement of construction activities” occurs before the effective date of this permit.

“Operator” for the purpose of this permit and in the context of stormwater associated with construction activity, means any party associated with a construction project that meets either of the following two criteria:

1. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
2. The party has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions). This definition is provided to inform permittees of EPA’s interpretation of how the regulatory definitions of “owner or operator” and “facility or activity” are applied to discharges of stormwater associated with construction activity.

“Owner or operator” means the owner or operator of any “facility or activity” subject to regulation under the NPDES program.

“Permitting Authority” means the United States Environmental Protection Agency, EPA, a Regional Administrator of the Environmental Protection Agency or an authorized representative.

“Point Source” means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

“Pollutant” is defined at 40 CFR §122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.

“Project Area” means:

- The areas on the construction site where stormwater discharges originate and flow toward the point of discharge into the receiving waters (including areas where excavation, site development, or other ground disturbance activities occur) and the immediate vicinity. (Example: 1. Where bald eagles nest in a tree that is on or bordering a construction site and could be disturbed by the construction activity or where grading causes stormwater to flow into a small wetland or other habitat that is on the site that contains listed species.)
- The areas where stormwater discharges flow from the construction site to the point of discharge into receiving waters. (Example: Where stormwater flows into a ditch, swale, or gully that leads to receiving waters and where listed species (such as amphibians) are found in the ditch, swale, or gully.)
- The areas where stormwater from construction activities discharge into receiving waters and the areas in the immediate vicinity of the point of discharge. (Example: Where stormwater from construction activities discharges into a stream segment that is known to harbor listed aquatic species.)
- The areas where stormwater BMPs will be constructed and operated, including any areas where stormwater flows to and from BMPs. (Example: Where a stormwater retention pond would be built.)
- The areas upstream and /or downstream from construction activities discharges into a stream segment that may be affected by the said discharges. (Example: Where sediment discharged to a receiving stream settles downstream and impacts a breeding area of a listed aquatic species.)

“Receiving water” means the “Water of the United States” as defined in 40 CFR §122.2 into which the regulated stormwater discharges.

“Runoff coefficient” means the fraction of total rainfall that will appear at the conveyance as runoff.

“Semi-Arid Areas” means areas with an average annual rainfall of 10 to 20 inches.

“Site” means the land or water area where any “facility or activity” is physically located or conducted, including adjacent land used in connection with the facility or activity.

“Small Construction Activity” is defined at 40 CFR §122.26(b)(15) and incorporated here by reference. A small construction activity includes clearing, grading, and excavating resulting in a land disturbance that will disturb equal to or greater than one (1) acre and less than five (5) acres of land or will disturb less than one (1) acre of total land area but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than one (1) acre and less than five (5) acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site.

“Stormwater” means stormwater runoff, snow melt runoff, and surface runoff and drainage.

“Stormwater Discharge-Related Activities” as used in this permit, include: activities that cause, contribute to, or result in stormwater point source pollutant discharges, including but not limited to: excavation, site development, grading and other surface disturbance activities; and measures to control stormwater including the siting, construction and operation of BMPs to control, reduce or prevent stormwater pollution.

“Total Maximum Daily Load” or “TMDL” means the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background. If a receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.

“Waters of the United States” is as defined at 40 CFR §122.2.

“Wetland” means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

## **ACRONYMS**

BMP - Best Management Practices  
CGP - Construction General Permit  
CFR - Code of Federal Regulations  
CWA - Clean Water Act  
EPA - United States Environmental Protection Agency  
ESA - Endangered Species Act  
FWS - United States Fish and Wildlife Service  
MS4 - Municipal Separate Storm Sewer System  
MSGP - Multi-Sector General Permit  
NHPA - National Historic Preservation Act  
NMFS - United States National Marine Fisheries Service  
NOI - Notice of Intent

NOT - Notice of Termination

NPDES - National Pollutant Discharge Elimination System

POTW - Publicly Owned Treatment Works

SHPO - State Historic Preservation Officer

SWPPP - Stormwater Pollution Prevention Plan

THPO - Tribal Historic Preservation Officer

TMDL - Total Maximum Daily Load

WQS - Water Quality Standard

**Appendix B - Permit Areas Eligible for Coverage**

Permit coverage for stormwater discharges from construction activity occurring within the following areas is provided by legally separate and distinctly numbered permits:

**1. EPA Region 1: CT, MA, ME, NH, RI, VT**

US EPA, Region 01  
 Office of Ecosystem Protection  
 NPDES Stormwater Program  
 1 Congress St, Suite 1100 (CMU)  
 Boston, MA 02114-2023

The States of Connecticut, Maine, Rhode Island, and Vermont are the NPDES Permitting Authority for the majority of discharges within their respective states.

<u>Permit No.</u>	<u>Areas of Coverage/Where EPA is Permitting Authority</u>
<b>MAR100000</b>	Commonwealth of Massachusetts (except Indian country)
<b>MAR10000I</b>	Indian country within the State of Massachusetts
<b>CTR10000I</b>	Indian country within the State of Connecticut
<b>NHR100000</b>	State of New Hampshire
<b>RIR10000I</b>	Indian country within the State of Rhode Island
<b>VTR10000F</b>	Federal Facilities in the State of Vermont

**2. EPA Region 2: NJ, NY, PR, VI**

For NJ, NY, and VI:  
 US EPA, Region 02  
 NPDES Stormwater Program  
 290 Broadway, 24th Floor  
 New York, NY 10007-1866

For PR:  
 US EPA, Region 02  
 Caribbean Environmental Protection Division  
 NPDES Stormwater Program  
 1492 Ponce de Leon Ave  
 Central Europa Building, Suite 417  
 San Juan, PR 00907-4127

The State of New York is the NPDES Permitting Authority for the majority of discharges within its state. The State of New Jersey and the Virgin Islands are the NPDES Permitting Authority for all discharges within their respective states.

<u>Permit No.</u>	<u>Areas of Coverage/Where EPA is Permitting Authority</u>
<b>NYR10000I</b>	Indian country within the State of New York
<b>PRR100000</b>	The Commonwealth of Puerto Rico

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**3. EPA Region 3: DE, DC, MD, PA, VA, WV**

US EPA, Region 03  
NPDES Stormwater Program  
1650 Arch St  
Philadelphia, PA 19103

The State of Delaware is the NPDES Permitting Authority for the majority of discharges within its state. Maryland, Pennsylvania, Virginia, and West Virginia are the NPDES Permitting Authority for all discharges within their respective states.

<u>Permit No.</u>	<u>Areas of Coverage/Where EPA is Permitting Authority</u>
<b>DCR100000</b>	The District of Columbia
<b>DER10000F</b>	Federal Facilities in the State of Delaware

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**4. EPA Region 4: AL, FL, GA, KY, MS, NC, SC, TN**

US EPA, Region 04  
Water Management Division  
NPDES Stormwater Program  
61 Forsyth St SW  
Atlanta, GA 30303-3104

Coverage Not Available. Construction activities in Region 4 must obtain permit coverage under an alternative permit.

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**5. EPA Region 5: IL, IN, MI, MN, OH, WI**

US EPA, Region 05  
NPDES & Technical Support  
NPDES Stormwater Program  
77 W Jackson Blvd  
(WN-16J)  
Chicago, IL 60604-3507

The States of Michigan, Minnesota, and Wisconsin are the NPDES Permitting Authority for the majority of discharges within their respective states. The States of Illinois, Indiana, and Ohio are the NPDES Permitting Authorities for all discharges within their respective states.

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<b><u>Permit No.</u></b>	<b><u>Areas of coverage/where EPA is Permitting Authority</u></b>
<b>MIR10000I</b>	Indian country within the State of Michigan
<b>MNR10000I</b>	Indian country within the State of Minnesota, except the Grand Portage Band of Chippewa
<b>WIR10000I</b>	Indian country within the State of Wisconsin, except the Sokaogon Chippewa (Mole Lake) Community.

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**6. EPA Region 6: AR, LA, OK, TX, NM (except see Region 9 for Navajo lands, and see Region 8 for Ute Mountain Reservation lands)**

US EPA, Region 06  
 NPDES Stormwater Program  
 1445 Ross Ave, Suite 1200  
 Dallas, TX 75202-2733

The States of Louisiana, Oklahoma, and Texas are the NPDES Permitting Authority for the majority of discharges within their respective state. The State of Arkansas is the NPDES Permitting Authority for all discharges within its respective state.

<b><u>Permit No.</u></b>	<b><u>Areas of coverage/where EPA is Permitting Authority</u></b>
<b>LAR10000I</b>	Indian country within the State of Louisiana
<b>NMR100000</b>	The State of New Mexico, except Indian country
<b>NMR10000I</b>	Indian country within the State of New Mexico, except Navajo Reservation Lands that are covered under Arizona permit AZR10000I and Ute Mountain Reservation Lands that are covered under Colorado permit COR10000I.
<b>OKR10000I</b>	Indian country within the State of Oklahoma
<b>OKR10000F</b>	Discharges in the State of Oklahoma that are not under the authority of the Oklahoma Department of Environmental Quality, including activities associated with oil and gas exploration, drilling, operations, and pipelines (includes SIC Groups 13 and 46, and SIC codes 492 and 5171), and point source discharges associated with agricultural production, services, and silviculture (includes SIC Groups 01, 02, 07, 08, 09).
<b>TXR10000F</b>	Discharges in the State of Texas that are not under the authority of the Texas Commission on Environmental Quality (formerly TNRCC), including activities associated with the exploration, development, or production of oil or gas or geothermal resources, including transportation of crude oil or natural gas by pipeline.
<b>TXR10000I</b>	Indian country within the State of Texas.

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**7. EPA Region 7: IA, KS, MO, NE (except see Region 8 for Pine Ridge Reservation Lands)**

US EPA, Region 07  
 NPDES Stormwater Program  
 901 N 5th St  
 Kansas City, KS 66101

The States of Iowa, Kansas, and Nebraska are the NPDES Permitting Authority for the majority of discharges within their respective states. The State of Missouri is the NPDES Permitting Authority for all discharges within its state.

<u>Permit No.</u>	<u>Areas of coverage/where EPA is Permitting Authority</u>
<b>IAR10000I</b>	Indian country within the State of Iowa
<b>KSR10000I</b>	Indian country within the State of Kansas
<b>NER10000I</b>	Indian country within the State of Nebraska, except Pine Ridge Reservation lands (see Region 8)

**8. EPA Region 8: CO, MT, ND, SD, WY, UT (except see Region 9 for Goshute Reservation and Navajo Reservation Lands), the Ute Mountain Reservation in NM, and the Pine Ridge Reservation in NE.**

US EPA, Region 08  
 NPDES Stormwater Program  
 999 18th St, Suite 300  
 (EPR-EP)  
 Denver, CO 80202-2466

The States of Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming are the NPDES Permitting Authority for the majority of discharges within their respective states.

<u>Permit No.</u>	<u>Areas of coverage/where EPA is Permitting Authority</u>
<b>COR10000F</b>	Federal Facilities in the State of Colorado, except those located on Indian country
<b>COR10000I</b>	Indian country within the State of Colorado, as well as the portion of the Ute Mountain Reservation located in New Mexico
<b>MTR10000I</b>	Indian country within the State of Montana
<b>NDR10000I</b>	Indian country within the State of North Dakota, as well as that portion of the Standing Rock Reservation located in South Dakota (except for the portion of the lands within the former boundaries of the Lake Traverse Reservation which is covered under South Dakota permit SDR10000I listed below)
<b>SDR10000I</b>	Indian country within the State of South Dakota, as well as the portion of the Pine Ridge Reservation located in Nebraska and the portion of the lands within the former boundaries of the Lake

	Traverse Reservation located in North Dakota (except for the Standing Rock Reservation which is covered under North Dakota permit NDR10000I listed above)
<b>UTR10000I</b>	Indian country within the State of Utah, except Goshute and Navajo Reservation lands (see Region 9)
<b>WYR10000I</b>	Indian country within the State of Wyoming

**9. EPA Region 9: CA, HI, NV, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Goshute Reservation in UT and NV, the Navajo Reservation in UT, NM, and AZ, the Duck Valley Reservation in ID, and the Fort McDermitt Reservation in OR.**

US EPA, Region 09  
 NPDES Stormwater Program  
 75 Hawthorne St  
 San Francisco, CA 94105-3901

The States of Arizona, California and Nevada are the NPDES Permitting Authority for the majority of discharges within their respective states. The State of Hawaii is the NPDES Permitting Authority for all discharges within its state.

<b><u>Permit No.</u></b>	<b><u>Areas of coverage/where EPA is Permitting Authority</u></b>
<b>ASR100000</b>	The Island of American Samoa
<b>AZR10000I</b>	Indian country within the State of Arizona, as well as Navajo Reservation lands in New Mexico and Utah
<b>CAR10000I</b>	Indian country within the State of California
<b>GUR100000</b>	The Island of Guam
<b>JAR100000</b>	Johnston Atoll
<b>MWR100000</b>	Midway Island and Wake Island
<b>MPR100000</b>	Commonwealth of the Northern Mariana Islands
<b>NVR10000I</b>	Indian country within the State of Nevada, as well as the Duck Valley Reservation in Idaho, the Fort McDermitt Reservation in Oregon and the Goshute Reservation in Utah

**10. EPA Region 10: AK, WA, ID (except see Region 9 for Duck Valley Reservation Lands), and OR (except see Region 9 for Fort McDermitt Reservation).**

US EPA, Region 10  
 NPDES Stormwater Program  
 1200 6th Ave (OW-130)  
 Seattle, WA 98101-1128  
 Phone: (206) 553-6650

The States of Oregon and Washington are the NPDES Permitting Authority for the majority of discharges within their respective states.

<b><u>Permit No.</u></b>	<b><u>Areas of coverage/where EPA is Permitting Authority</u></b>
<b>AKR100000</b>	The State of Alaska, except Indian country
<b>AKR10000I</b>	Indian country within the state of Alaska
<b>IDR100000</b>	The State of Idaho, except Indian country
<b>IDR10000I</b>	Indian country within the State of Idaho, except Duck Valley Reservation lands (see Region 9)
<b>ORR10000I</b>	Indian country within the State of Oregon, except Fort McDermitt Reservation lands (see Region 9)
<b>WAR10000F</b>	Federal Facilities in the State of Washington, except those located on Indian country
<b>WAR10000I</b>	Indian country within the State of Washington

## Appendix C - Endangered Species Act Review Procedures

You must meet at least one of the six criteria in Part 1.3.C.6 to be eligible for coverage under this permit. You must follow the procedures in this Appendix to assess the potential effects of stormwater discharges and stormwater discharge-related activities on listed species and their critical habitat. When evaluating these potential effects, operators must evaluate the entire project area.

For purposes of this Appendix, the term “project area” is inclusive of the term “Action Area.” Action area is defined in 50 CFR §402.02 as all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action.

This includes areas beyond the footprint of the construction area that may be affected by stormwater discharges and stormwater discharge related activities. “Project area” is defined in Appendix A.

(Operators who are eligible and able to certify eligibility under Criterion B, C, D, or F of Part 1.3.C.6 because of a previously issued ESA section 10 permit, a previously completed ESA section 7 consultation, or because the operator’s activities were already addressed in another operator’s certification of eligibility may proceed directly to Step Four.)

### **Step One: Determine if Listed Threatened or Endangered Species are Present On or Near Your Project Area**

You must determine, to the best of your knowledge, whether listed species are located on or near your project area. To make this determination, you should:

- Determine if listed species are in your county or township. The local offices of the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and State or Tribal Heritage Centers often maintain lists of federally listed endangered or threatened species on their internet sites. Visit <http://www.epa.gov/npdes/stormwater/cgp> to find the appropriate site for your state or check with your local office. In most cases, these lists allow you to determine if there are listed species in your county or township.
- If there are listed species in your county or township, check to see if critical habitat has been designated and if that area overlaps or is near your project area.
- Contact your local FWS, NMFS, or State or Tribal Heritage Center to determine if the listed species could be found on or near your project area and if any critical habitat areas have been designated that overlap or are near your project area. Critical habitat areas maybe designated independently from the listed species for your county, so even if there are no listed species in your county or township, you must still contact one of the agencies mentioned above to determine if there are any critical habitat areas on or near your project area.

You can also find critical habitat designations and associated requirements at 50 CFR Parts 17 and 226. <http://www.access.gpo.gov>.

- If there are no listed species in your county or township, no critical habitat areas on or near your project area, or if your local FWS, NMFS, or State or Tribal Heritage Center indicates that listed species are not a concern in your part of the county or township, you may check box A on the Notice of Intent Form.
- If there are listed species and if your local FWS, NMFS, or State or Tribal Heritage Center indicates that these species could exist on or near your project area, you will need to do one or more of the following:
  - Conduct visual inspections: This method may be particularly suitable for construction sites that are smaller in size or located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no natural habitat, or for construction activities that discharge directly into municipal stormwater collection systems.
  - Conduct a formal biological survey. In some cases, particularly for larger construction sites with extensive stormwater discharges, biological surveys may be an appropriate way to assess whether species are located on or near the project area and whether there are likely adverse effects to such species. Biological surveys are frequently performed by environmental consulting firms. A biological survey may in some cases be useful in conjunction with Steps Two, Three, or Four of these instructions.
  - Conduct an environmental assessment under the National Environmental Policy Act (NEPA). Such reviews may indicate if listed species are in proximity to the project area. Coverage under the CGP does not trigger such a review because the CGP does not regulate new sources (that is, dischargers subject to New Source Performance Standards under section 306 of the Clean Water Act), and is thus statutorily exempted from NEPA. See CWA section 511(c). However, some construction activities might require review under NEPA for other reasons such as federal funding or other federal involvement in the project.
  - If listed threatened or endangered species or critical habitat are present in the project area, you must look at impacts to species and/or habitat when following Steps Two through Four. Note that many but not all measures imposed to protect listed species under these steps will also protect critical habitat. Thus, meeting the eligibility requirements of this CGP may require measures to protect critical habitat that are separate from those to protect listed species.

**Step Two: Determine if the Construction Activity’s Stormwater Discharges or Stormwater Discharge- Related Activities Are Likely to Adversely Affect Listed Threatened or Endangered Species or Designated Critical Habitat**

To receive CGP coverage, you must assess whether your stormwater discharges or stormwater discharge related activities is likely to adversely affect listed threatened or endangered species or designated critical habitat that are present on or near your project area.

Potential adverse effects from stormwater discharges and stormwater discharge-related activities include:

- *Hydrological.* Stormwater discharges may cause siltation, sedimentation or induce other changes in receiving waters such as temperature, salinity or pH. These effects will vary with the amount of stormwater discharged and the volume and condition of the receiving water. Where a stormwater discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely. Construction activity itself may also alter drainage patterns on a site where construction occurs that can impact listed species or critical habitat.
- *Habitat.* Excavation, site development, grading, and other surface disturbance activities from construction activities, including the installation or placement of stormwater BMPs, may adversely affect listed species or their habitat. Stormwater may drain or inundate listed species habitat.
- *Toxicity.* In some cases, pollutants in stormwater may have toxic effects on listed species.

The scope of effects to consider will vary with each site. If you are having difficulty determining whether your project is likely to adversely affect listed species or critical habitat, or one of the Services has already raised concerns to you, you must contact the appropriate office of the FWS, NMFS or Natural Heritage Center for assistance. If adverse effects are not likely, then you may check box E on the NOI form and apply for coverage under the CGP. If the discharge may adversely effect listed species or critical habitat, you must follow Step Three.

### **Step Three: Determine if Measures Can Be Implemented to Avoid Adverse Effects**

If you make a preliminary determination that adverse effects are likely to occur, you can still receive coverage under Criterion E of Part 1.3.C.6 of the CGP if appropriate measures are undertaken to avoid or eliminate the likelihood of adverse effects prior to applying for CGP coverage. These measures may involve relatively simple changes to construction activities such as re-routing a stormwater discharge to bypass an area where species are located, relocating BMPs, or by changing the “footprint” of the construction activity. You should contact the FWS and/or NMFS to see what appropriate measures might be suitable to avoid or eliminate the likelihood of adverse impacts to listed species and/or critical habitat. (See 50 CFR §402.13(b)). This can entail the initiation of informal consultation with the FWS and/or NMFS (described in more detail in Step Four).

If you adopt measures to avoid or eliminate adverse effects, you must continue to abide by those measures for the duration of the construction project and coverage under the CGP. These measures must be described in the SWPPP and are enforceable CGP conditions and/or conditions for meeting the eligibility criteria in Part 1.3. If appropriate measures to avoid the likelihood of adverse effects are not available, you must follow Step Four.

### **Step Four: Determine if the Eligibility Requirements of Criterion B, C, D, or F of Part 1.3.C.6 Can Be Met**

Where adverse effects are likely, you must contact the FWS and/or NMFS. You may still be eligible for CGP coverage if any likely adverse effects can be addressed through meeting Criterion B, C, D, or F of Part 1.3.C.6 of the CGP. These criteria are as follows:

1. *An ESA Section 7 Consultation Is Performed for Your Activity (See Criterion B or C of Part 1.3.C.6 of the CGP).*

Formal or informal ESA section 7 consultation is performed with the FWS and/or NMFS that addresses the effects of your stormwater discharges and stormwater discharge-related activities on federally-listed and threatened species and designated critical habitat. FWS and/or NMFS may request that consultation take place if any actions are identified that may affect listed species or critical habitat. In order to be eligible for coverage under this permit, consultation must result in a “no jeopardy opinion” or a written concurrence by the Service(s) on a finding that your stormwater discharge(s) and stormwater discharge-related activities are not likely to adversely affect listed species or critical habitat (For more information on consultation, see 50 CFR §402). If you receive a “jeopardy opinion,” you may continue to work with the FWS and/or NMFS and your permitting authority to modify your project so that it will not jeopardize listed species or designated critical habitat.

Most consultations are accomplished through informal consultation. By the terms of this CGP, EPA has automatically designated operators as non-federal representatives for the purpose of conducting informal consultations. See Part 1.3.C.6 and 50 CFR §402.08 and §402.13. When conducting informal ESA section 7 consultation as a non-federal representative, you must follow the procedures found in 50 CFR Part 402 of the ESA regulations. You must notify FWS and/or NMFS of your intention and agreement to conduct consultation as a non-federal representative.

Consultation may occur in the context of another federal action at the construction site (e.g., where ESA section 7 consultation was performed for issuance of a wetlands dredge and fill permit for the project or where a NEPA review is performed for the project that incorporates a section 7 consultation). Any terms and conditions developed through consultations to protect listed species and critical habitat must be incorporated into the SWPPP. As noted above, operators may, if they wish, initiate consultation with the Services at Step Four.

Whether ESA section 7 consultation must be performed with either the FWS, NMFS or both Services depends on the listed species that may be affected by the operator’s activity. In general, NMFS has jurisdiction over marine, estuaries, and anadromous species. Operators should also be aware that while formal section 7 consultation provides protection from incidental takings liability, informal consultation does not.

2. *An Incidental Taking Permit Under Section 10 of the ESA is Issued for the Operators Activity (See Criterion D of Part 1.3.C.6 of the CGP).*

Your construction activities are authorized through the issuance of a permit under section 10 of the ESA and that authorization addresses the effects of your stormwater discharge(s) and stormwater discharge-related activities on federally-listed species and designated critical habitat. You must follow FWS and/or NMFS procedures when applying for an ESA Section 10 permit (see 50 CFR §17.22(b)(1) for FWS and §222.22

for NMFS). Application instructions for section 10 permits for FWS and NMFS can be obtained by accessing the FWS and NMFS websites (<http://www.fws.gov> and <http://www.nmfs.noaa.gov>) or by contacting the appropriate FWS and NMFS regional office.

3. *You are Covered Under the Eligibility Certification of Another Operator for the Project Area (See Criterion F of Part 1.3.C.6 of the CGP).*

Your stormwater discharges and stormwater discharge-related activities were already addressed in another operator's certification of eligibility under Criteria A through E of Part 1.3.C.6 which also included your project area. For example, a general contractor or developer may have completed and filed an NOI for the entire project area with the necessary Endangered Species Act certifications (criteria A-E), subcontractors may then rely upon that certification and must comply with any conditions resulting from that process. By certifying eligibility under Criterion F of Part 1.3.C.6, you agree to comply with any measures or controls upon which the other operator's certification under Criterion B, C, or D of Part 1.3.C.6 was based. Certification under Criterion F of Part 1.3.C.6 is discussed in more detail in the Fact Sheet that accompanies this permit.

You must comply with any terms and conditions imposed under the eligibility requirements of Criterion A through F to ensure that your stormwater discharges and stormwater discharge-related activities are protective of listed species and/or critical habitat. Such terms and conditions must be incorporated in the project's SWPPP. If the eligibility requirements of Part 1.3.C.6 cannot be met, then you are not eligible for coverage under the CGP. In these instances, you may consider applying to EPA for an individual permit.

## Appendix D - Small Construction Waivers and Instructions

These waivers are only available to stormwater discharges associated with small construction activities (i.e., 1-5 acres). As the operator of a small construction activity, you may be able to qualify for a waiver in lieu of needing to obtain coverage under this general permit based on: (A) a low rainfall erosivity factor, (B) a TMDL analysis, or (C) an equivalent analysis that determines allocations for small construction sites are not needed. Each operator, otherwise needing permit coverage, must notify EPA of its intention for a waiver. It is the responsibility of those individuals wishing to obtain a waiver from coverage under this general permit to submit a complete and accurate waiver certification as described below. Where the operator changes or another is added during the construction project, the new operator must also submit a waiver certification to be waived.

### A. Rainfall Erosivity Waiver

Under this scenario the small construction project's rainfall erosivity factor calculation ("R" in the Revised Universal Soil Loss Equation) is less than 5 during the period of construction activity. The operator must certify to the EPA that construction activity will occur only when the rainfall erosivity factor is less than 5. The period of construction activity begins at initial earth disturbance and ends with final stabilization. Where vegetation will be used for final stabilization, the date of installation of a stabilization practice that will provide interim non-vegetative stabilization can be used for the end of the construction period, provided the operator commits (as a condition of waiver eligibility) to periodically inspect and properly maintain the area until the criteria for final stabilization as defined in the construction general permit have been met. If use of this interim stabilization eligibility condition was relied on to qualify for the waiver, signature on the waiver with its certification statement constitutes acceptance of and commitment to complete the final stabilization process. The operator must submit a waiver certification to EPA prior to commencing construction activities.

*Note: The rainfall erosivity factor "R" is determined in accordance with Chapter 2 of Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE), pages 21–64, dated January 1997; United States Department of Agriculture (USDA), Agricultural Research Service.*

EPA has developed an online rainfall erosivity calculator to help small construction sites determine potential eligibility for the rainfall erosivity waiver. You can access the calculator from EPA's website at: [www.epa.gov/npdes/stormwater/lew](http://www.epa.gov/npdes/stormwater/lew). The R factor can easily be calculated by using the construction site latitude/longitude or address and estimated start and end dates of construction. This calculator may also be useful in determining the time periods during which construction activity could be waived from permit coverage. You may find that moving your construction activity by a few weeks or expediting site stabilization will allow you to qualify for the waiver. Use this online calculator or the Construction Rainfall Erosivity Waiver Fact Sheet

([www.epa.gov/npdes/pubs/fact3-1.pdf](http://www.epa.gov/npdes/pubs/fact3-1.pdf)) to assist in determining the R Factor for your small construction site.

If you are the operator of the construction activity and eligible for a waiver based on low erosivity potential, you may submit a rainfall erosivity waiver electronically via EPA's eNOI system ([www.epa.gov/npdes/eNOI](http://www.epa.gov/npdes/eNOI)) or provide the following information on the waiver certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operators;
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The rainfall erosivity factor calculation that applies to the active construction phase at your project site; and
5. A statement, signed and dated by an authorized representative as provided in Appendix G, Subsection 11, that certifies that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five.

You can access the waiver certification form from EPA's website at:

([http://www.epa.gov/npdes/pubs/construction\\_waiver\\_form.pdf](http://www.epa.gov/npdes/pubs/construction_waiver_form.pdf)). Paper copies of the form must be sent to one of the addresses listed in Part D of this section.

*Note: If the R factor is 5 or greater, you cannot apply for the rainfall erosivity waiver, and must apply for permit coverage as per Subpart 2.1 of the construction general permit, unless you qualify for the Water Quality Waiver as described below.*

If your small construction project continues beyond the projected completion date given on the waiver certification, you must recalculate the rainfall erosivity factor for the new project duration. If the R factor is below five (5), you must update all applicable information on the waiver certification and retain a copy of the revised waiver as part of the site SWPPP. The new waiver certification must be submitted prior to the projected completion date listed on the original waiver form to assure your exemption from permitting requirements is uninterrupted. If the new R factor is five (5) or above, you must submit an NOI as per Part 2.

## B. TMDL Waiver

This waiver is available if EPA has established or approved a TMDL that addresses the pollutant(s) of concern and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Information on TMDLs that have been established or approved by EPA is available from EPA online at <http://www.epa.gov/owow/tmdl/> and from state and tribal water quality agencies.

If you are the operator of the construction activity and eligible for a waiver based on compliance with an EPA established or approved TMDL, you must provide the following information on the Waiver Certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the water body(s) that would be receiving stormwater discharges from your construction project;
5. The name and approval date of the TMDL;
6. A statement, signed and dated by an authorized representative as provided in Appendix G, Subsection 11, that certifies that the construction activity will take place and that the stormwater discharges will occur, within the drainage area addressed by the TMDL.

#### C. Equivalent Analysis Waiver

This waiver is available for non-impaired waters only. The operator can develop an equivalent analysis that determines allocations for his small construction site for the pollutant(s) of concern or determines that such allocations are not needed to protect water quality. This waiver requires a small construction operator to develop an equivalent analysis based on existing in-stream concentrations, expected growth in pollutant concentrations from all sources, and a margin of safety.

If you are a construction operator who wants to use this waiver, you must develop your equivalent analysis and provide the following information to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the water bodies that would be receiving stormwater discharges from your construction project;
5. Your equivalent analysis;
6. A statement, signed and dated by an authorized representative as provided in Appendix G, Subsection 11, that certifies that the construction activity will take place and that the stormwater discharges will occur, within the drainage area addressed by the equivalent analysis.

#### D. Waiver Deadlines and Submissions

1. Waiver certifications must be submitted prior to commencement of construction activities.
2. If you submit a TMDL or equivalent analysis waiver request, you are not waived until EPA approves your request. As such, you may not commence construction activities until receipt of approval from EPA.
3. Late Notifications: Operators are not prohibited from submitting waiver certifications after initiating clearing, grading, excavation activities, or other construction activities. The Agency reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and waiver authorization is granted.

Submittal of a waiver certification is an optional alternative to obtaining permit coverage for discharges of stormwater associated with small construction activity, provided you qualify for the waiver. Any discharge of stormwater associated with small construction activity not covered by either a permit or a waiver may be considered an unpermitted discharge under the Clean Water Act. As mentioned above, EPA reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and either discharge authorization is granted or a complete and accurate waiver certification is submitted. EPA may notify any operator covered by a waiver that they must apply for a permit. EPA may notify any operator who has been in non-compliance with a waiver that they may no longer use the waiver for future projects. Any member of the public may petition EPA to take action under this provision by submitting written notice along with supporting justification.

Complete and accurate Rainfall Erosivity waiver certifications not otherwise submitted electronically via EPA's eNOI system ([www.epa.gov/npdes/eNOI](http://www.epa.gov/npdes/eNOI)) must be sent to one of the following addresses:

Regular U.S. Mail Delivery

EPA Stormwater Notice Processing  
Center  
Mail Code 4203M  
U.S. EPA  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Overnight/Express Mail Delivery

EPA Stormwater Notice Processing  
Center  
Room 7420  
U.S. EPA  
1201 Constitution Avenue, NW  
Washington, DC 20004

Complete and accurate TMDL or equivalent analysis waiver requests must be sent to the applicable EPA Region office specified in Appendix B.

**Appendix E - Notice of Intent Form and Instructions**

From the effective date of this permit, operators are to use the Notice of Intent Form contained in this Appendix to obtain permit coverage.





**Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit**

NPDES Form Date

This Form Replaces Form 3510-9 (8/98)

Form Approved OMB Nos. 2040-0188 and 2040-0211

**Who Must File an NOI Form**

Under the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et. seq.; the Act), federal law prohibits storm water discharges from certain construction activities to waters of the U.S. unless that discharge is covered under a National Pollutant Discharge Elimination System (NPDES) Permit. Operator(s) of construction sites where one or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least one acre, or any other site specifically designated by the Director, must submit an NOI to obtain coverage under an NPDES general permit. Each person, firm, public organization, or any other entity that meets either of the following criteria must file this form: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have day-to-day operational control of those activities at the project necessary to ensure compliance with SWPPP requirements or other permit conditions. If you have questions about whether you need an NPDES storm water permit, or if you need information to determine whether EPA or your state agency is the permitting authority, refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) or telephone the Storm Water Notice Processing Center at (866) 352-7755.

**Where to File NOI Form**

See the applicable CGP for information on where to send your completed NOI form.

**Completing the Form**

Obtain and read a copy of the appropriate EPA Storm Water Construction General Permit for your area. To complete this form, type or print uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) or telephone the Storm Water Notice Processing Center at (866) 352-7755. Please submit original document with signature in ink. Do not send a photocopied signature.

**Section I. Permit Number**

Provide the number of the permit under which you are applying for coverage (see Appendix B of the general permit for the list of eligible permit numbers).

**Section II. Operator Information**

Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this application. An operator of a project is a legal entity that controls at least a portion of site operations and is not necessarily the site manager. Provide the employer identification number (EIN from the Internal Revenue Service;

IRS), also commonly referred to as your taxpayer ID. If the applicant does not have an EIN enter "NA" in the space provided. Also provide the operator's mailing address, telephone number, fax number (optional) and e-mail address (to be notified via e-mail of NOI approval when available). Correspondence for the NOI will be sent to this address.

**Section III. Project/Site Information**

Enter the official or legal name and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.

The applicant must also provide the latitude and longitude of the facility either in degrees, minutes, seconds; degrees, minutes, decimal; or decimal format. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic or quadrangle maps, and EPA's web-based siting tools, among others. Refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) for further guidance on the use of these methodologies. For consistency, EPA requests that measurements be taken from the approximate center of the construction site. Applicants must specify which method they used to determine latitude and longitude. If a U.S.G.S. topographic map is used, applicants are required to specify the scale of the map used.

Indicate whether the project is in Indian country, and if so, provide the name of the Reservation. If the project is in Indian Country Lands that are not part of a Reservation, indicate "not applicable" in the space provided.

Enter the estimated construction start and completion dates using four digits for the year (i.e., 05/27/1998). Enter the estimated area to be disturbed including but not limited to: grubbing, excavation, grading, and utilities and infrastructure installation. Indicate to the nearest quarter acre. Note: 1 acre = 43,560 sq. ft.

**Section IV. SWPPP Information**

Indicate whether or not the SWPPP was prepared in advance of filing the NOI form. Check the appropriate box for the location where the SWPPP may be viewed. Provide the name, fax number (optional), and e-mail address of the contact person if different than that listed in Section II of the NOI form.

**Section V. Discharge Information**

Enter the name(s) of receiving waterbodies to which the project's storm water will discharge. These should be the first bodies of water that the discharge will reach. (Note: If you discharge to more than one waterbody, please indicate all such waters in the space provided and attach a separate sheet if necessary.) For example, if the discharge leaves your

**Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit**

NPDES Form Date

This Form Replaces Form 3510-9 (8/98)

Form Approved OMB Nos. 2040-0188 and 2040-0211

site and travels through a roadside swale or a storm sewer and then enters a stream that flows to a river, the stream would be the receiving waterbody. Waters of the U.S. include lakes, streams, creeks, rivers, wetlands, impoundments, estuaries, bays, oceans, and other surface bodies of water within the confines of the U.S. and U.S. coastal waters. Waters of the U.S. do not include man-made structures created solely for the purpose of wastewater treatment. U.S. Geological Survey topographical maps may be used to make this determination. If the map does not provide a name, use a format such as "unnamed tributary to Cross Creek". If you discharge into a municipal separate storm sewer system (MS4), you must identify the waterbody into which that portion of the storm sewer discharges. That information should be readily available from the operator of the MS4.

Indicate whether your storm water discharges from construction activities will be consistent with the assumptions and requirements of applicable EPA approved or established TMDL(s). To answer this question, refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) for state- and regional-specific TMDL information related to the construction general permit. You may also have to contact your EPA regional office or state agency. If there are no applicable TMDLs or no related requirements, please check the "yes" box in the NOI form.

**Section VI. Endangered Species Information**

Indicate for which criterion (i.e., A, B, C, D, E, or F) of the permit the applicant is eligible with regard to protection of federally listed endangered and threatened species, and designated critical habitat. See Part 1.3.C.6 and Appendix C of the permit. If you select criterion F, provide the permit tracking number of the operator under which you are certifying eligibility. The permit tracking number is the number assigned to the operator by the Storm Water Notice Processing Center after EPA acceptance of a complete NOI.

**Section VII. Certification Information**

All applications, including NOIs, must be signed as follows:  
*For a corporation:* By a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or

delegated to the manager in accordance with corporate procedures.

*For a partnership or sole proprietorship:* By a general partner or the proprietor, respectively; or

*For a municipality, state, federal, or other public agency:* By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

Include the name, title, and email address of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered eligible for permit coverage. If the NOI was prepared by someone other than the certifier (for example, if the NOI was prepared by the facility SWPPP contact or a consultant for the certifier's signature), include the name, organization, phone number and email address of the NOI preparer.

**Paperwork Reduction Act Notice**

Public reporting burden for this application is estimated to average 3.7 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch 2136, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address.

**Visit this website for mailing instructions:**

[www.epa.gov/npdes/stormwater/mail](http://www.epa.gov/npdes/stormwater/mail)

**Visit this website for instructions on how to submit electronically:**

[www.epa.gov/npdes/stormwater/enoi](http://www.epa.gov/npdes/stormwater/enoi)

**Appendix F - Notice of Termination Form and Instructions**

From the effective date of this permit, operators are to use the Notice of Termination Form contained in this Appendix to terminate permit coverage.



Instructions for Completing EPA Form 3510-13

**Notice of Termination (NOT) of Coverage Under an NPDES General Permit for Stormwater Discharges Associated with Construction Activity**

NPDES Form

This Form Replaces Form 3517-7 (8-98)

Form Approved OMB Nos. 2040-0086 and 2040-0211

**Who May File an NOT Form**

Permittees who are presently covered under the EPA-issued National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction Activity may submit an NOT form when final stabilization has been achieved on all portions of the site for which you are responsible; another operator has assumed control in accordance with Appendix G, Section 11.C of the General Permit over all areas of the site that have not been finally stabilized; coverage under an alternative NPDES permit has been obtained; or for residential construction only, temporary stabilization has been completed and the residence has been transferred to the homeowner.

"Final stabilization" means that all soil disturbing activities at the site have been completed and that a uniform perennial vegetative cover with a density of at least 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed. See "final stabilization" definition in Appendix A of the Construction General Permit for further guidance where background native vegetation covers less than 100 percent of the ground, in arid or semi-arid areas, for individual lots in residential construction, and for construction projects on land used for agricultural purposes.

**Completing the Form**

Type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use only one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions about this form, refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) or telephone the Stormwater Notice Processing Center at (866) 352-7755. Please submit original document with signature in ink - do not send a photocopied signature.

**Section I. Permit Number**

Enter the existing NPDES Stormwater General Permit Tracking Number assigned to the project by EPA's Stormwater Notice Processing Center. If you do not know the permit tracking number, refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) or contact the Stormwater Notice Processing Center at (866) 352-7755.

Indicate your reason for submitting this Notice of Termination by checking the appropriate box. Check only one:

*Final stabilization has been achieved on all portions of the site for which you are responsible.*

*Another operator has assumed control according to Appendix G, Section 11.C over all areas of the site that have not been finally stabilized.*

*Coverage under an alternative NPDES permit has been obtained.*

*For residential construction only, if temporary stabilization has been completed and the residence has been transferred to the homeowner.*

**Section II. Operator Information**

Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this application and is covered by the permit tracking number identified in Section I. The operator of the project is the legal entity that controls the site operation, rather than the site manager. Provide the employer identification number (EIN from the Internal Revenue Service; IRS). If the applicant does not have an EIN enter "NA" in the space provided. Enter the

complete mailing address, telephone number, and email address of the operator. Optional: enter the fax number of the operator.

**Section III. Project/Site Information**

Enter the official or legal name and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for termination of permit coverage to be valid.

**Section IV. Certification Information**

All applications, including NOIs, must be signed as follows:  
*For a corporation:* By a responsible corporate officer. For the purpose of this Part, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

*For a partnership or sole proprietorship:* By a general partner or the proprietor, respectively; or

*For a municipality, state, federal, or other public agency:* By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

Include the name, title, and email address of the person signing the form and the date of signing. An unsigned or undated NOT form will not be considered valid termination of permit coverage.

**Paperwork Reduction Act Notice**

Public reporting burden for this application is estimated to average 0.5 hours per notice, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include the OMB number on any correspondence. Do not send the completed form to this address.

Visit this website for mailing instruction:  
[www.epa.gov/npdes/stormwater/mail](http://www.epa.gov/npdes/stormwater/mail)

Visit this website for instructions on how to submit electronically:  
[www.epa.gov/npdes/stormwater/enoi](http://www.epa.gov/npdes/stormwater/enoi)

**Appendix G - Standard Permit Conditions**  
**STANDARD PERMIT CONDITIONS**

**1. Duty To Comply**

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

- A. You must comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- B. The Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. §2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. §3701 note) (currently \$27,500 per day for each violation).

The Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

C. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Pursuant to 40 CFR Part 19 and the Act, administrative penalties for Class I violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. §2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. §3701 note) (currently \$11,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$27,500). Pursuant to 40 CFR Part 19 and the Act, penalties for Class II violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. §2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. §3701 note) (currently \$11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$137,500).

**2. Duty to Reapply**

If you wish to continue an activity regulated by this permit after the expiration date of this permit, you must apply for and obtain a new permit.

**3. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for you in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**4. Duty to Mitigate**

You must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

**5. Proper Operation and Maintenance**

You must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by you to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by you only when the operation is necessary to achieve compliance with the conditions of this permit.

**6. Permit Actions**

This permit may be modified, revoked and reissued, or terminated for cause. Your filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

**7. Property Rights**

This permit does not convey any property rights of any sort, or any exclusive privileges.

**8. Duty to Provide Information**

You must furnish to EPA, within a reasonable time, any information which EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. You must also furnish to EPA upon request, copies of records required to be kept by this permit.

## **9. Inspection and Entry**

You must allow EPA, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- A. Enter upon your premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

## **10. Monitoring and Records**

- A. Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.
- B. You must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of EPA at any time.
- C. Records of monitoring information must include:
  - 1. The date, exact place, and time of sampling or measurements;
  - 2. The individual(s) who performed the sampling or measurements;
  - 3. The date(s) analyses were performed
  - 4. The individual(s) who performed the analyses;
  - 5. The analytical techniques or methods used; and
  - 6. The results of such analyses.
- D. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in the permit.
- E. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

## **11. Signatory Requirements**

- A. All applications, including NOIs, must be signed as follows:
  - 1. For a corporation: By a responsible corporate officer. For the purpose of this Part, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any

- other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
2. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
  3. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).
- B. All reports required by this permit, including SWPPPs, must be signed by a person described in Appendix G, Subsection 11.A above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
1. The authorization is made in writing by a person described in Appendix G, Subsection 11.A;
  2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
  3. The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.
- C. Changes to Authorization. If an authorization under Part 2.1 is no longer accurate because a different operator has responsibility for the overall operation of the construction site, a new NOI satisfying the requirements of Part 2.1 must be submitted to EPA prior to or together with any reports, information, or applications to be signed by an authorized representative. The change in authorization must be submitted within the time frame specified in Part 2.4, and sent to the address specified in Part 2.2.
- D. Any person signing documents required under the terms of this permit must include the following certification:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons

directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

- E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

## **12. Reporting Requirements**

- A. **Planned changes.** You must give notice to EPA as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b); or
  2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR §122.42(a)(1).
- B. **Anticipated noncompliance.** You must give advance notice to EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- C. **Transfers.** This permit is not transferable to any person except after notice to EPA. EPA may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See 40 CFR §122.61; in some cases, modification or revocation and reissuance is mandatory.)
- D. **Monitoring reports.** Monitoring results must be reported at the intervals specified elsewhere in this permit.
1. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by EPA for reporting results of monitoring of sludge use or disposal practices.
  2. If you monitor any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by EPA.
  3. Calculations for all limitations which require averaging of measurements must use an arithmetic mean.
- E. **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.
- F. **Twenty-four hour reporting.**

1. You must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time you become aware of the circumstances. A written submission must also be provided within five days of the time you become aware of the circumstances. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
  2. The following shall be included as information which must be reported within 24 hours under this paragraph.
    - a. Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR §122.41(g).)
    - b. Any upset which exceeds any effluent limitation in the permit
    - c. Violation of a maximum daily discharge limitation for any of the pollutants listed by EPA in the permit to be reported within 24 hours. (See 40 CFR §122.44(g).)
  13. EPA may waive the written report on a case-by-case basis for reports under Appendix G, Subsection 12.F.2 if the oral report has been received within 24 hours.
- G. Other noncompliance. You must report all instances of noncompliance not reported under Appendix G, Subsections 12.D, 12.E, and 12.F, at the time monitoring reports are submitted. The reports must contain the information listed in Appendix G, Subsection 12.F.
- H. Other information. Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permitting Authority, you must promptly submit such facts or information.

### **13. Bypass**

#### **A. Definitions.**

1. Bypass means the intentional diversion of waste streams from any portion of a treatment facility
2. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

#### **B. Bypass not exceeding limitations.** You may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Appendix G, Subsections 13.C and 13.D.

#### **C. Notice—**

1. Anticipated bypass. If you know in advance of the need for a bypass, you must submit prior notice, if possible at least ten days before the date of the bypass.
2. Unanticipated bypass. You must submit notice of an unanticipated bypass as required in Appendix G, Subsection 12.F (24-hour notice).

D. Prohibition of bypass.

1. Bypass is prohibited, and EPA may take enforcement action against you for bypass, unless:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - c. You submitted notices as required under Appendix G, Subsection 13.C.
2. EPA may approve an anticipated bypass, after considering its adverse effects, if EPA determines that it will meet the three conditions listed above in Appendix G, Subsection 13.D.1.

**14. Upset**

- A. Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- B. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Appendix G, Subsection 14.C are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- C. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  1. An upset occurred and that you can identify the cause(s) of the upset;
  2. The permitted facility was at the time being properly operated; and
  3. You submitted notice of the upset as required in Appendix G, Subsection 12.F.2.b(24 hour notice).
  4. You complied with any remedial measures required under Appendix G, Section 4.
- D. Burden of proof. In any enforcement proceeding, you, as the one seeking to establish the occurrence of an upset, has the burden of proof.

Attachment 2

Spill Report Form

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**CAPE WIND PROJECT  
Yarmouth and Barnstable, Massachusetts  
Storm Water Pollution Prevention Plan**

**SPILL REPORT FORM**

Observer: \_\_\_\_\_ Date: \_\_\_\_\_

Type of Material: \_\_\_\_\_ Quantity: \_\_\_\_\_

Description of Release:

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Circumstances Leading to Release:

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Location of Release:

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Response Actions:

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Attach documentation of notification and corrective measures implemented to prevent reoccurrence.

**CAPE WIND PROJECT  
Yarmouth and Barnstable, Massachusetts  
Storm Water Pollution Prevention Plan**

**SPILL CLEAN-UP REPORT**

Start Date and Time: \_\_\_\_\_ Finish Date and Time: \_\_\_\_\_

Clean-up Contractor Name: \_\_\_\_\_

Street Address:  
\_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Spill Type and Description:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Amount of Material(s) Removed:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Material Disposal Location:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Street Address:  
\_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

I certify that the clean up was performed and completed on the above listed dates in accordance with the applicable state laws and regulations and if required the appropriate state agencies were contacted and notified of a spill.

Site Operator Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## Attachment 3

# Emergency Contact Information

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**EMERGENCY NOTIFICATION PHONE NUMBERS**

1. PROJECT SUPERINTENDANT  
NAME: -- \_\_\_\_\_ CELL: \_\_\_\_\_  
OFFICE: -- \_\_\_\_\_ HOME PHONE: \_ \_\_\_\_\_  
  
PROJECT MANAGER:  
NAME: - \_\_\_\_\_ Cell: \_ \_\_\_\_\_  
OFFICE: - \_\_\_\_\_ HOME PHONE: \_ \_\_\_\_\_  
  
GENERAL SUPERINTENDANT:  
NAME: - \_\_\_\_\_ Cell: \_ \_\_\_\_\_  
OFFICE: ( ) \_\_\_\_\_ HOME PHONE: ( ) \_\_\_\_\_
2. YARMOUTH FIRE DEPARTMENT  
GENERAL NUMBER: 911/ (508) 398-2211
3. BARNSTABLE FIRE DEPARTMENT  
GENERAL NUMBER: 911/ (508) 362-3312
4. MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SPILL REPORT: (617) 556-1000  
SOUTHEAST REGION: (508) 946-2718
5. NATIONAL RESPONSE CENTER  
PHONE: (800) 424-8802  
  
ALTERNATE: U.S. ENVIRONMENTAL PROTECTION AGENCY  
EMERGENCY: (617) 223-7265  
BUSINESS: (617) 860-4300
6. YARMOUTH CONSERVATION COMMISSION  
PHONE: (508) 398-2231, Ext. 288
7. YARMOUTH DEPARTMENT OF PUBLIC WORKS  
PHONE: (508) 398-2231 Ext. Ext. 290
8. BARNSTABLE CONSERVATION COMMISSION  
PHONE: (508) 862-4093



Attachment 4

Inspection and Maintenance  
Form

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**CAPE WIND PROJECT  
Yarmouth and Barnstable, Massachusetts  
Storm Water Pollution Prevention Plan**

**INSPECTION AND MAINTENANCE REPORT FORM**

To be completed every 7 days and within 24 hours of a rainfall event of 0.5 inches or more.

Inspector: \_\_\_\_\_

Date: \_\_\_\_\_

Days since last rainfall: \_\_\_\_\_

Amount of last rainfall: \_\_\_\_\_ inches

**Stabilization Measures**

<b>Date Since Last Disturbance</b>	<b>Date of Next Disturbance</b>	<b>Stabilized (Yes/No)</b>	<b>Stabilized With</b>	<b>Condition</b>

Stabilization required:

To be performed by: \_\_\_\_\_

On or before: \_\_\_\_\_

**CAPE WIND PROJECT  
Yarmouth and Barnstable, Massachusetts  
Storm Water Pollution Prevention Plan**

**INSPECTION AND MAINTENANCE REPORT FORM**

**Sediment Basins**

<b>Depth of Sediment Basin</b>	<b>Condition of Basin Side Slopes</b>	<b>Any Evidence of Overtopping of the Embankment</b>	<b>Condition of Outfall from Sediment Basin</b>

Maintenance required for sediment basin:

To be preformed by: \_\_\_\_\_

On or before: \_\_\_\_\_

**Other Controls  
Stabilized Construction Entrance**

<b>Does Much Sediment Get Tracked on to Road?</b>	<b>Is the Gravel Clean or is it Filled with Sediment?</b>	<b>Does all Traffic use the Stabilized Entrance to Leave the Site?</b>

Maintenance required for stabilized construction entrance:

To be preformed by: \_\_\_\_\_

On or before: \_\_\_\_\_

**CAPE WIND PROJECT  
Yarmouth and Barnstable, Massachusetts  
Storm Water Pollution Prevention Plan**

**INSPECTION AND MAINTENANCE REPORT FORM**

**Perimeter Structural Controls**

Date: \_\_\_\_\_

**Silt Fence and Haybales**

<b>Has Silt Reached 1/3 of Fence Height?</b>	<b>Is Fence Properly Secured?</b>	<b>Is There Evidence of Washout or Over-topping?</b>

Maintenance required for silt fence and hay bales:

To be performed by: \_\_\_\_\_

On or before: \_\_\_\_\_

**CAPE WIND PROJECT  
Yarmouth and Barnstable, Massachusetts  
Storm Water Pollution Prevention Plan**

**INSPECTION AND MAINTENANCE REPORT FORM**

**Stormwater Structural Controls**

Date: \_\_\_\_\_

**Stormwater Conveyance Channels**

Are the Rocks in Place?	Is the Grass Damaged?	Is Woody Vegetation or Weeds a Problem?

Maintenance required for stormwater conveyance channels:

To be preformed by: \_\_\_\_\_

On or before: \_\_\_\_\_

**Temporary Earth Berms or Diversions**

Depth of Berm/Diversion	Condition of Side Slopes	Is it Stabilized?	Condition of Outfall to Sediment Basin

Maintenance required for temporary earth berms or diversions:

To be preformed by: \_\_\_\_\_

On or before: \_\_\_\_\_

**CAPE WIND PROJECT  
Yarmouth and Barnstable, Massachusetts  
Storm Water Pollution Prevention Plan**

**INSPECTION AND MAINTENANCE REPORT FORM**

Changes required to the pollution prevention plan:

Reasons for changes:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Attachment 5

SWPPP Amendment Log





Attachment 6

Project Plan Set

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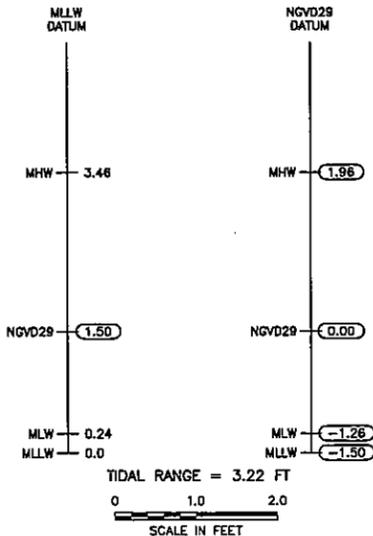


**GENERAL NOTES:**

- EXISTING GROUND FEATURES AND TOPOGRAPHY WERE TAKEN FROM THE FOLLOWING SOURCES:
  - TOWN OF BARNSTABLE GEOGRAPHIC INFORMATION SYSTEMS UNIT.
  - TOWN OF YARMOUTH GEOGRAPHIC INFORMATION SYSTEMS UNIT.

AND DO NOT REPRESENT THE RESULTS OF ACTUAL "ON-GROUND" PHYSICAL SURVEY AND THEREFORE ARE ONLY APPROXIMATE.
- EXISTING GROUND FEATURES AND TOPOGRAPHY FOR PORTIONS OF HIGGINS CROWELL ROAD AND ROUTE 6/WILLOW STREET INTERCHANGE WERE TAKEN FROM THE FOLLOWING PLANS:
  - TOWN OF YARMOUTH DEPARTMENT OF PUBLIC WORKS PLAN AND PROFILE OF HIGGINS CROWELL ROAD IN THE TOWN OF YARMOUTH, MASSACHUSETTS, BARNSTABLE COUNTY (NOT DATED) BY M.S. TRANSPORTATION SYSTEMS, INC.
  - THE COMMONWEALTH OF MASSACHUSETTS HIGHWAY DEPARTMENT PLAN AND PROFILE OF WILLOW STREET IN THE TOWN OF YARMOUTH, MASSACHUSETTS, BARNSTABLE COUNTY, 25% REVIEW DATED APRIL 2000, BY M.S. TRANSPORTATION SYSTEMS, INC.
  - THE TOWN OF YARMOUTH DEPARTMENT OF PUBLIC WORKS PLAN AND PROFILE OF RELOCATED HIGGINS CROWELL ROAD IN THE TOWN OF YARMOUTH, MASSACHUSETTS, BARNSTABLE COUNTY (UNDATED) BY M.S. TRANSPORTATION SYSTEMS, INC.
  - THE MANUICKET SOUND AND APPROACHES AREA REFERENCES ARE TAKEN FROM NOAA CHART #13237, DATED 39TH EDITION, MAY '03. THE LEWIS BAY REFERENCES ARE TAKEN FROM NOAA CHART #13229, DATED COPYRIGHT 1999.
- EXISTING GROUND FEATURES AND TOPOGRAPHY AT THE NEW HAMPSHIRE AVENUE LANDFALL WERE TAKEN FROM A PLAN ENTITLED "AS-BUILT SITE PLAN OF LAND IN (WEST) YARMOUTH, MA PREPARED FOR ENERGY MANAGEMENT, INC. #43 SHORE ROAD AND NEW HAMPSHIRE AVE." DATED 11/02/01, PREPARED BY DOWN CAPE ENGINEERING, INC.
- PROPERTY LINE AND RIGHT-OF-WAY INFORMATION WAS COMPILED FROM TOWN OF BARNSTABLE AND TOWN OF YARMOUTH ASSESSOR'S MAPS AND ARE ONLY APPROXIMATE.
- ADJUTER INFORMATION (NOW OR FORMERLY) WERE TAKEN FROM INFORMATION PROVIDED TO ESS GROUP, INC. BY THE TOWN OF YARMOUTH GIS.
- PORTIONS OF THE PROJECT LIMITS ARE LOCATED WITHIN FLOOD HAZARD ZONES A12 AND V15 WITH 100-YEAR FLOOD ELEVATIONS VARYING FROM ELEV. 10 TO ELEV. 13 FEET-NGVD OF 1929. REFERENCE: FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR THE TOWN OF YARMOUTH, MASSACHUSETTS, BARNSTABLE COUNTY, COMMUNITY PANEL NUMBER 250015 00050, MAP REVISED JULY 2, 1992.
- VERTICAL DATUM REFERS TO NATIONAL GEODETIC VERTICAL DATUM (NGVD) OF 1929, UNLESS OTHERWISE NOTED.
- EXISTING UTILITIES SHOWN ON THESE PLANS WERE COMPILED FROM RECORD DRAWINGS, FIELD SURVEYS, AND/OR PREVIOUS CONSTRUCTION DRAWINGS. THIS PLAN DOES NOT NECESSARILY DEPICT THE EXACT LOCATIONS OF ALL UTILITIES, WHICH MAY EXIST AT THIS TIME WITHIN THE PROJECT LIMITS. THERE MAY BE EXISTING LINES OTHER THAN THOSE INDICATED. THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY UTILITY CONNECTIONS OR CROSSINGS OF PROPOSED OR EXISTING UTILITIES. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER. THE CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES RELATIVE TO THE LOCATIONS AND ELEVATIONS OF THESE LINES. NO SEPARATE OR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR DUE TO ANY VARIANCE BETWEEN THE DATA SHOWN ON THE PLANS AND ACTUAL FIELD CONDITIONS ENCOUNTERED. THE CONTRACTOR IS RESPONSIBLE FOR HIS/HER OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE EXISTING UTILITIES AS MAY BE NECESSARY TO AVOID THEIR DAMAGE AND TO FACILITATE THE PROPOSED CONNECTION(S).
- PLANS ARE NOT INTENDED FOR CONSTRUCTION. ENGINEER'S CERTIFICATION IS FOR PERMITTING PURPOSES ONLY.

**VERTICAL DATUM RELATIONSHIPS IN FEET  
(HYANNIS HARBOR - HYANNISPORT)  
(NOAA TIDAL BENCHMARK NO. 8447605)**



**NOTE:**  
NO ACCEPTED REFERENCE BETWEEN MLLW AND NGVD29 EXISTS AT THIS LOCATION. RELATIONSHIPS ESTIMATED BASED ON OTHER CAPE COD LOCATIONS. ENCIRCLED NUMBERS ARE ESTIMATED.

**CONSTRUCTION NOTES:**

- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE. PRIOR TO ANY EXCAVATION THE CONTRACTOR SHALL MAKE THE REQUIRED 72-HOUR NOTIFICATION TO DIG-SAFE (1-888-344-7233) AND ANY OTHER UTILITIES WHICH MAY HAVE CABLE, PIPE, OR EQUIPMENT WITHIN THE CONSTRUCTION AREAS FOR VERIFICATION OF LOCATIONS.
- THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE AGENCIES AND UTILITY COMPANIES, IN WRITING, 72-HOURS PRIOR TO ANY CONSTRUCTION.
- WORK WITHIN PUBLIC WAYS SHALL COMPLY WITH APPLICABLE MUNICIPAL AND STATE REQUIREMENTS.
- PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAKING ALL NECESSARY ARRANGEMENTS AND FOR PERFORMING ANY NECESSARY WORK INVOLVED IN CONNECTION WITH THE DISCONTINUANCE OR JURISDICTION OF THE UTILITY COMPANIES, SUCH AS ELECTRICITY, TELEPHONE, WATER AND ANY SYSTEM OR SYSTEMS WHICH WILL BE AFFECTED BY THE WORK TO BE PERFORMED UNDER THIS CONTRACT.
- UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER, THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES.
- THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN EXCAVATING AND BACKFILLING IN THE VICINITY OF EXISTING UTILITIES, INCLUDING BUT NOT LIMITED TO SHORING AND THE USE OF HAND EXCAVATION WHERE APPROPRIATE.
- ALL EXISTING PIPING AND STRUCTURES EXPOSED DURING EXCAVATION SHALL BE ADEQUATELY SUPPORTED, BRACED, OR OTHERWISE PROTECTED DURING CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE REQUIREMENTS OF ALL GOVERNING CODES AND REGULATIONS.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
- NO CHANGES ARE TO BE MADE UNLESS AUTHORIZED BY THE DESIGN ENGINEER.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL SAFETY CODES, REGULATIONS, LEGAL REQUIREMENTS, PERMIT CONDITIONS, ETC.
- CONSTRUCTION SEQUENCE SHALL BE COORDINATED TO MINIMIZE DISTURBANCE OF EXISTING CONDITIONS.
- IF REQUIRED BY THE CONTRACTOR, OVERHEAD LINES SHALL BE RELOCATED BY THE UTILITY COMPANY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO PROTECT THE EXISTING RAILROAD TRACKS, ALL RETAINING WALLS, WALKS, STREETS, PAVEMENTS, HIGHWAY GUARDS, CURBING, EDGING, TREES AND PLANTINGS ON OR OFF THE PREMISES, AND SHALL REPAIR AND REPLACE OR OTHERWISE MAKE GOOD AT HIS/HER OWN EXPENSE ANY ITEMS DAMAGED AS A RESULT OF THE CONTRACTOR'S WORK.
- THE CONTRACTOR SHALL REMOVE FROM THE PROJECT SITE ALL STUMPS, RUBBISH AND DEBRIS FOUND THEREON. STORAGE OF SUCH MATERIALS ON THE PROJECT SITE WILL NOT BE PERMITTED. ALL MATERIALS TO BE REMOVED AND DISPOSED SHALL BE DISPOSED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS. THE CONTRACTOR SHALL LEAVE THE PROJECT SITE IN SAFE, CLEAN AND LEVEL CONDITION UPON COMPLETION OF THE SITE CLEARANCE WORK.
- ALL SURFACES DISTURBED BY THIS WORK SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AS DETAILED OR AS SPECIFIED BY THE ENGINEER.
- ALL VAULT STRUCTURES IN PAVED AREAS SHALL HAVE THEIR RIMS SET TO FINISHED GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- ALL WORK SHALL COMPLY WITH THE PROJECT'S REGULATORY PERMITS AND AGREEMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SPECIFYING HOW TO "REPAIR, REPLACE, PROTECT, AND MAINTAIN" ALL EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES DURING CONSTRUCTION. THIS SHALL INCLUDE SHOP DRAWING SUBMITTALS TO THE PROJECT ENGINEER.
- UTILITY TRENCHES THAT REQUIRE REPAIRS AND/OR REPLACEMENT OF EXPOSED UNDERGROUND UTILITIES MAY NOT BE BACKFILLED UNTIL THE COMPLETED UTILITY WORK HAS BEEN INSPECTED AND APPROVED BY THE APPROPRIATE UTILITY INSPECTOR.

**COMPILED PLAN REFERENCES:**

- YARMOUTH NOTICE OF INTENT PLANS SUBMARINE AND UPLAND 115KV TRANSMISSION CABLE ROUTE CAPE WIND PROJECT. REVISED PER JUNE 13, 2008. PREPARED FOR: CAPEWIND ASSOCIATES, LLC., 75 ARLINGTON STREET, BOSTON, MASSACHUSETTS 02116.
- YARMOUTH ROAD OPENING PERMIT UPLAND 115KV TRANSMISSION CABLE ROUTE CAPE WIND PROJECT. REVISED PER JUNE 13, 2008. PREPARED FOR: CAPE WIND ASSOCIATES, LLC., 75 ARLINGTON STREET, BOSTON, MASSACHUSETTS 02116.
- BARNSTABLE ROAD OPENING PERMIT UPLAND 115KV TRANSMISSION CABLE ROUTE CAPE WIND PROJECT. DATED OCTOBER 31, 2007. PREPARED FOR: CAPE WIND ASSOCIATES, LLC., 75 ARLINGTON STREET, BOSTON, MASSACHUSETTS 02116.
- PRELIMINARY ENGINEERING PLANS SUBMARINE AND UPLAND 115KV TRANSMISSION CABLE ROUTE CAPE WIND PROJECT. REVISED PER APRIL 13, 2007. PREPARED FOR: CAPE WIND ASSOCIATES, LLC., 75 ARLINGTON STREET, BOSTON, MASSACHUSETTS 02116.
- STATE HIGHWAY ACCESS PERMIT PLANS UPLAND 115KV TRANSMISSION CABLE ROUTE CAPE WIND PROJECT FOR 3 LOCATIONS IN YARMOUTH & BARNSTABLE, MASSACHUSETTS. REVISED PER JUNE 13, 2008. PREPARED FOR: CAPE WIND ASSOCIATES, LLC., 75 ARLINGTON STREET, BOSTON, MASSACHUSETTS 02116.
- EXECUTIVE OFFICE OF TRANSPORTATION (EOT) BAY COLONY RAILROAD CROSSING FOR UPLAND 115KV TRANSMISSION CABLE ROUTE CAPE WIND PROJECT IN YARMOUTH, MASSACHUSETTS. DATED OCTOBER 31, 2007. PREPARED FOR: CAPE WIND ASSOCIATES, LLC., 75 ARLINGTON STREET, BOSTON, MASSACHUSETTS 02116.

**SEDIMENTATION & EROSION CONTROL NOTES:**

- THE CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES, AS SPECIFIED ON THE DRAWINGS AND AS DIRECTED BY THE ENGINEER.
- ALL SOIL AND EROSION CONTROLS SHALL BE PLACED PRIOR TO ANY CONSTRUCTION ACTIVITIES. ALL SOIL AND EROSION CONTROLS SHALL BE CHECKED AND REPAIRED AS NECESSARY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING EROSION CONTROL MEASURES IN ORDER TO PREVENT OFF-SITE TRACKING OF EARTH, SEDIMENT AND DEBRIS.
- AREAS REMAINING UNSTABILIZED FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE TEMPORARILY SEEDED AND MULCHED.
- ALL DISTURBED AREAS NOT OCCUPIED BY PAVEMENT, SIDEWALK OR RIPRAP SHALL BE COVERED WITH 4" (MIN.) OF LOAM AND SEED.
- PERMANENT SEEDING SHALL OCCUR BETWEEN MARCH 1 AND JUNE 15, OR BETWEEN AUGUST 15 AND OCTOBER 15.
- SOILS TO BE STOCKPILED FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE SURROUNDED BY EROSION CONTROL BARRIERS AND TEMPORARILY SEEDED AND MULCHED.
- ALL LOAM STOCKPILE AREAS SHALL BE SURROUNDED BY EROSION CONTROL BARRIERS UNTIL SUCH TIME AS THE LOAM IS RESPIRED AND STABILIZED.
- TEMPORARY STORAGE OF MATERIALS ON-SITE IS TO BE LOCATED GREATER THAN 100 FEET FROM WETLAND AREAS, AND AS APPROVED BY THE ENGINEER. THERE IS TO BE NO LONG TERM STORAGE OF MATERIAL ON-SITE. MATERIAL NOT USED ON-SITE IS TO BE TRUCKED TO AN ACCEPTABLE OFF-SITE DISPOSAL LOCATION.
- EROSION CONTROL MEASURES SHALL BE INSPECTED EVERY WEEK, AND DURING AND AFTER EVERY RAIN EVENT GREATER THAN 0.5 INCHES. ANY NECESSARY REPLACEMENT OR REPAIR SHALL BE PERFORMED PROMPTLY BY THE CONTRACTOR.
- EROSION CONTROL BLANKETS SHALL BE PLACED IN ALL SWALES AND ON ALL SLOPES 2:1 OR STEEPER, AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE DETAILS.
- DUST SHALL BE CONTROLLED AS NECESSARY THROUGH THE USE OF WATER. THE USE OF CALCIUM CHLORIDE FOR DUST CONTROL IS NOT ALLOWED, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL PHASE CONSTRUCTION TO MINIMIZE THE AREA OF DISTURBED EARTH OPEN TO THE ELEMENTS AT ANY GIVEN TIME. THIS SHALL BE ACHIEVED BY THE FOLLOWING METHODS OR OTHER BEST MANAGEMENT PRACTICES (BMP'S):
  - LOADING AND SEEDING CUT SLOPES IMMEDIATELY UPON COMPLETION OF SUBGRADE PREPARATION.
  - PLACING AND COMPACTING PAVEMENT GRAVEL BASE AND SUBBASE IMMEDIATELY UPON COMPLETION OF SUBGRADE PREPARATION.
  - LIMITING STRIPPING AND STOCKPILING OF LOAM TO AREAS SLATED FOR IMMEDIATE CONSTRUCTION AND STABILIZATION (I.E., PLACEMENT OF GRAVELS, LOAM AND SEED, EROSION CONTROL MATTING, ETC.).
- THE CONTRACTOR SHALL ADHERE TO ALL REQUIREMENTS OF THE ORDERS OF CONDITIONS ISSUED BY THE TOWN OF YARMOUTH CONSERVATION COMMISSION AND THE TOWN OF BARNSTABLE CONSERVATION COMMISSION.

**NATURAL HERITAGE (NHESP) HABITAT KEY:**

- EH 821** NHESP ESTIMATED HABITATS OF RARE WILDLIFE
- PH 1232** NHESP PRIORITY HABITATS OF RARE SPECIES
- — — — — APPROXIMATE HABITAT BOUNDARY

**RESOURCE AREA LEGEND:**

- EDGE OF BORDERING VEGETATED WETLANDS
- WETLAND FLAG
- TRENCH LIMITS
- 35' VEGETATED BUFFER
- 50' NO-BUILD ZONE
- 100' BUFFER ZONE
- PROPOSED HAYBALES AND SILT FENCE

**ABBREVIATIONS:**

- L.O.W. LIMIT OF WORK
- SHLO STATE HIGHWAY LAYOUT
- R.O.W. RIGHT OF WAY
- N/F NOW OR FORMERLY
- LSCSF LAND SUBJECT TO COASTAL STORM FLOWAGE
- NHESP NATURAL HERITAGE & ENDANGERED SPECIES PROGRAM

**ESS Group Inc.**  
Engineers  
Scientists  
Consultants

888 Worcester Street, Suite 240  
Wellesley, Massachusetts 02482  
p 781.431.0500  
f 781.431.7434  
www.essgroup.com

NO.	REVISION	DATE	APP. BY

DRAWN BY: KGW      CHECKED BY: FRW  
DESIGNED BY: RAM      APPROVED BY:

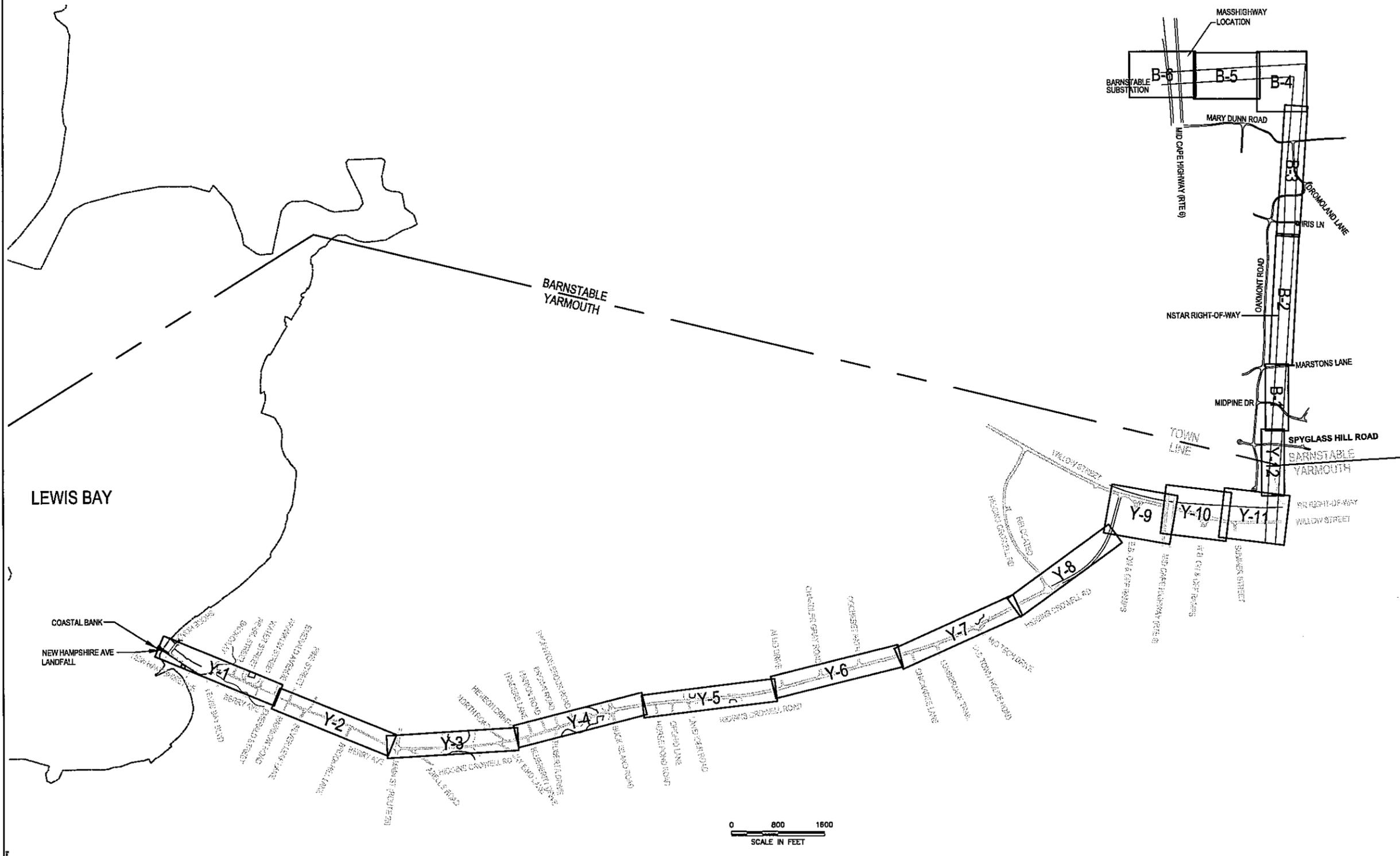
CAPE WIND ASSOCIATES, LLC

CAPE WIND PROJECT

COMPILED PLAN SET OF  
THE UPLAND 115KV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

**NOTES & LEGEND**

PROJECT No.: C159-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>N-1</b>
SHEET No.:	
SCALE: 1"=40'	



**ESS Group Inc.**  
Engineers  
Scientists  
Consultants

888 Worcester Street, Suite 240  
Wellesley, Massachusetts 02482  
p 781.431.0500  
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No.	REVISION	DATE	APP BY

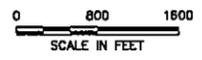
CAPE WIND ASSOCIATES, LLC

**CAPE WIND PROJECT**

COMPILED PLAN SET OF  
THE UPLAND 115KV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

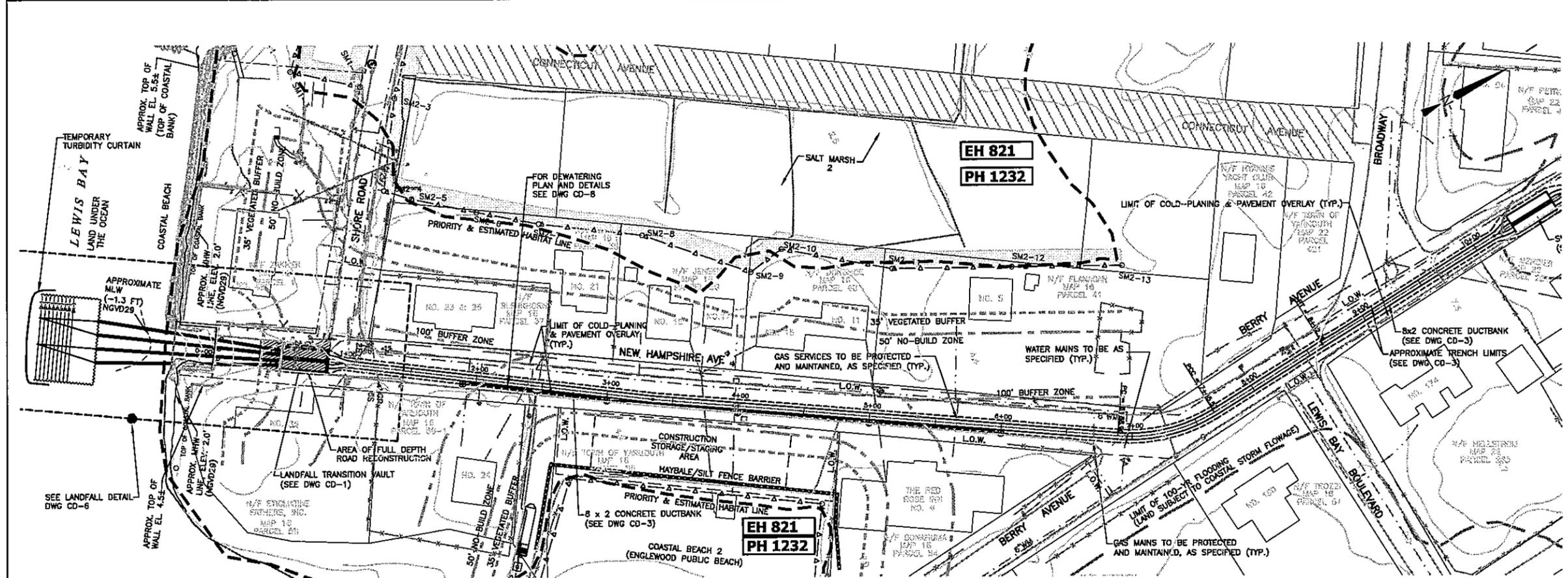
**KEY PLAN**

PROJECT No.: E158-50410	DRAWING No. <b>KP-1</b>
DATE OF ISSUE: 02/26/10	SHEET No.:
SCALE: 1"=40'	



FOR PERMITTING PURPOSES ONLY

DATE: Jan 27, 2010 - 12:31 PM



VERTICAL DATUM RELATIONSHIPS IN FEET  
(HYANNIS HARBOR - HYANNISPORT)  
(NOAA TIDAL BENCHMARK NO. 8447602)

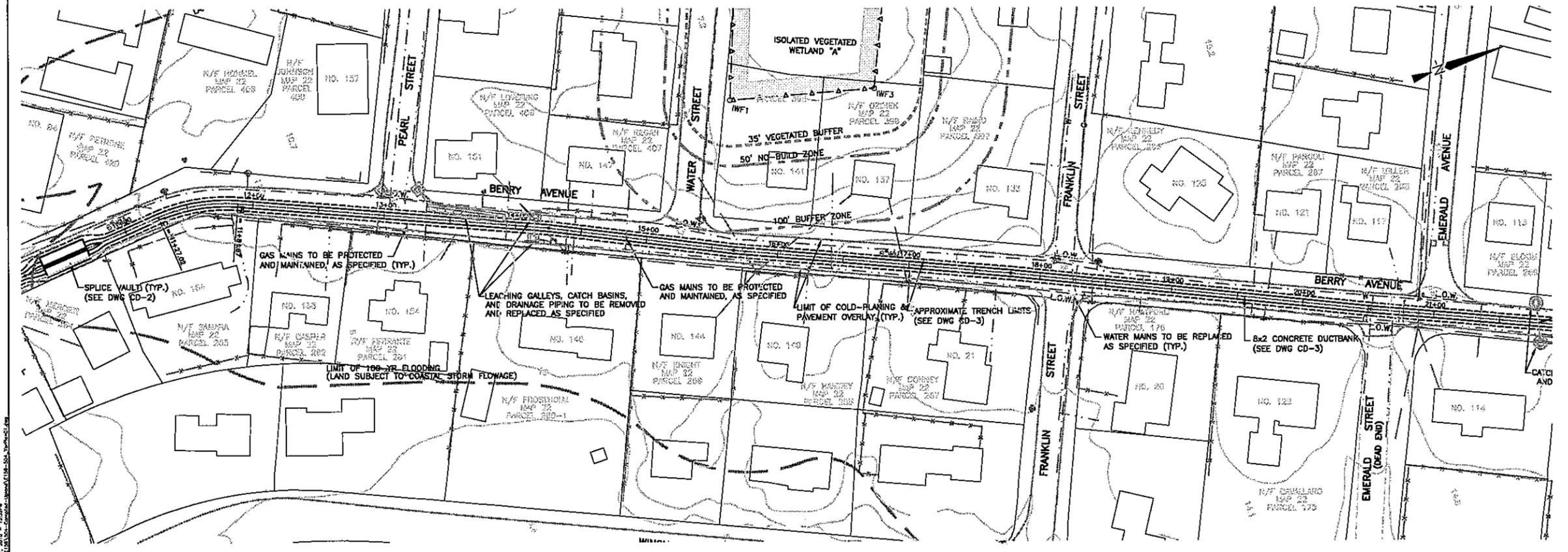
MLW DATUM	NOV02S DATUM
MHW - 3.48	MHW - 1.28
NOV02S - 1.28	NOV02S - 1.28
MLW - 0.24	MLW - 1.28
MLW - 0.0	MLW - 1.28

TIDAL RANGE = 3.22 FT

NOTE:  
NO ACCEPTED RELATIONSHIP BETWEEN MLW AND NOV02S DATUMS AT THIS LOCATION. RELATIONSHIPS ESTIMATED BASED ON OTHER CAPE WIND LOCATIONS. ENCLOSED NUMBERS ARE ESTIMATED.

WORK AREAS ON THIS SHEET  
UNDER MWPA JURISDICTION  
LEWIS BAY  
STA. 0+00 TO STA. 10+53

0 40 80  
SCALE IN FEET



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f 781.431.7434  
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No.	REVISION	DATE	APP BY
1	DESIGNED BY: RAH		APPROVED BY:
2	DRAWN BY: KCW		CHECKED BY: PRW

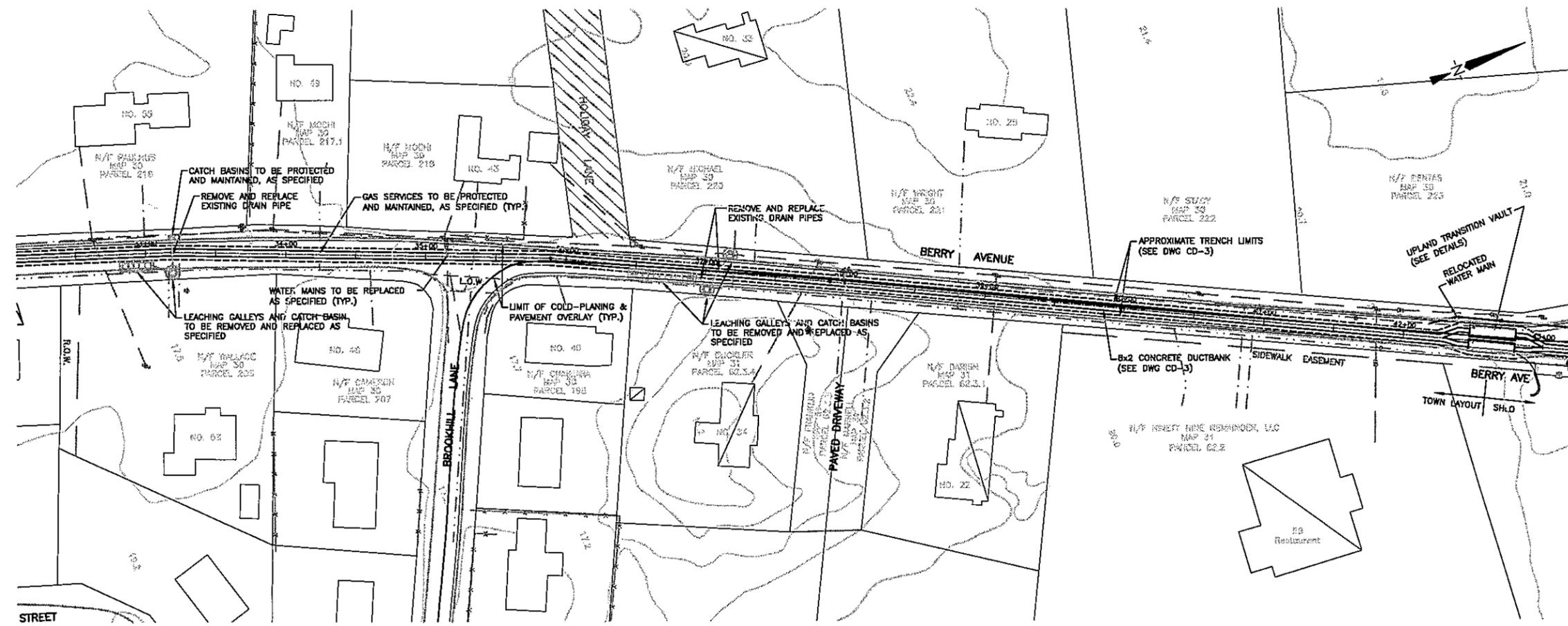
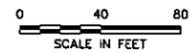
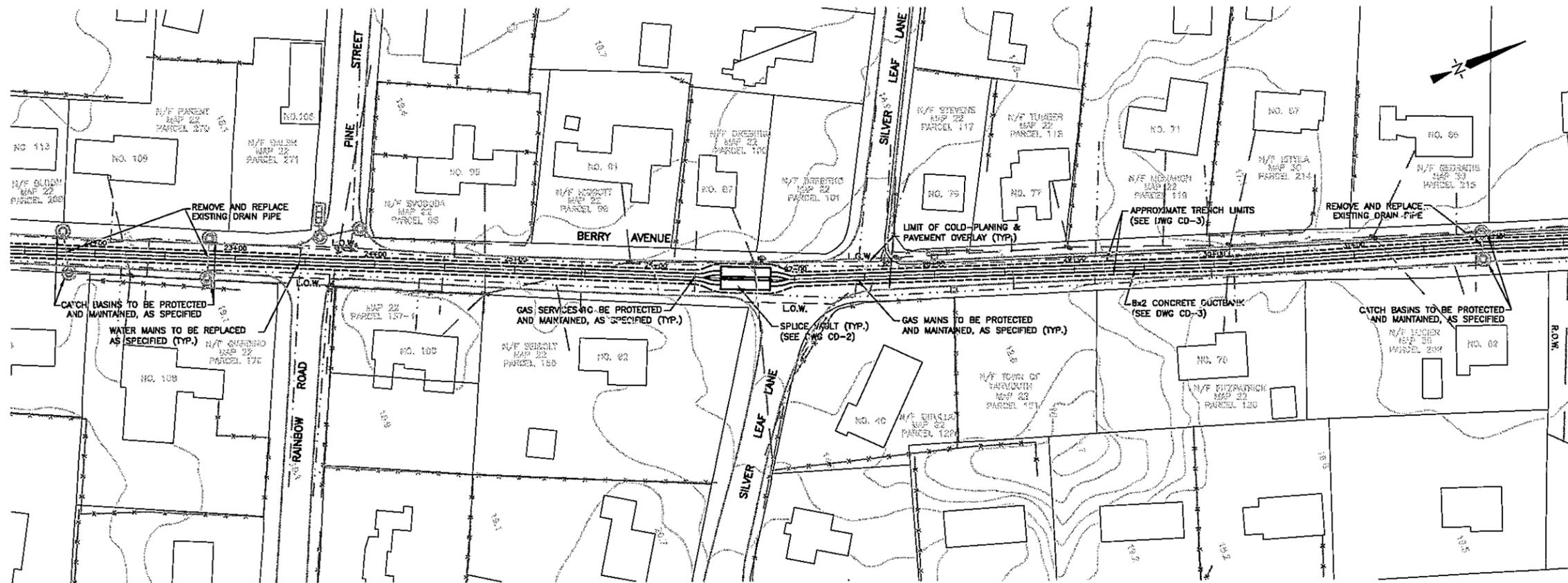
CAPE WIND ASSOCIATES, LLC

CAPE WIND PROJECT

COMPILED PLAN SET OF  
THE UPLAND 115KV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

UPLAND CABLE  
ROUTE PLAN  
(YARMOUTH, MA)

PROJECT No.: E158-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>Y-1</b>
SHEET No.:	SCALE: 1"=40'



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No. REVISION	DATE	APP BY
DRAWN BY: KCW	CHECKED BY: PRW	
DESIGNED BY: RAM	APPROVED BY:	

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**CAPE WIND PROJECT**

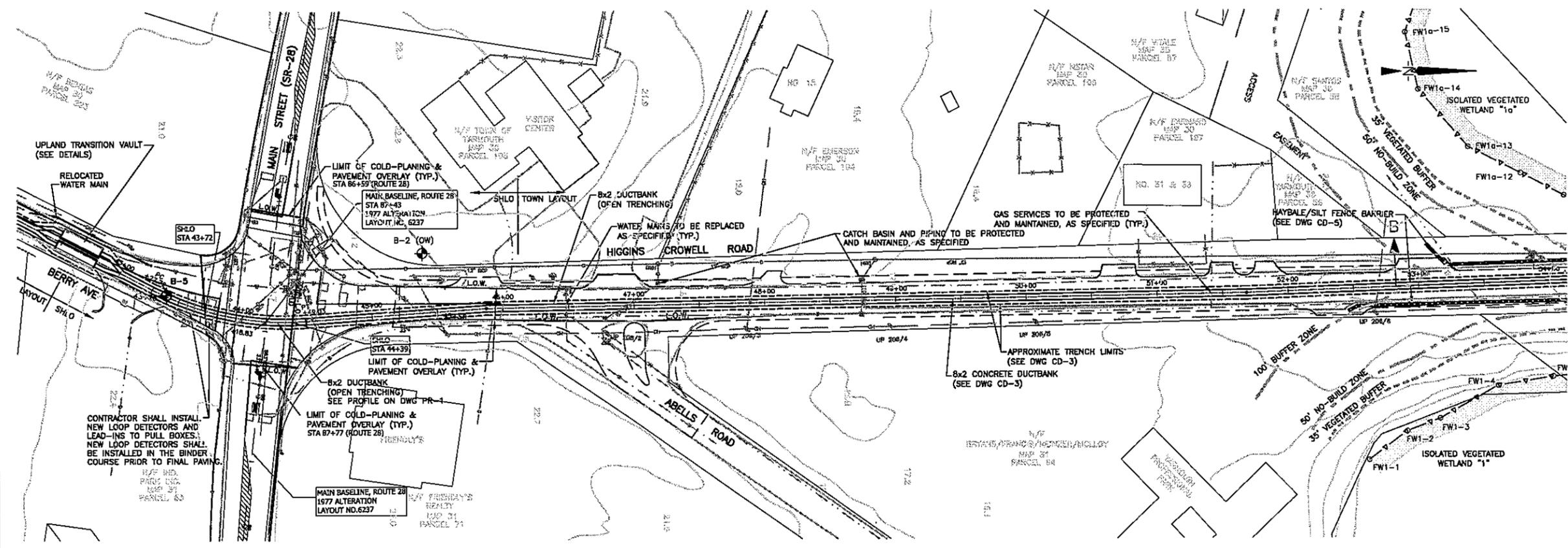
COMPILED PLAN SET OF  
THE UPLAND 115kV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

UPLAND CABLE  
ROUTE PLAN  
(YARMOUTH, MA)

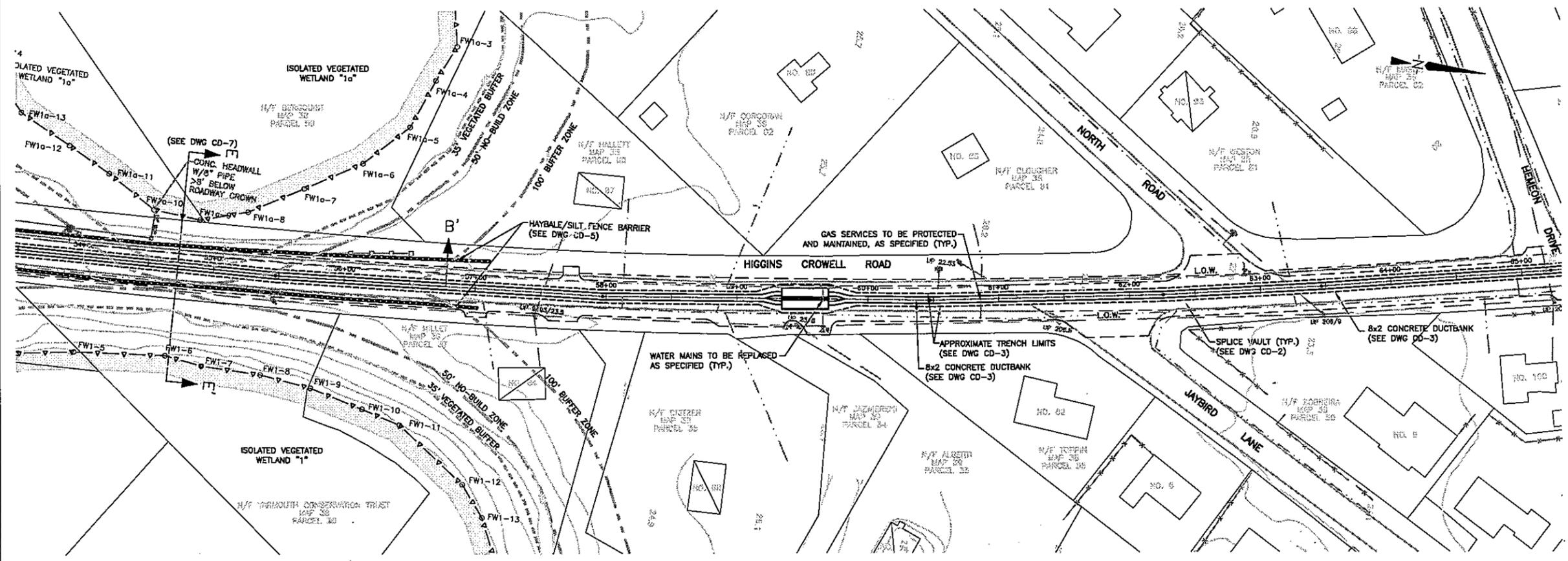
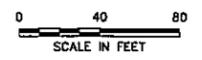
PROJECT No.: E159-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>Y-2</b>
SHEET No.:	
SCALE: 1"=40'	

FOR PERMITTING PURPOSES ONLY

DATE: Jul 01, 2010 - 12:30 PM  
FILENAME: Y-2.dwg - C:\Users\RAM\Documents\Projects\CAPE WIND\Drawings\Y-2.dwg



WORK AREAS ON THIS SHEET UNDER MWPA JURISDICTION STA. 52+67 TO STA. 58+47



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No.	REVISION	DATE	APP BY

CAPE WIND ASSOCIATES, LLC

**CAPE WIND PROJECT**

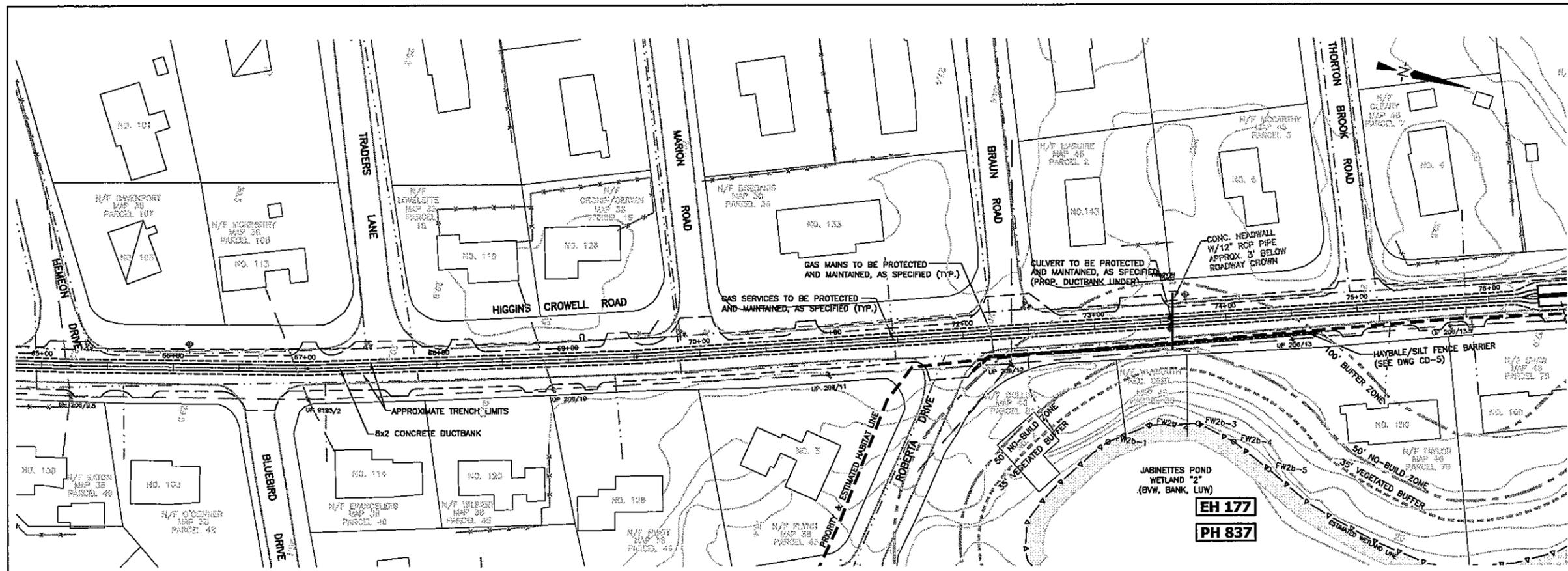
COMPILED PLAN SET OF  
THE UPLAND 115kV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

UPLAND CABLE  
ROUTE PLAN  
(YARMOUTH, MA)

PROJECT No.: E158-504.10  
DATE OF ISSUE: 02/26/10  
SHEET No.:  
SCALE: 1"=40'

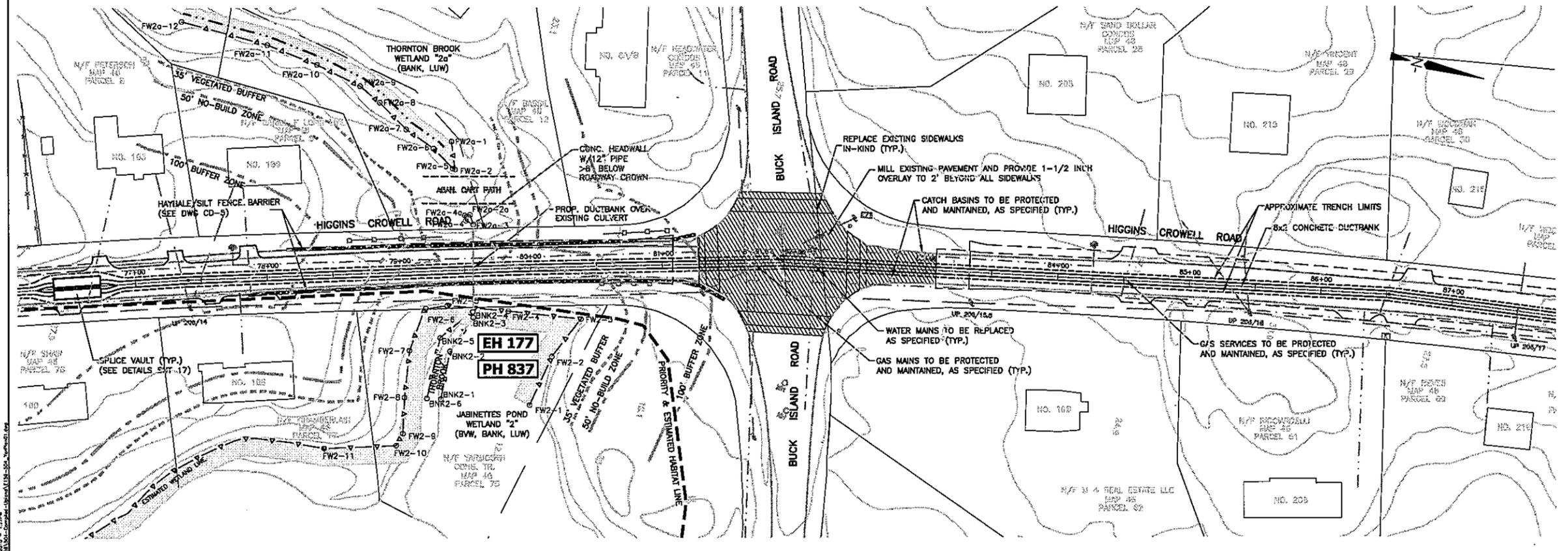
DRAWING No.  
**Y-3**

FOR PERMITTING PURPOSES ONLY



**NOTE:**  
CONTRACTOR TO MAINTAIN TWO LANES (MINIMUM) OF TRAFFIC (ONE IN EACH DIRECTION) ON BUCK ISLAND ROAD THROUGHOUT CONSTRUCTION.

**WORK AREAS ON THIS SHEET UNDER MWPA JURISDICTION**  
STA. 72+55 TO STA. 74+40  
STA. 76+17 TO STA. 81+23



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No.	REVISION	DATE	APP BY

CAPE WIND ASSOCIATES, LLC

**CAPE WIND PROJECT**

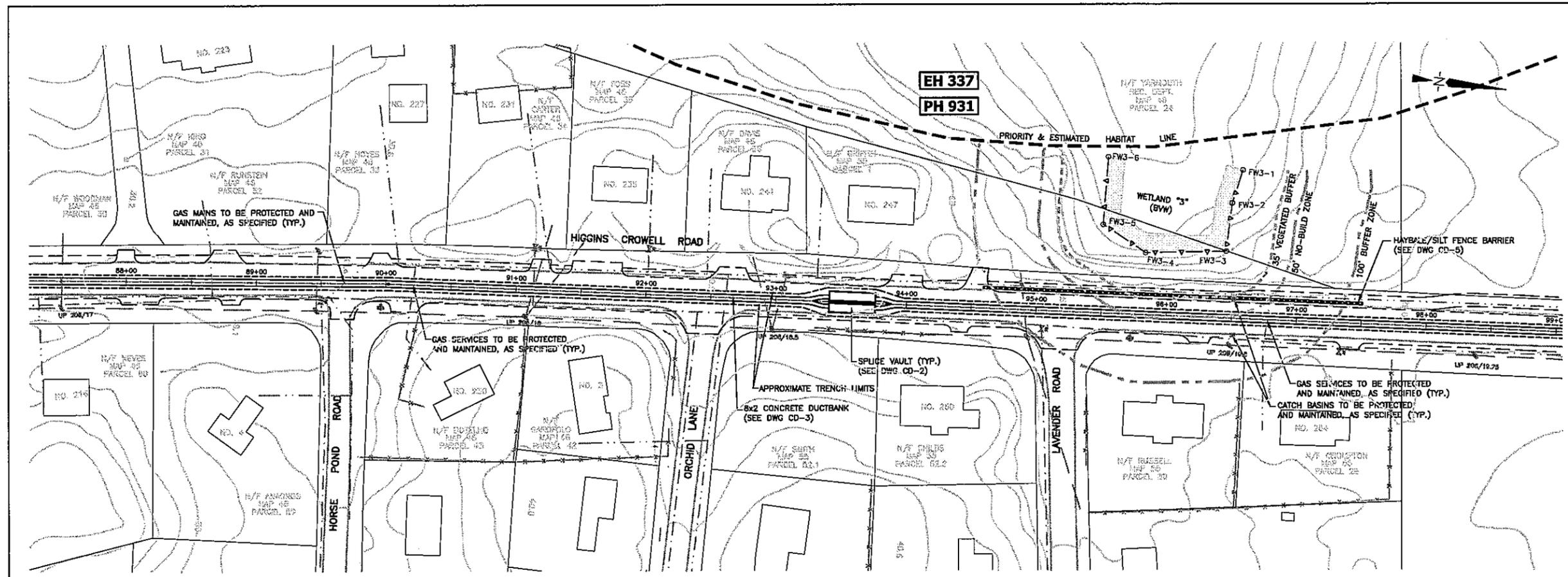
COMPILED PLAN SET OF  
THE UPLAND 115KV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

**UPLAND CABLE  
ROUTE PLAN  
(YARMOUTH, MA)**

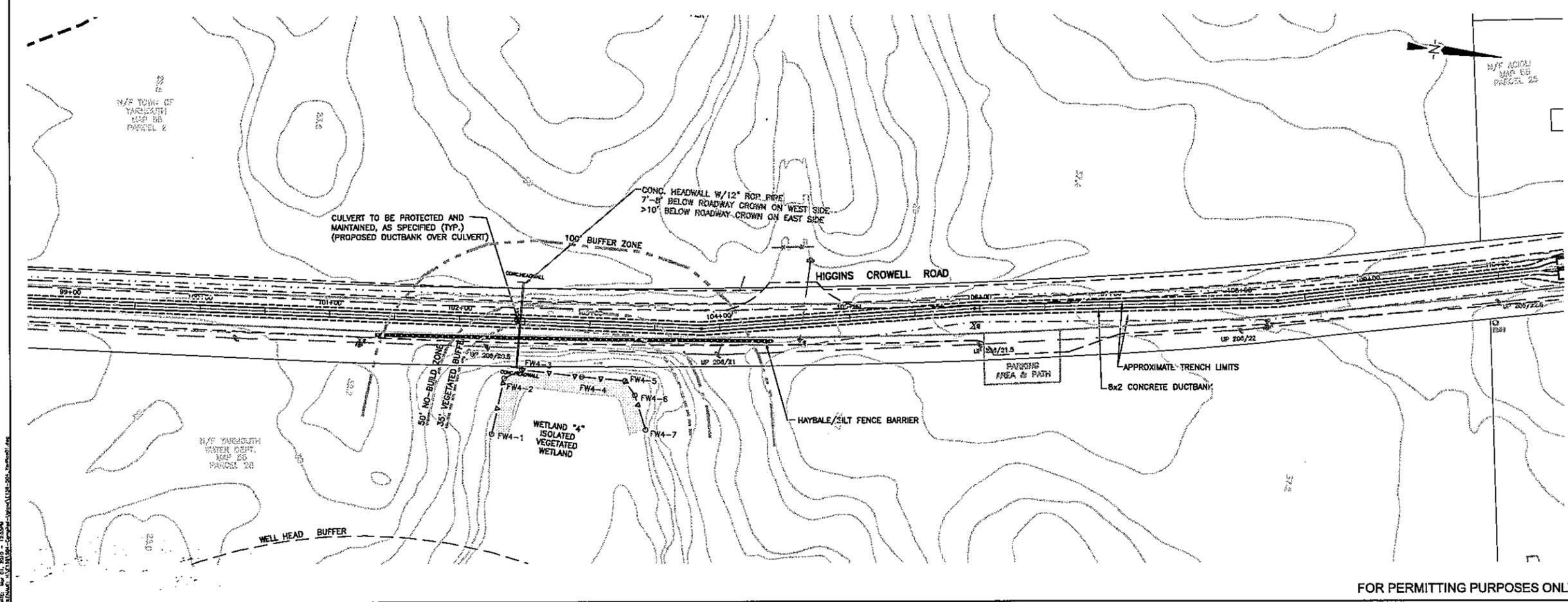
PROJECT No.: E158-504.10  
DATE OF ISSUE: 02/16/10  
SHEET No.:  
SCALE: 1"=40'

DRAWING No.  
**Y-4**

FOR PERMITTING PURPOSES ONLY



WORK AREAS ON THIS SHEET  
UNDER MWPA JURISDICTION  
STA. 94+73 TO STA. 97+23  
STA. 101+42 TO STA. 104+14



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No.	REVISION	DATE	APP BY

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CAPE WIND PROJECT

COMPILED PLAN SET OF  
THE UPLAND 115kV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

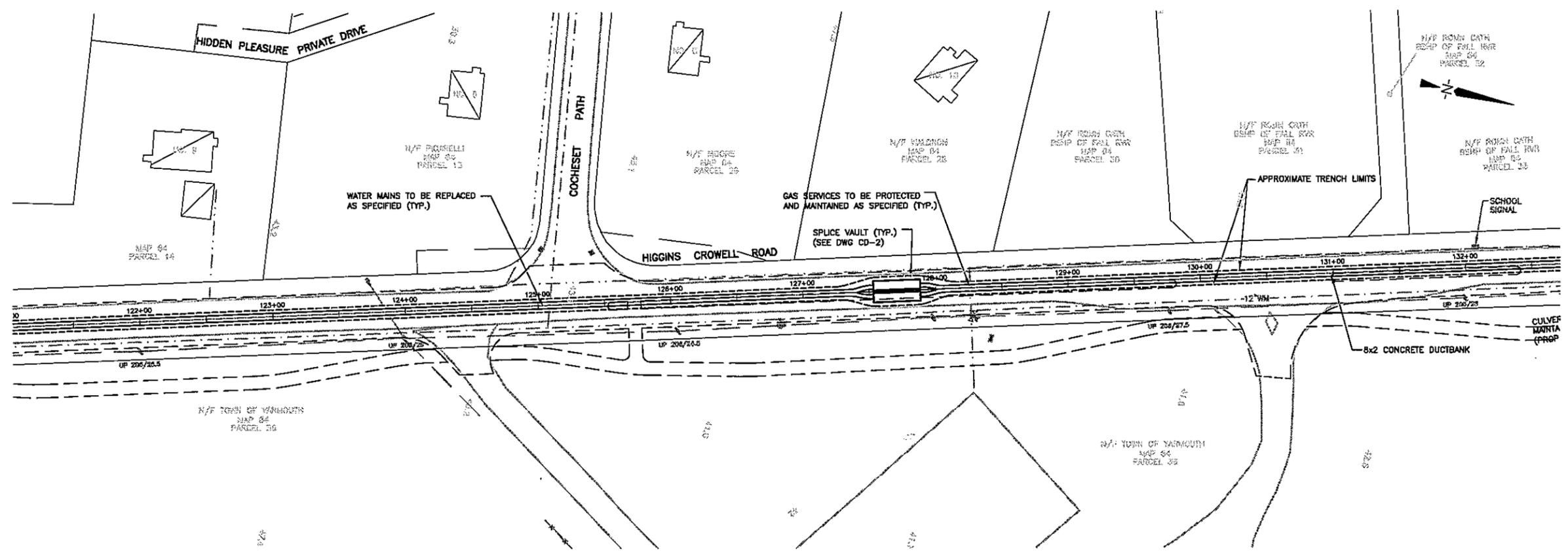
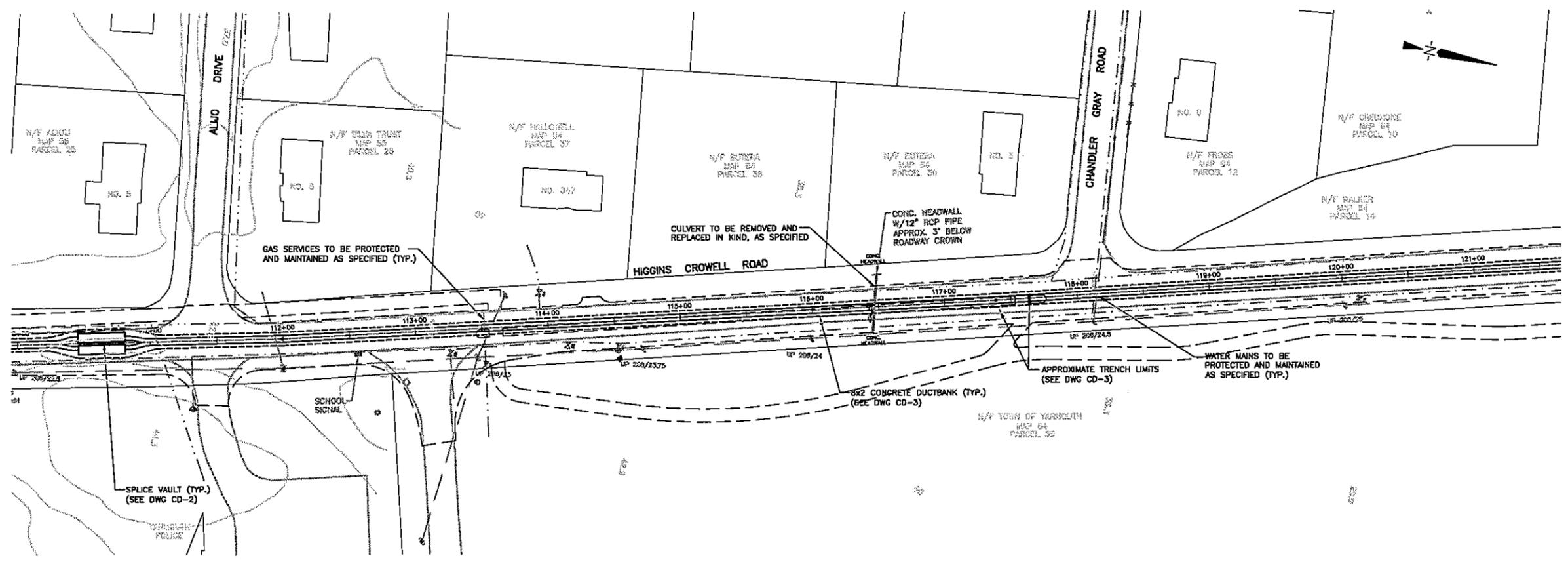
UPLAND CABLE  
ROUTE PLAN  
(YARMOUTH, MA)

PROJECT No.: E159-504.10  
DATE OF ISSUE: 02/26/10  
SHEET No.:  
SCALE: 1"=40'

DRAWING No.  
**Y-5**

FOR PERMITTING PURPOSES ONLY

DATE: May 01, 2010 - 12:50PM  
FILENAME: \\C:\Users\raim\Documents\Projects\115kV-Upland\115kV-Upland.dwg



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No.	REVISION	DATE	APP BY

DESIGNED BY: RAH      CHECKED BY: PRW  
APPROVED BY: \_\_\_\_\_

CAPE WIND ASSOCIATES, LLC

**CAPE WIND PROJECT**

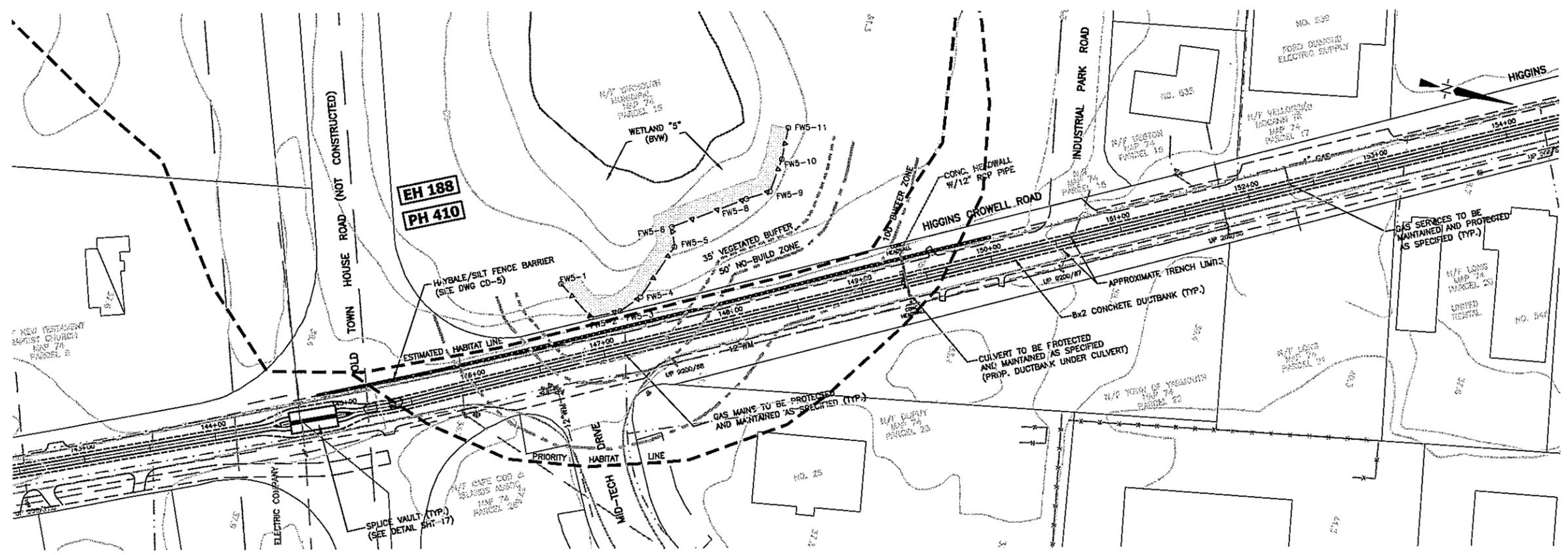
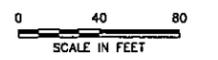
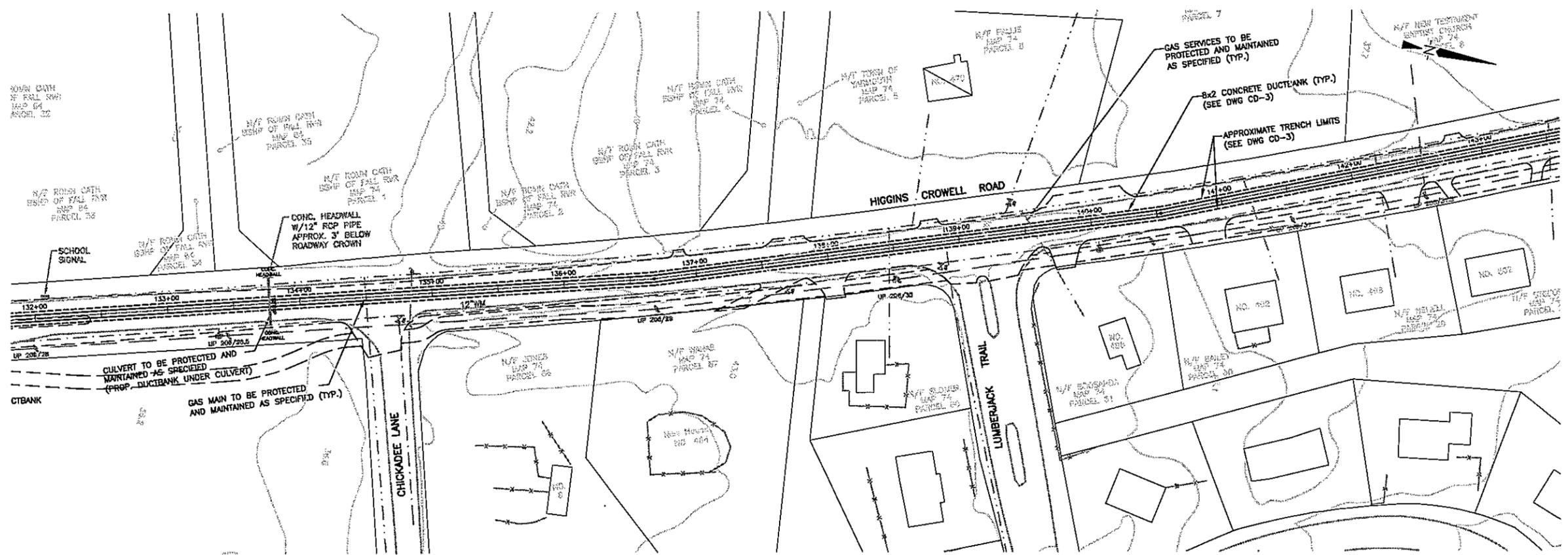
COMPILED PLAN SET OF  
THE UPLAND 115kV  
TRANSMISSION CABLE ROUTE  
YARMOOUTH & BARNSTABLE, MA.

**UPLAND CABLE  
ROUTE PLAN  
(YARMOOUTH, MA)**

PROJECT No.: E159-504.10      DRAWING No.  
DATE OF ISSUE: 02/26/10      **Y-6**  
SHEET No.:      SCALE: 1"=40'

FOR PERMITTING PURPOSES ONLY

DATE: Nov 01, 2010 - 11:56AM  
FILENAME: \\ATL01\GIS\Projects\E159-504\Drawings\Upland\Upland\_Cable\_Route\_Plan\_Yarmouth\_MA.dwg



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No.	REVISION	DATE	APP BY

DESIGNED BY: RAH      CHECKED BY: PRW  
APPROVED BY:

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**CAPE WIND PROJECT**

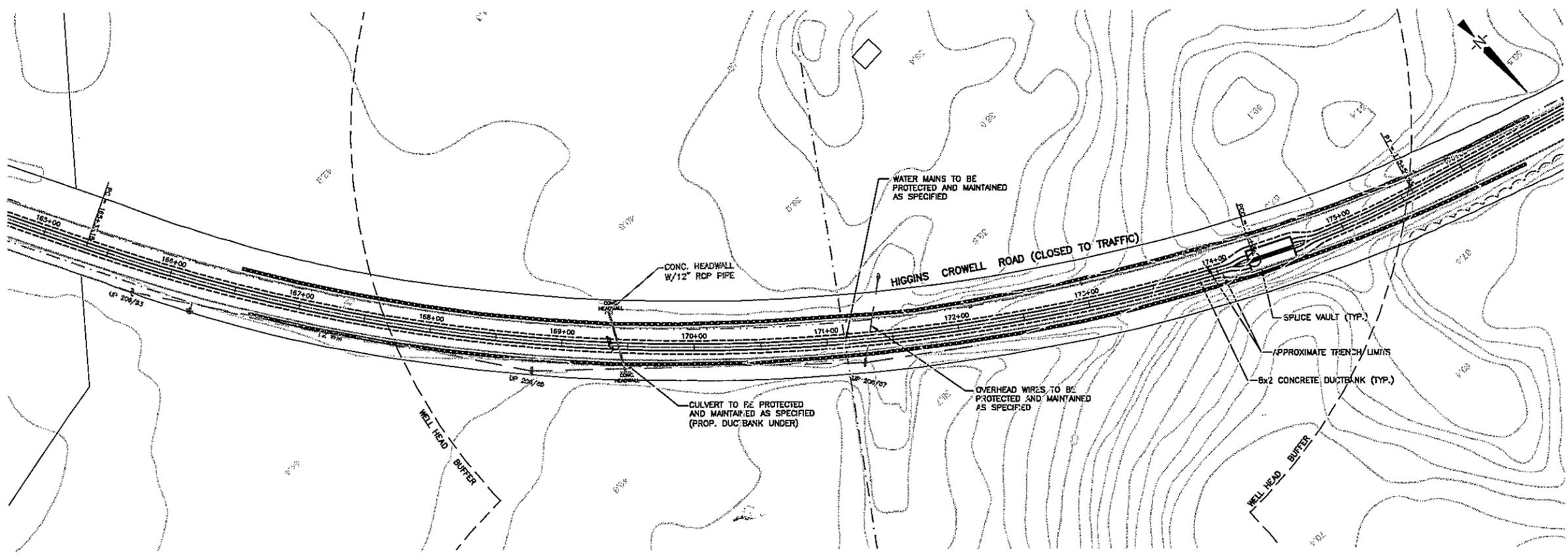
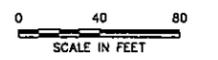
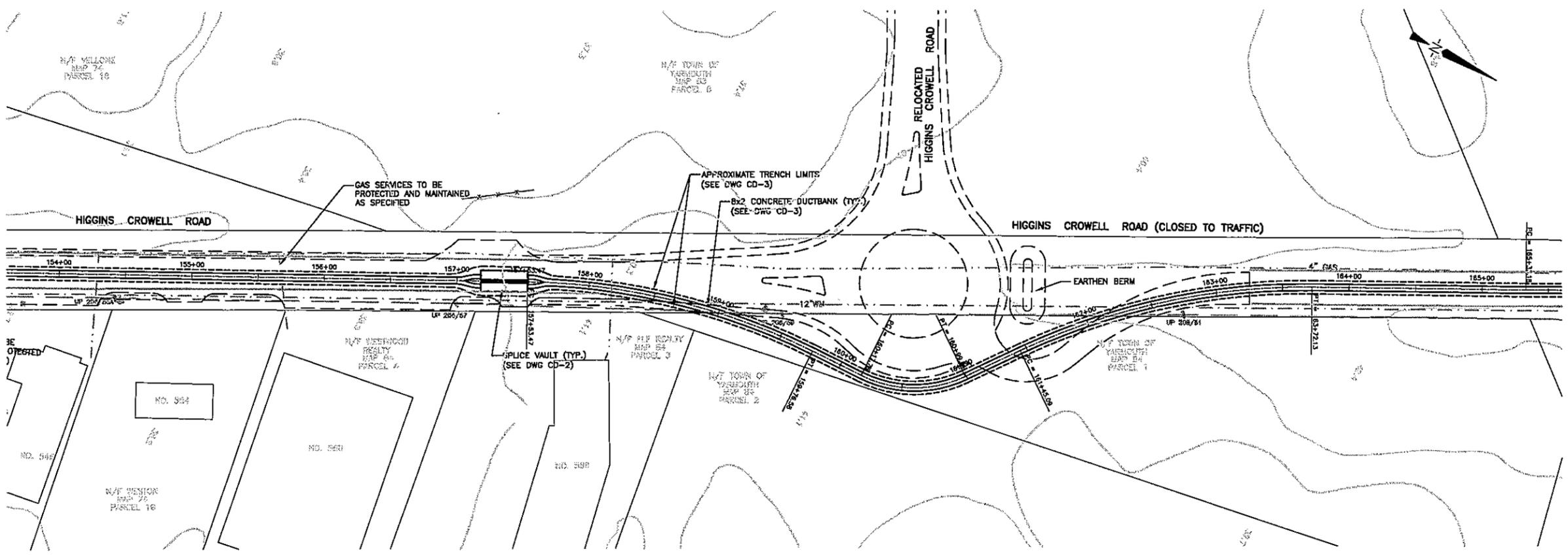
COMPILED PLAN SET OF  
THE UPLAND 115KV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

**UPLAND CABLE  
ROUTE PLAN  
(YARMOUTH, MA)**

PROJECT No.: E155-504.10      DRAWING No.  
DATE OF ISSUE: 02/26/10      **Y-7**  
SHEET No.:      SCALE: 1"=40'

FOR PERMITTING PURPOSES ONLY

DATE: MAR 01, 2010 12:30PM  
FILENAME: \\ATL\DATA\Projects\CapeWind\CD-504-Yarmouth.dwg



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No.	REVISION	DATE	APP BY

DRAWN BY: KCR      CHECKED BY: PRW  
DESIGNED BY: RAH      APPROVED BY:

CAPE WIND ASSOCIATES, LLC

**CAPE WIND PROJECT**

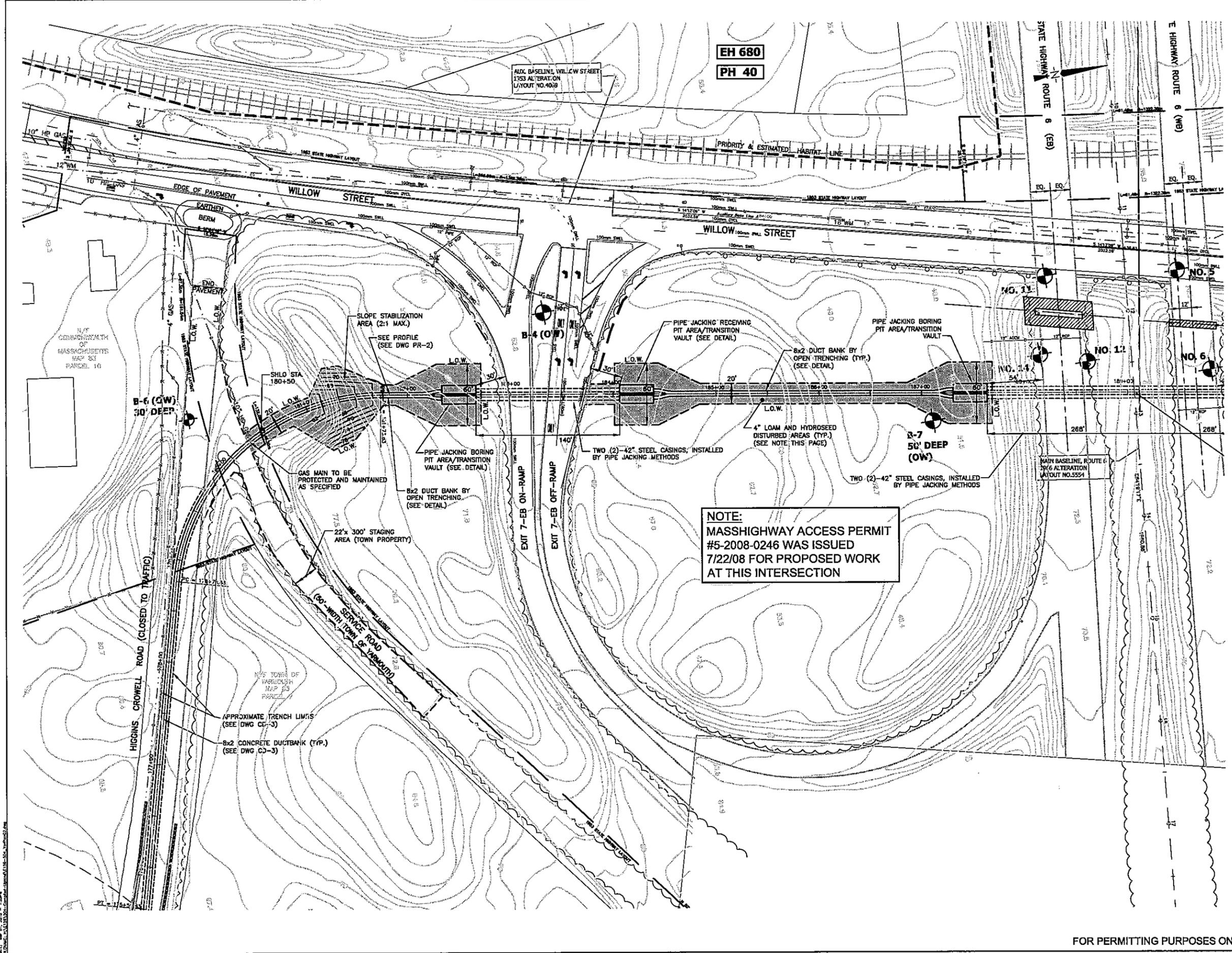
COMPILED PLAN SET OF  
THE UPLAND 115kV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

UPLAND CABLE  
ROUTE PLAN  
(YARMOUTH, MA)

PROJECT No.: E155-504.10	DRAWING No.:
DATE OF ISSUE: 02/28/10	<b>Y-8</b>
SHEET No.:	
SCALE: 1"=40'	

FOR PERMITTING PURPOSES ONLY

DATE: MAR 01, 2010 - 12:29PM  
FILENAME: \\CAPEWIND\SSD\SSD\155-504.dwg



EH 680  
PH 40

AUX. BASELINE, WILLOW STREET  
1:500 ALTERATION  
LAYOUT NO. 4039

**NOTE:**  
MASSHIGHWAY ACCESS PERMIT  
#5-2008-0246 WAS ISSUED  
7/22/08 FOR PROPOSED WORK  
AT THIS INTERSECTION

0 40 80  
SCALE IN FEET

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No.	REVISION	DATE	APP BY

DRAWN BY: KCW      CHECKED BY: PRW  
DESIGNED BY: RAH      APPROVED BY:

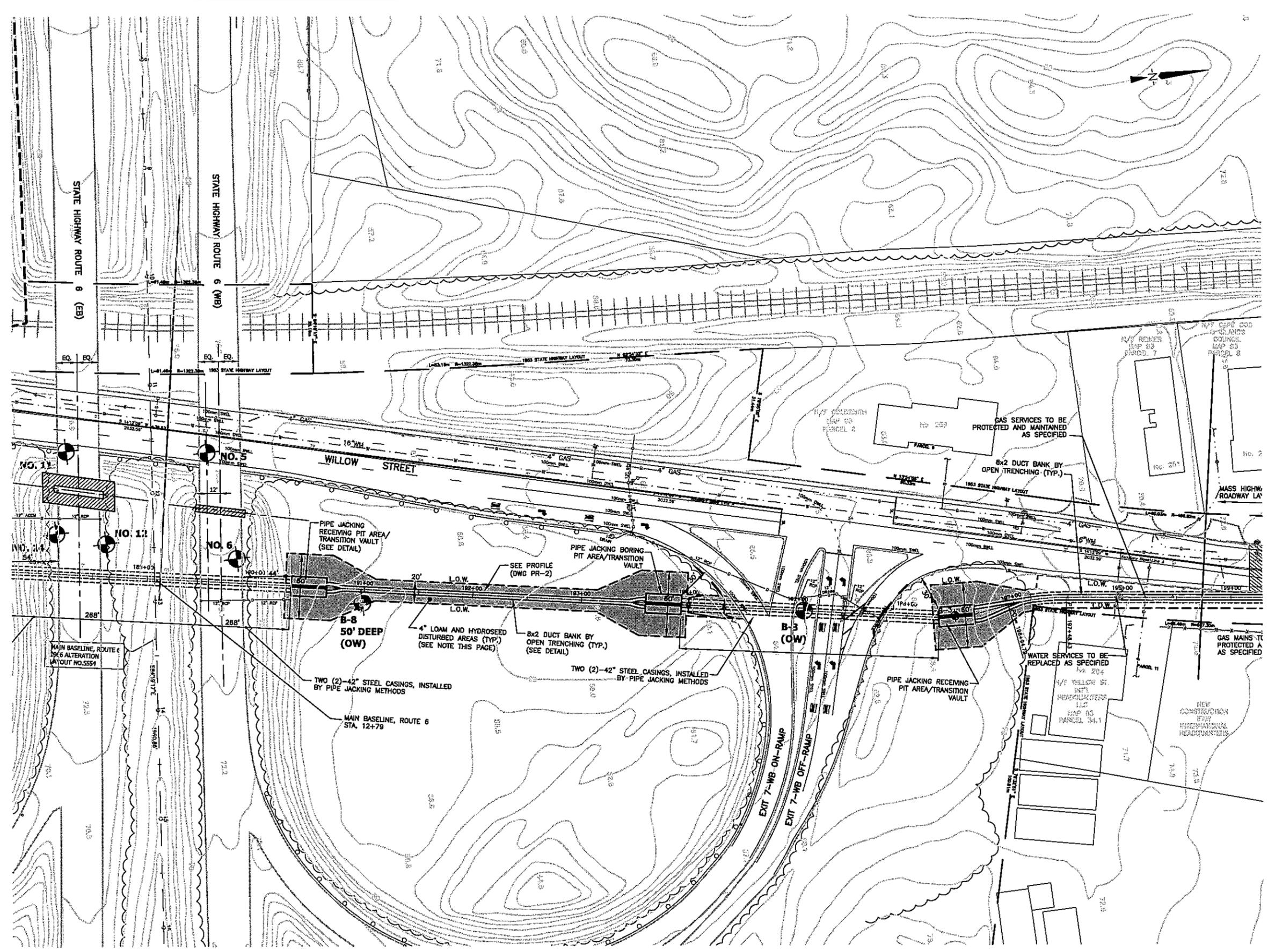
CAPE WIND ASSOCIATES, LLC

CAPE WIND PROJECT

COMPILED PLAN SET OF  
THE UPLAND 115kV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

UPLAND CABLE  
ROUTE PLAN  
(YARMOUTH, MA)

PROJECT No.: E159-504.10      DRAWING No.  
DATE OF ISSUE: 02/26/10      **Y-9**  
SHEET No.:  
SCALE: 1"=40'



0 40 80  
SCALE IN FEET

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NO.	REVISION	DATE	APP BY

DRAWN BY: KCW      CHECKED BY: PRW  
DESIGNED BY: RAH      APPROVED BY:

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CAPE WIND PROJECT

COMPILED PLAN SET OF  
THE UPLAND 115kV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

UPLAND CABLE  
ROUTE PLAN  
(YARMOUTH, MA)

PROJECT No.: E159-504.10      DRAWING No.  
DATE OF ISSUE: 02/26/10      **Y-10**  
SHEET No.:      SCALE: 1"=40'

DATE: May 01, 2010 - 10:09 AM  
DRAWN BY: KCW

LONG POND WETLAND "6" (B/W)  
EH 178  
PH 88

**NOTE:**  
EXECUTIVE OFFICE OF TRANSPORTATION (EOT) LICENSE AGREEMENT #613 WAS ISSUED ON 9/17/08 FOR WORK PROPOSED UNDER AND ADJACENT TO THE RAILROAD.

0 40 80  
SCALE IN FEET

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No.	REVISION	DATE	APP BY

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**CAPE WIND PROJECT**  
COMPILED PLAN SET OF  
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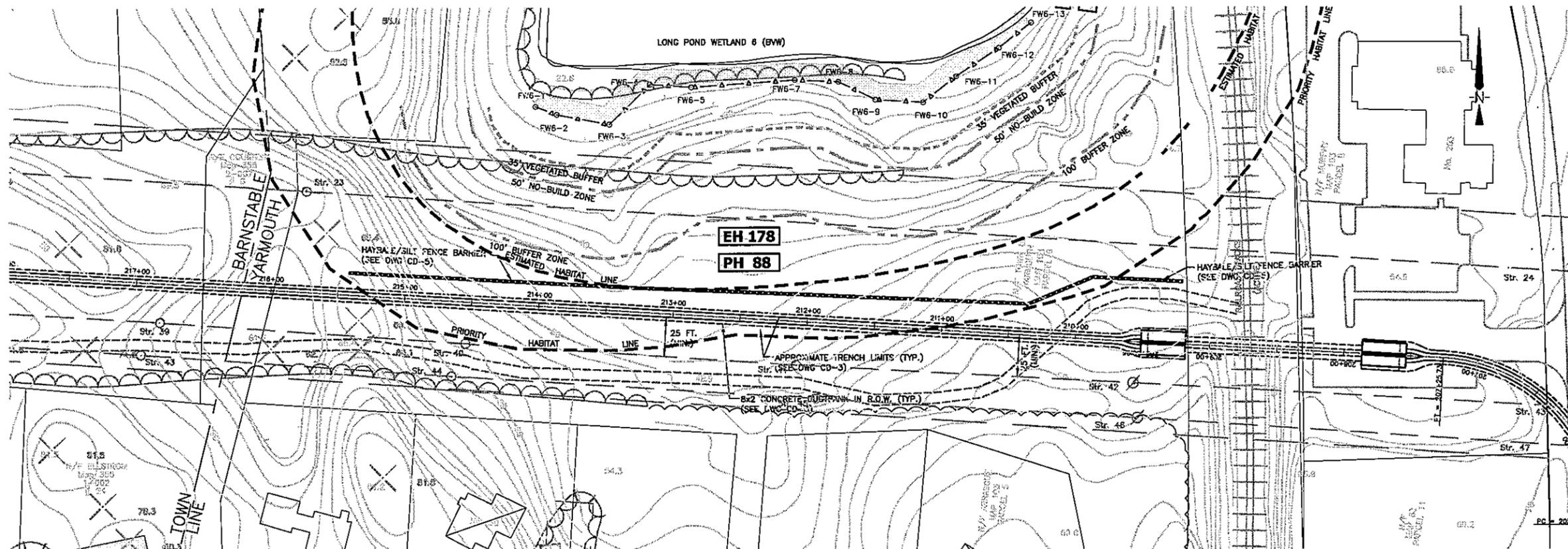
**UPLAND CABLE  
ROUTE PLAN  
(YARMOOUTH, MA)**

PROJECT No.: E158-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>Y-11</b>
SHEET No.:	SCALE: 1"=40'

FOR PERMITTING PURPOSES ONLY



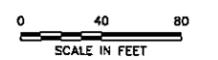
DATE: 02/26/10 10:14 AM  
DRAWN BY: RAK



NOTE: ROUTE STATIONING ON THIS SHEET INCREASES FROM RIGHT TO LEFT.

- NOTES:
1. AT ROAD CROSSINGS WITHIN RIGHT-OF-WAY, DUCT BANK SHALL BE INSTALLED WITH 72" COVER TO AVOID CONFLICT WITH UTILITIES IN THE ROAD.
  2. UPON COMPLETION OF DUCT BANK INSTALLATION, ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED, IN ACCORDANCE WITH N-STAR REQUIREMENTS AND AS SPECIFIED.
  3. ALL EXISTING UTILITIES TO BE PROTECTED AND MAINTAINED AT ROAD CROSSINGS.

WORK AREAS ON THIS SHEET UNDER MWPA JURISDICTION  
NONE



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No.	REVISION	DATE	APP BY

DRAWN BY: KCW      CHECKED BY: PRW  
DESIGNED BY: RAM      APPROVED BY:

CAPE WIND ASSOCIATES, LLC

CAPE WIND PROJECT

COMPILED PLAN SET OF  
THE UPLAND 115kV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

UPLAND CABLE  
ROUTE PLAN  
(YARMOUTH, MA)

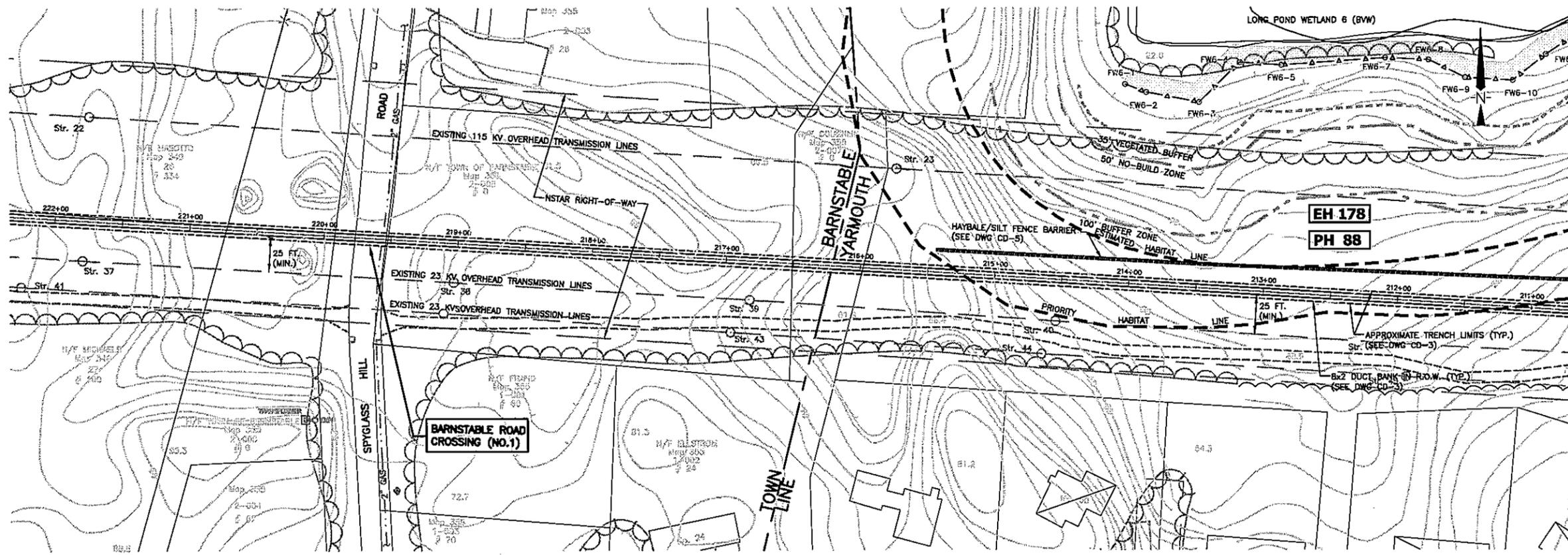
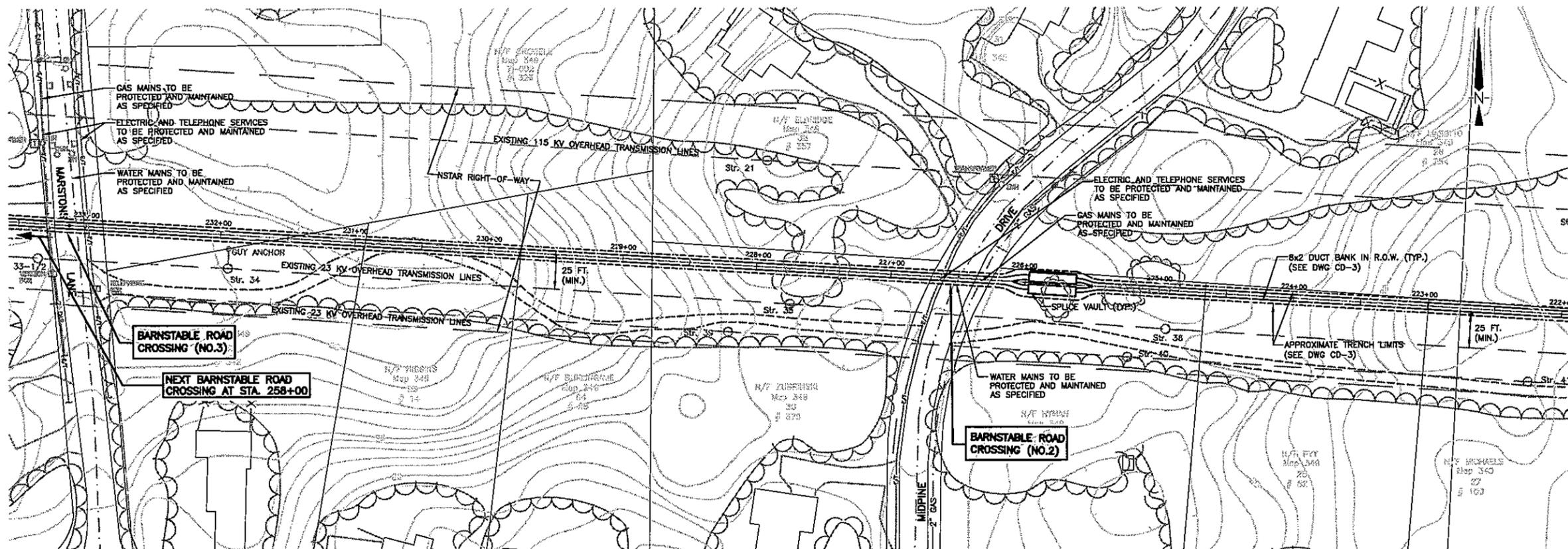
PROJECT No.: E159-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>Y-12</b>
SHEET No.:	
SCALE: 1" = 40'	

DATE: Mar 01, 2010 - 2:10PM  
FILENAME: E:\PROJECTS\1003-CapeWind\1003-CapeWind.dwg

NOTE: ROUTE STATIONING ON THIS SHEET INCREASES FROM BOTTOM-RIGHT TO TOP-LEFT.

NOTES:

1. AT ROAD CROSSINGS WITHIN RIGHT-OF-WAY, DUCT BANK SHALL BE INSTALLED WITH 72" COVER TO AVOID CONFLICT WITH UTILITIES IN THE ROAD.
2. UPON COMPLETION OF DUCT BANK INSTALLATION, ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED, IN ACCORDANCE WITH N-STAR REQUIREMENTS AND AS SPECIFIED.
3. ALL EXISTING UTILITIES TO BE PROTECTED AND MAINTAINED AT ROAD CROSSINGS.



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No.	REVISION	DATE	APP BY

DRAWN BY: KCW      CHECKED BY: PRW  
DESIGNED BY: RAH      APPROVED BY:

CAPE WIND ASSOCIATES, LLC

CAPE WIND PROJECT

COMPILED PLAN SET OF  
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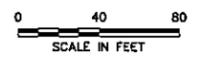
UPLAND CABLE  
ROUTE PLAN  
(BARNSTABLE, MA)

PROJECT No: E159-504.10      DRAWING No.  
DATE OF ISSUE: 02/26/10      **B-1**  
SHEET No.:  
SCALE: 1"=40'

NOTE: ROUTE STATIONING ON THIS SHEET INCREASES FROM BOTTOM-RIGHT TO TOP-LEFT.

NOTES:

1. AT ROAD CROSSINGS WITHIN RIGHT-OF-WAY, DUCT BANK SHALL BE INSTALLED WITH 72" COVER TO AVOID CONFLICT WITH UTILITIES IN THE ROAD.
2. UPON COMPLETION OF DUCT BANK INSTALLATION, ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED, IN ACCORDANCE WITH N-STAR REQUIREMENTS AND AS SPECIFIED.
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No.	REVISION	DATE	APP BY

DRAWN BY: KCW      CHECKED BY: PRW  
DESIGNED BY: RAH      APPROVED BY:

CAPE WIND ASSOCIATES, LLC

CAPE WIND PROJECT

COMPILED PLAN SET OF  
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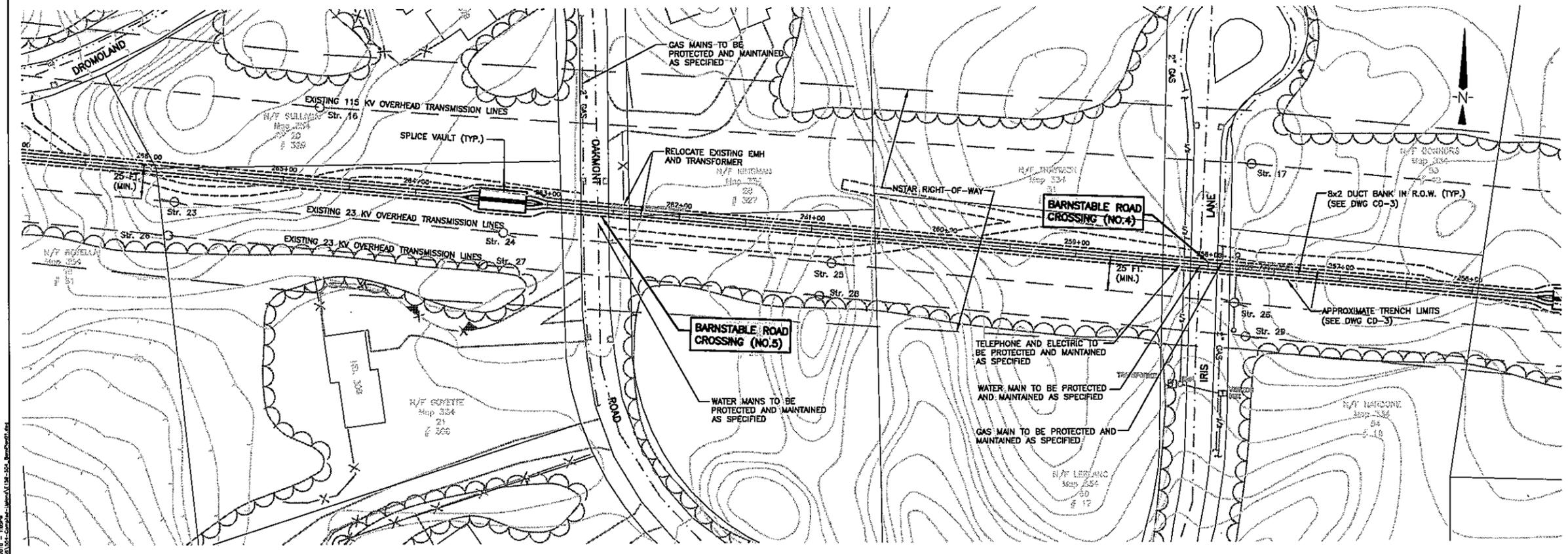
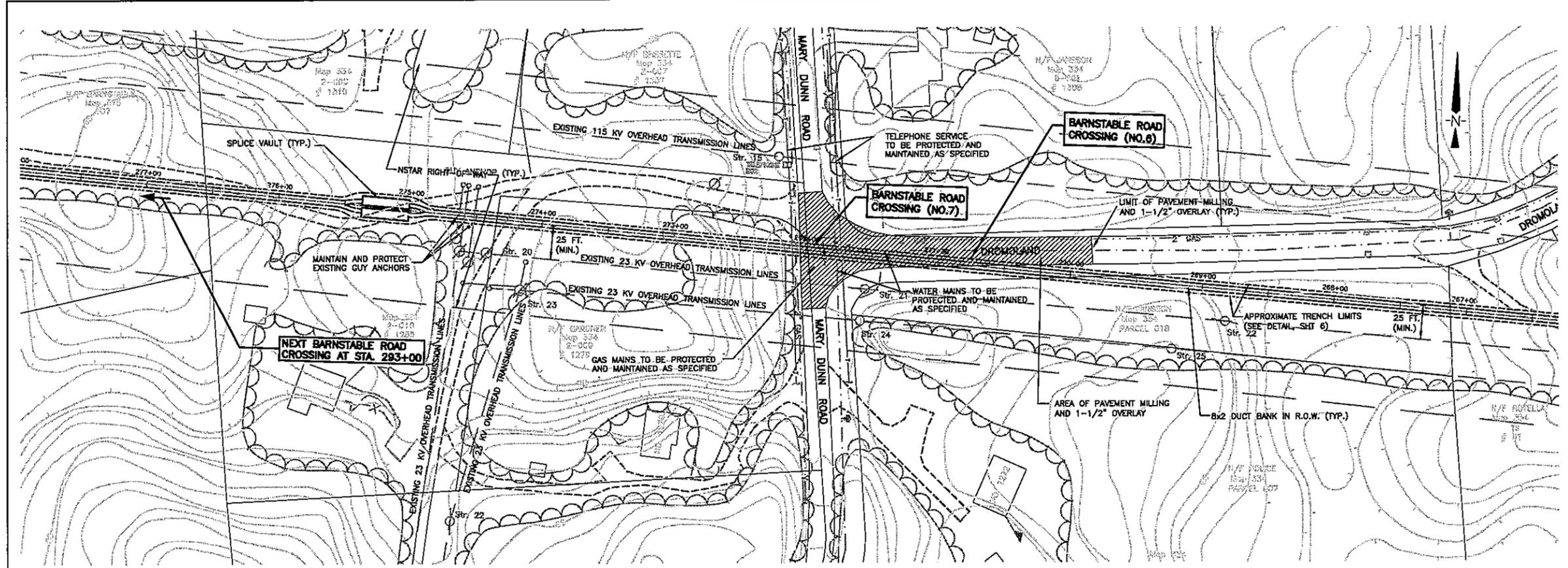
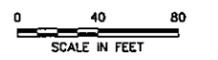
UPLAND CABLE  
ROUTE PLAN  
(BARNSTABLE, MA)

PROJECT No.: E159-504.10      DRAWING No.  
DATE OF ISSUE: 02/28/10      **B-2**  
SHEET No.:      SCALE: 1"=40'

NOTE: ROUTE STATIONING ON THIS SHEET INCREASES FROM BOTTOM-RIGHT TO TOP-LEFT.

**NOTES:**

1. AT ROAD CROSSINGS WITHIN RIGHT-OF-WAY, DUCT BANK SHALL BE INSTALLED WITH 72" COVER TO AVOID CONFLICT WITH UTILITIES IN THE ROAD.
2. UPON COMPLETION OF DUCT BANK INSTALLATION, ALL DISTURBED AREAS SHALL BE LOAMED AND SEED, IN ACCORDANCE WITH N-STAR REQUIREMENTS AND AS SPECIFIED.
3. ALL EXISTING UTILITIES TO BE PROTECTED AND MAINTAINED AT ROAD CROSSINGS.



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Group Inc.

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Scientists  
Consultants

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f 781.431.7434  
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No.	REVISION	DATE	APP BY

DRAWN BY: KCW      CHECKED BY: PRW  
DESIGNED BY: RAH      APPROVED BY:

CAPE WIND ASSOCIATES, LLC

**CAPE WIND PROJECT**

COMPILED PLAN SET OF  
THE UPLAND 115KV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

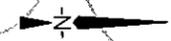
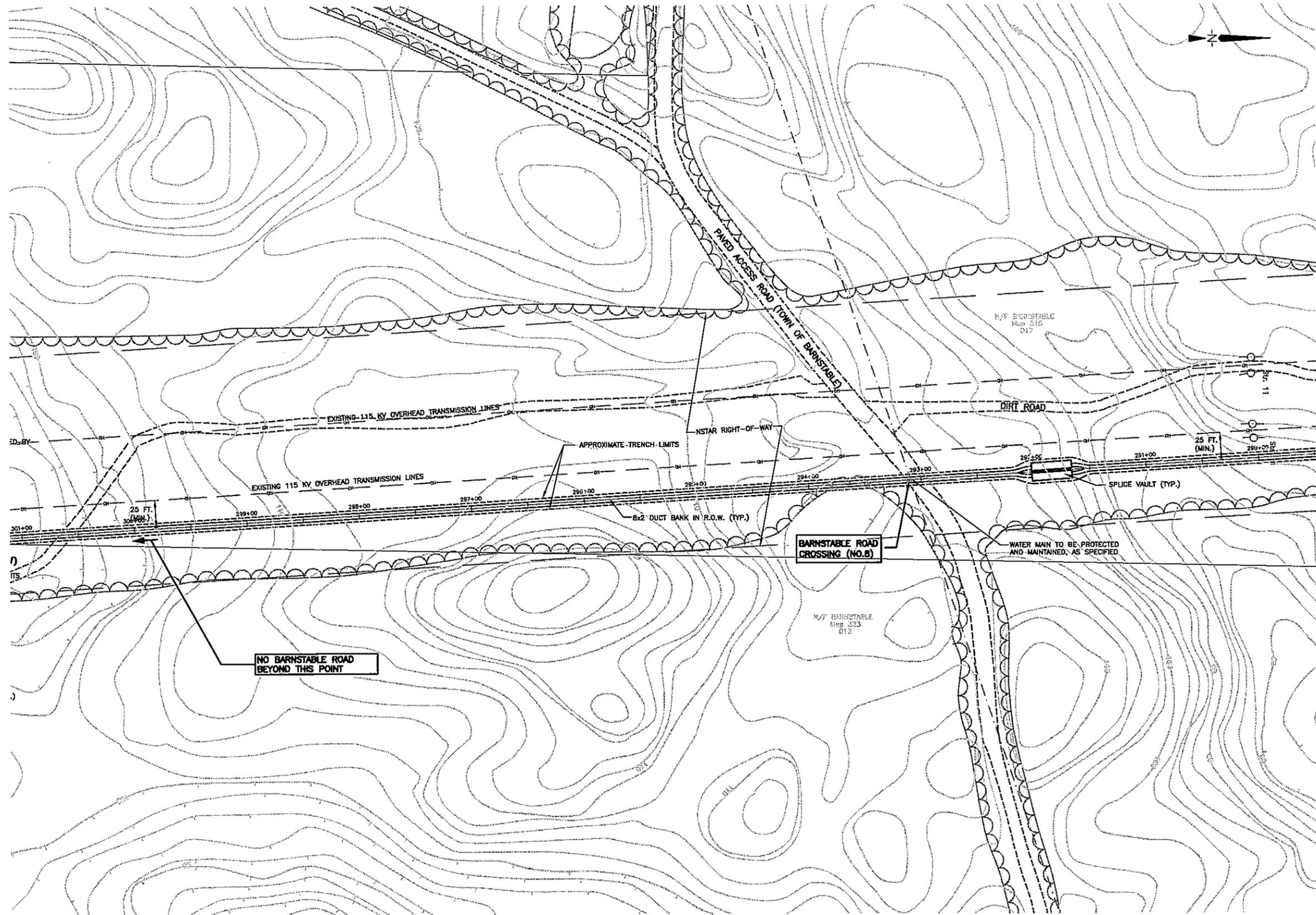
UPLAND CABLE  
ROUTE PLAN  
(BARNSTABLE, MA)

PROJECT No.: E156-504.10	DRAWING No.
DATE OF ISSUE: 02/28/10	<b>B-3</b>
SHEET No.:	SCALE: 1"=40'

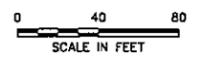
FOR PERMITTING PURPOSES ONLY

DATE: Mar 07, 2010 1:00PM  
FILENAME: \\S:\Projects\1000000000\1000000000\1000000000\1000000000.dwg





- NOTES:**
1. AT ROAD CROSSINGS WITHIN RIGHT-OF-WAY, DUCT BANK SHALL BE INSTALLED WITH 72" COVER TO AVOID CONFLICT WITH UTILITIES IN THE ROAD.
  2. UPON COMPLETION OF DUCT BANK INSTALLATION, ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED, IN ACCORDANCE WITH NSTAR REQUIREMENTS AND AS SPECIFIED.
  3. ALL EXISTING UTILITIES TO BE PROTECTED AND MAINTAINED AT ROAD CROSSINGS.



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p 781.431.0500  
f 781.431.7434  
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No.	REVISION	DATE	APP BY

DESIGNED BY: RAH      CHECKED BY: PRW  
DRAWN BY: KCW      APPROVED BY:

CAPE WIND ASSOCIATES, LLC

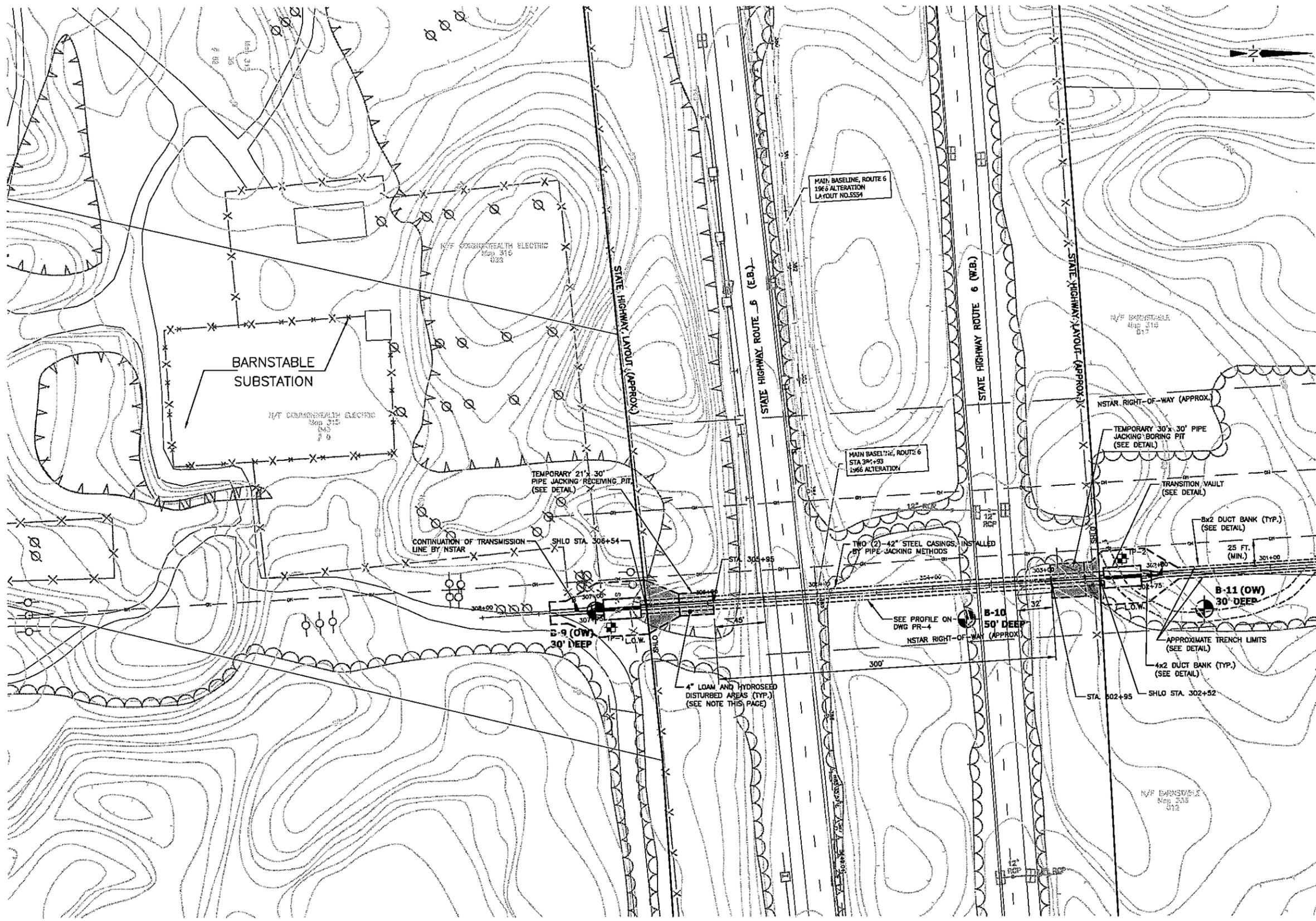
CAPE WIND PROJECT

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TRANSMISSION CABLE ROUTE  
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UPLAND CABLE  
ROUTE PLAN  
(BARNSTABLE, MA)

PROJECT No.: E159-504.10      DRAWING No.:  
DATE OF ISSUE: 02/28/10      **B-5**  
SHEET No.:  
SCALE: 1"=40'

DATE: Mar 01, 2010 - 1:09PM  
FILENAME: \\S:\Projects\115KV\115KV-Upland-Cable-Route\115KV-Upland-Cable-Route.dwg



**NOTES:**

1. AT ROAD CROSSINGS WITHIN RIGHT-OF-WAY, DUCT BANK SHALL BE INSTALLED WITH 72" COVER TO AVOID CONFLICT WITH UTILITIES IN THE ROAD.
2. UPON COMPLETION OF DUCT BANK INSTALLATION, ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED, IN ACCORDANCE WITH NSTAR REQUIREMENTS AND AS SPECIFIED.
3. ALL EXISTING UTILITIES TO BE PROTECTED AND MAINTAINED AT ROAD CROSSINGS.
4. EXISTING UTILITIES WERE COMPILED FROM PLANS RECEIVED BY THE TOWN OF YARMOUTH ON FEBRUARY 11, 2008 BY MS TRANSPORTATION SYSTEM, INC. FEDERAL AID PROJECT No. STP-001S(340)X, DATED 11/10/04.
5. LIMITS OF WORK AND LIMITS OF TREE CLEARING SHOWN ON THE PLANS SHALL BE PERMANENTLY REVEGETATED WITH A CONSERVATION/WILDLIFE SEED MIX APPLIED BY HYDROSEEDING METHODS OVER A 4" LAYER OF TOPSOIL. THE SEED MIX APPLICATION RATE SHALL BE (25 lbs/ACRE) MINIMUM.

0 40 80  
SCALE IN FEET

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No. REVISION	DATE	APP BY
DRAWN BY: KCW	CHECKED BY: PRW	
DESIGNED BY: RAH	APPROVED BY:	

CAPE WIND ASSOCIATES, LLC

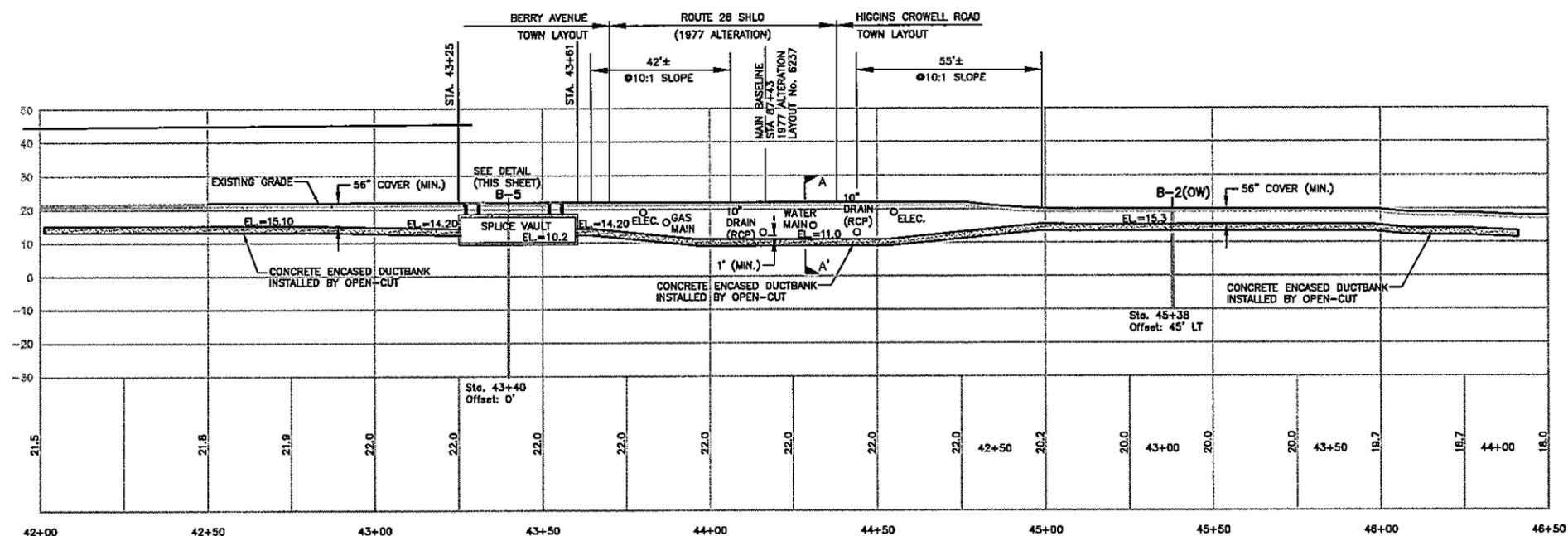
**CAPE WIND PROJECT**

COMPILED PLAN SET OF  
THE UPLAND 115kV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

UPLAND CABLE  
ROUTE PLAN  
(BARNSTABLE, MA)

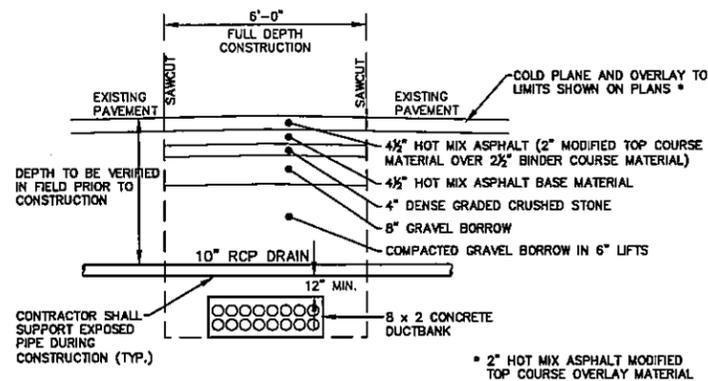
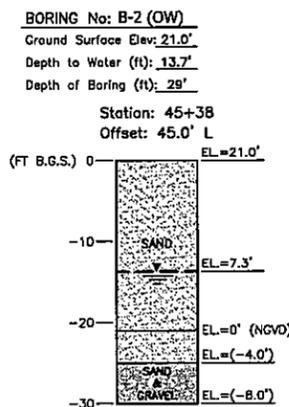
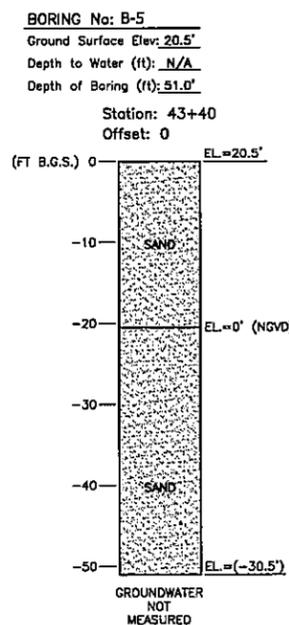
PROJECT No.: E159-504.10	DRAWING No.
DATE OF ISSUE: 02/28/10	<b>B-6</b>
SHEET No.:	SCALE: 1"=40'

DATE: May 01, 2010 - 1:00PM  
PROJECT: UPLAND 115kV TRANSMISSION CABLE ROUTE



SCALE:  
HORIZONTAL: 1"=20'  
VERTICAL: 1"=20'

**ROUTE 28 PROFILE (YARMOUTH)**  
**(STA 42+00 TO STA 46+50)**



**UTILITY CROSSING - SECTION A-A'**  
N.T.S.

NOTE:  
1. THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT FIELD VERIFIED.

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CAPE WIND PROJECT  
COMPILED PLAN SET OF  
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TRANSMISSION CABLE ROUTE  
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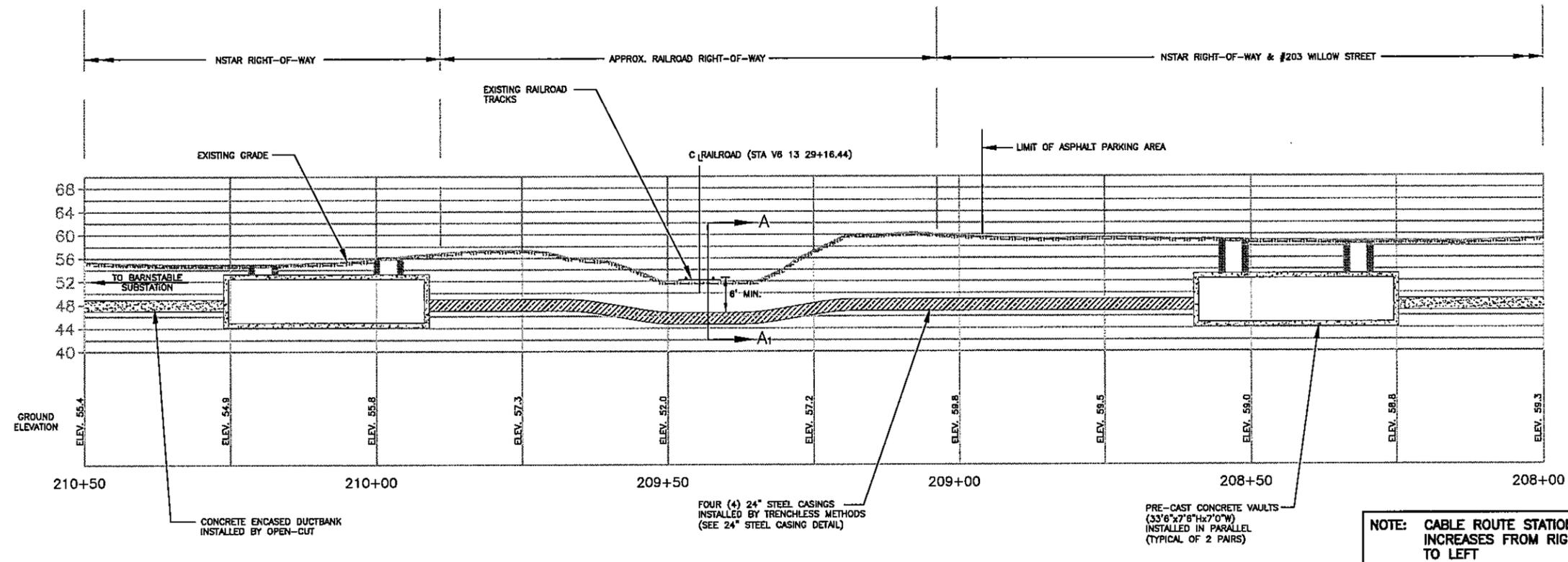
ROUTE 28  
PROFILE & DETAILS  
(YARMOUTH, MA)

PROJECT No: E159-204.10	DRAWING No.
DATE OF ISSUE: 02/25/10	PR-1
SHEET No:	
SCALE: 1"=40'	

FOR PERMITTING PURPOSES ONLY

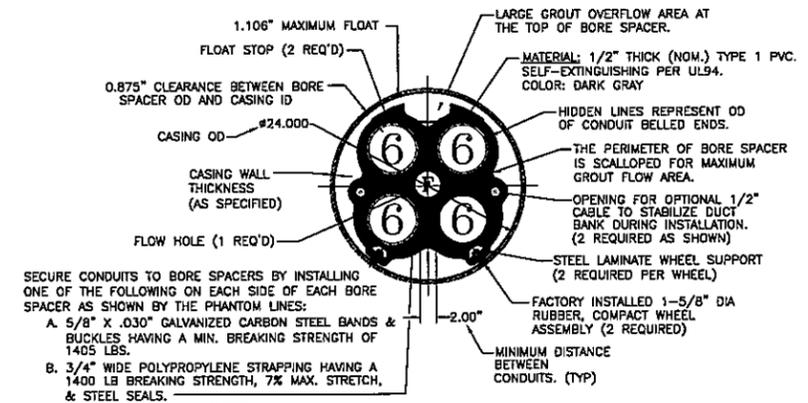
NOTE:  
1. BORING DATA OBTAINED FROM GZA BORING SKETCHES DATED JUNE 2008.  
2. SEE BORING LOGS FOR DETAILED INFORMATION.



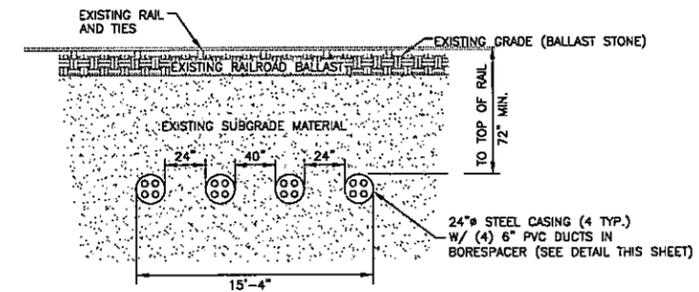


LOOKING NORTH  
 SCALE:  
 HORIZONTAL 1"=10'  
 VERTICAL 1"=10'

**RAILROAD CROSSING  
 SECTION C-C' (STA 208+00 TO STA 210+50)**



**24" CASING DETAIL**  
 NOT TO SCALE



**RAILROAD CROSSING SECTION A-A1 TRENCHLESS INSTALLATION DETAIL**  
 NOT TO SCALE

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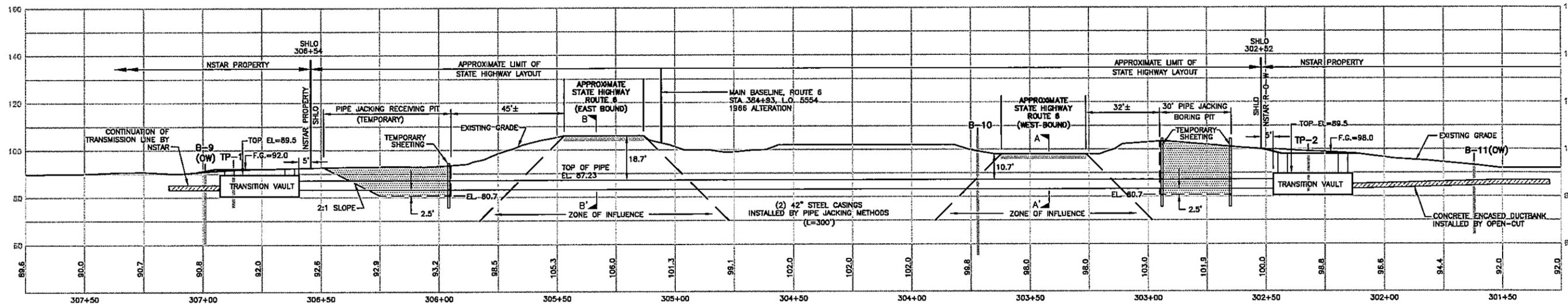
No.	REVISION	DATE	APP BY

CAPE WIND ASSOCIATES, LLC  
**CAPE WIND PROJECT**  
 COMPILED PLAN SET OF  
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 TRANSMISSION CABLE ROUTE  
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**CABLE PROFILE &  
 DETAILS  
 (UNDER RAILROAD)**

PROJECT No.: E159-504.10	DRAWING No.
DATE OF ISSUE: 02/28/10	<b>PR-3</b>
SHEET No.:	
SCALE: 1"=40'	

FOR PERMITTING PURPOSES ONLY



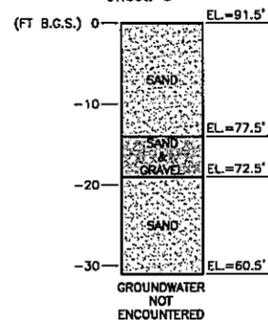
SCALE:  
HORIZONTAL: 1"=20'  
VERTICAL: 1"=20'

**ROUTE 6 CROSSING (BARNSTABLE)  
(STA 301+00 TO STA 307+25)**

**BORING No: B-9 (OW)**

Ground Surface Elev: 91.5'  
Depth to Water (ft): N/A  
Depth of Boring (ft): 31'

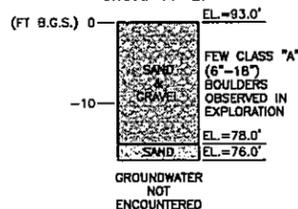
Station: 306+99  
Offset: 0



**TEST PIT No: TP-1**

Ground Surface Elev: 93.0'  
Depth to Water (ft): N/A  
Depth of Boring (ft): 17'

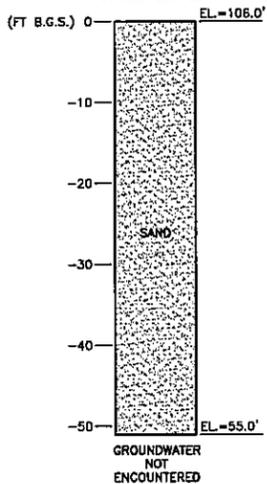
Station: 306+87  
Offset: 16' LT



**BORING No: B-10**

Ground Surface Elev: 106.0'  
Depth to Water (ft): N/A  
Depth of Boring (ft): 51.0'

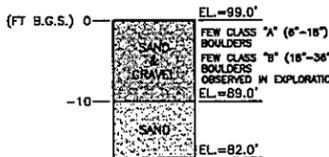
Station: 303+72  
Offset: 28' LT



**TEST PIT No: TP-2**

Ground Surface Elev: 99.0'  
Depth to Water (ft): N/A  
Depth of Boring (ft): 17'

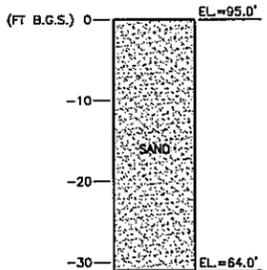
Station: 302+32  
Offset: 16' RT



**BORING No: B-11 (OW)**

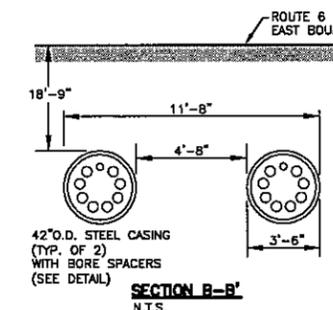
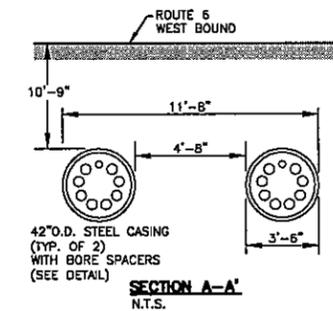
Ground Surface Elev: 95.0'  
Depth to Water (ft): N/A  
Depth of Boring (ft): 31'

Station: 301+62  
Offset: 32' LT



**NOTE:**

- BORING DATA OBTAINED FROM GZA BORING SKETCHES DATED JUNE 2008.
- BORING ELEVATIONS REPORTED TO BE NGVD
- SEE BORING LOGS FOR DETAILED INFORMATION



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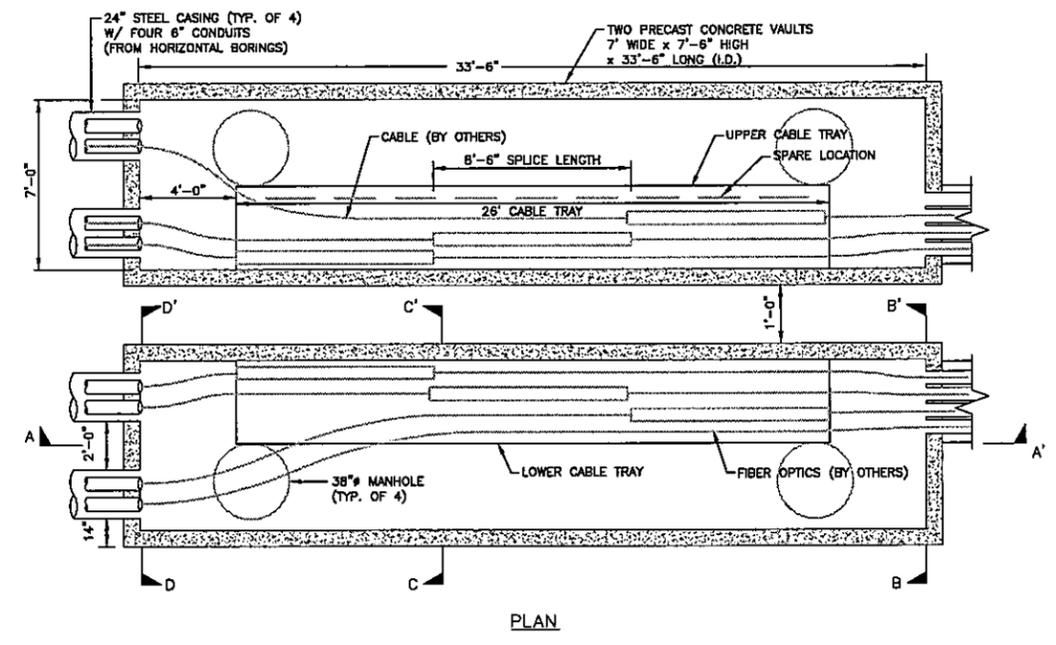
CAPE WIND ASSOCIATES, LLC

**CAPE WIND PROJECT**  
COMPILED PLAN SET OF  
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TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

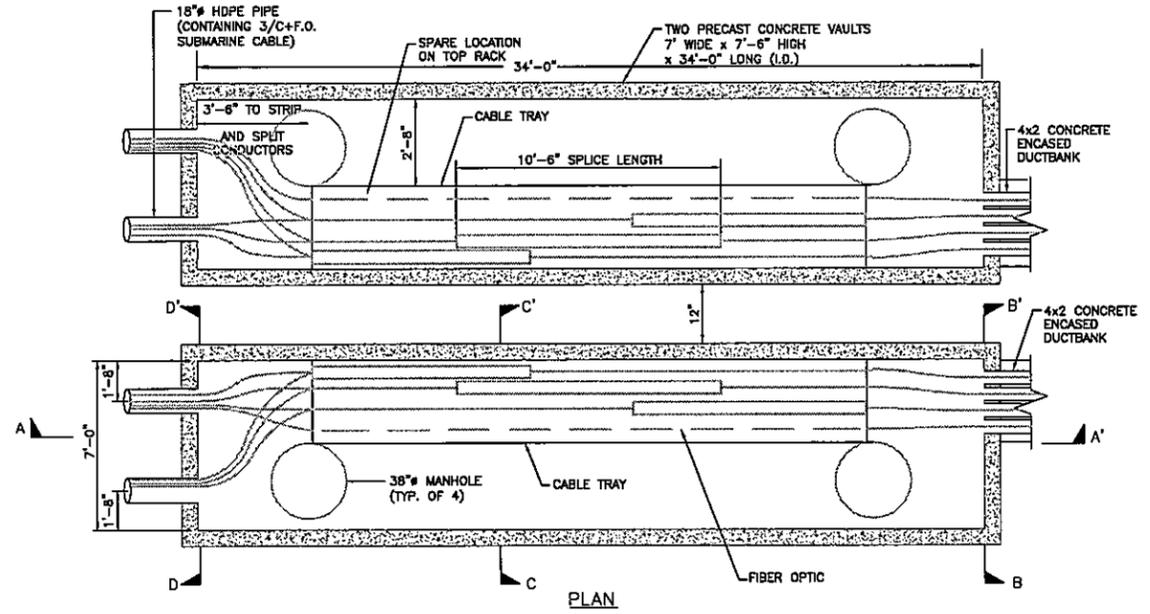
**ROUTE 6 CROSSING  
PROFILE & DETAILS  
(BARNSTABLE, MA)**

PROJECT No.: E159-304.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>PR-4</b>
SHEET No.:	SCALE: 1"=40'

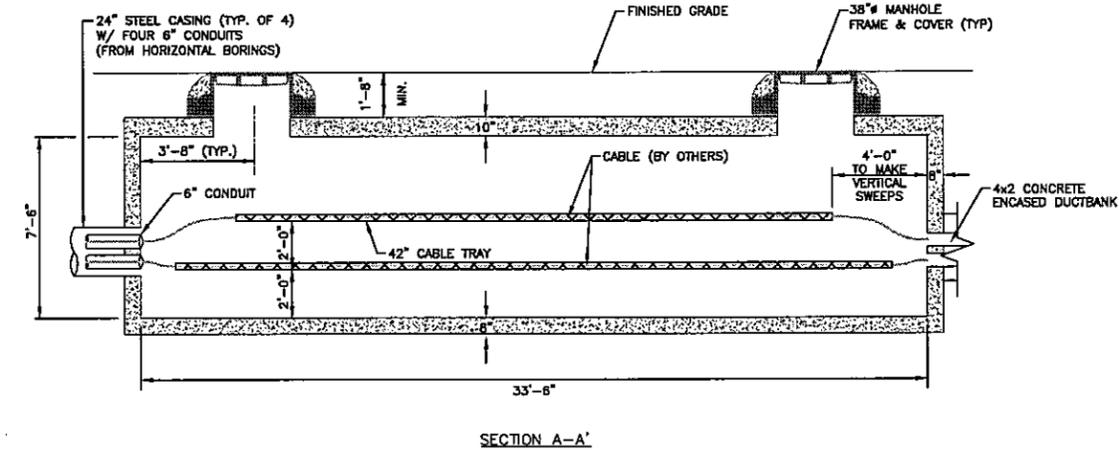
FOR PERMITTING PURPOSES ONLY



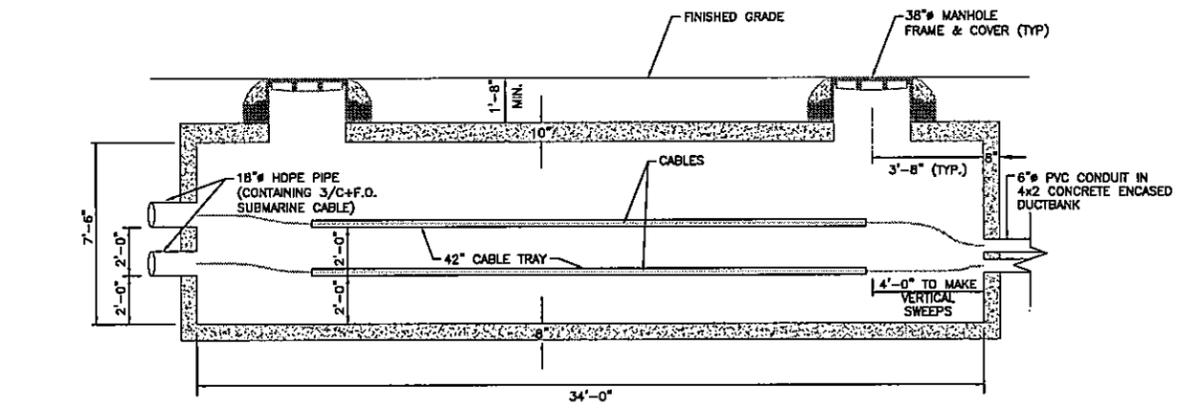
PLAN



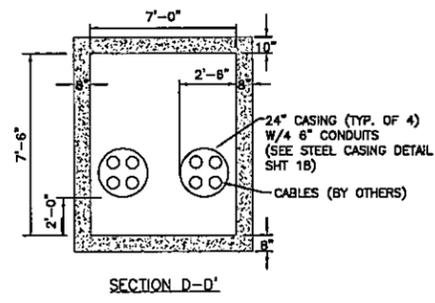
PLAN



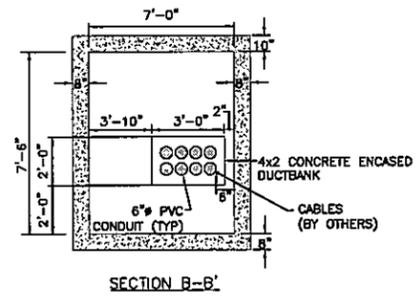
SECTION A-A'



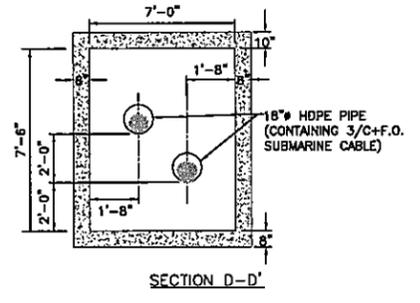
SECTION A-A'



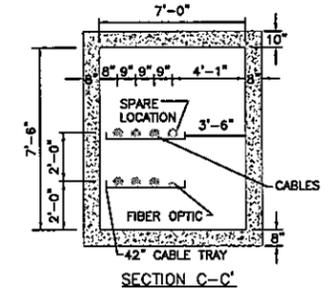
SECTION D-D'



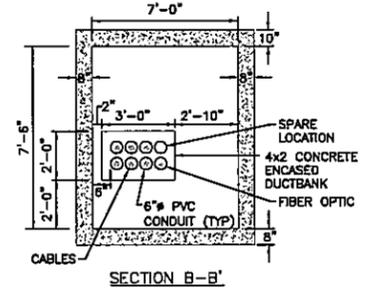
SECTION B-B'



SECTION D-D'

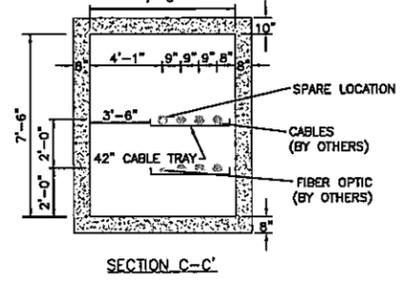


SECTION C-C'



SECTION B-B'

- NOTES:
1. CONCRETE MINIMUM STRENGTH - 6000 PSI @28 DAYS.
  2. STEEL REINFORCEMENT - ASTM A615, GRADE 60.
  3. COVER TO STEEL - 1" MIN.
  4. DESIGN LOADING - AASHTO HS20-44.
  5. CONSTRUCTION JOINT - SEALED WITH 1" BUTYL RUBBER.
  6. DESIGN SPECIFICATION - ACI 350R& 318& AASHTO LOAD FACTOR DESIGN METHOD.



SECTION C-C'

SEE TYPICAL VAULT INSTALLATION DETAIL, SHEET 17.  
**UPLAND TRANSITION VAULT DETAIL**  
NOT TO SCALE

**LANDFALL TRANSITION VAULT DETAIL**  
NOT TO SCALE

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Wellesley, Massachusetts 02482  
p 781.431.0500  
f 781.431.7434  
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NO.	REVISION	DATE	APP BY

DRAWN BY: KCM      CHECKED BY: PRW  
DESIGNED BY: RAH      APPROVED BY:

CAPE WIND ASSOCIATES, LLC

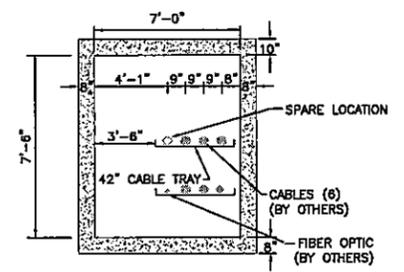
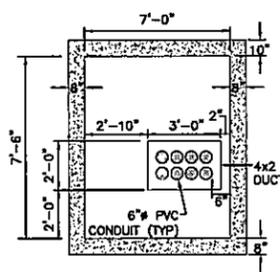
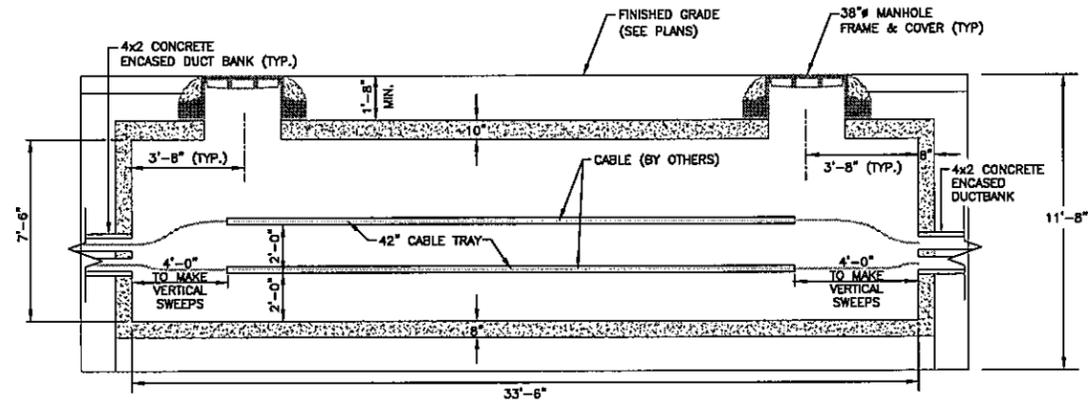
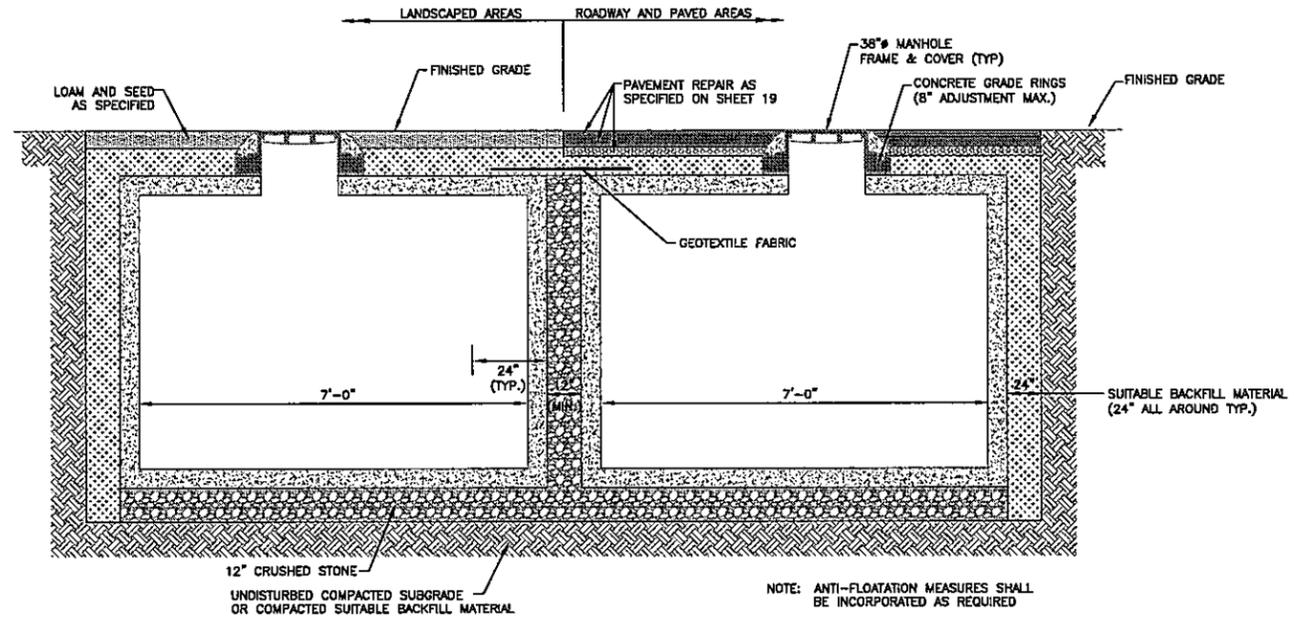
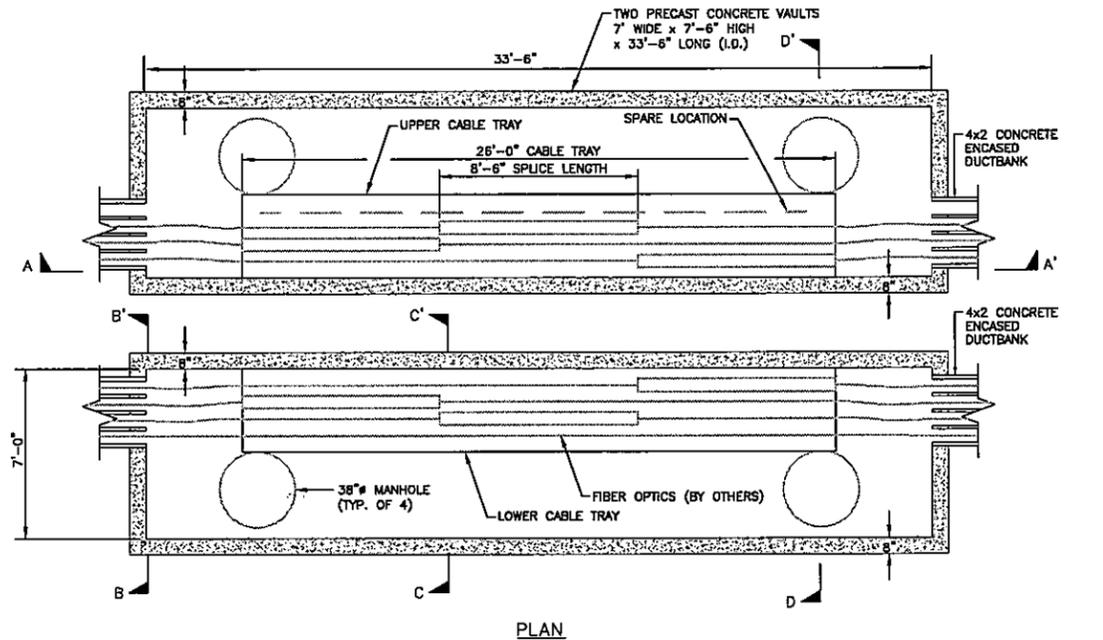
**CAPE WIND PROJECT**

COMPILED PLAN SET OF  
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TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

VAULT DETAILS

PROJECT No: E156-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>CD-1</b>
SHEET No.:	
SCALE: 1"=40'	

FOR PERMITTING PURPOSES ONLY



- NOTES:
1. CONCRETE MINIMUM STRENGTH - 6000 PSI @28 DAYS.
  2. STEEL REINFORCEMENT - ASTM A615, GRADE 60.
  3. COVER TO STEEL - 1" MIN.
  4. DESIGN LOADING - AASHTO HS20-44.
  5. CONSTRUCTION JOINT - SEALED WITH 1" BUTYL RUBBER.
  6. DESIGN SPECIFICATION - ACI 350R& 318& AASHTO LOAD FACTOR DESIGN METHOD.

SEE TYPICAL VAULT INSTALLATION DETAIL, THIS SHEET.  
**SPLICE VAULT DETAIL**  
NOT TO SCALE

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NO.	REVISION	DATE	APP BY

DRAWN BY: KCW      CHECKED BY: PRW  
DESIGNED BY: RAH      APPROVED BY:

CAPE WIND ASSOCIATES, LLC

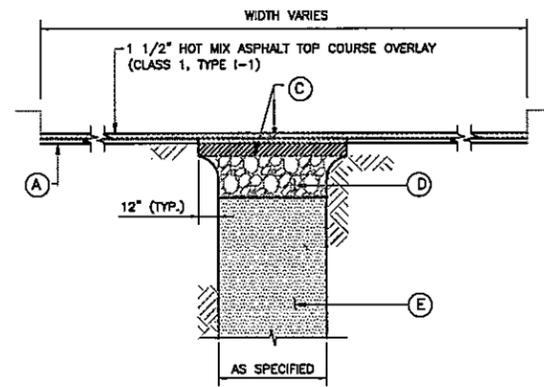
CAPE WIND PROJECT

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VAULT DETAILS

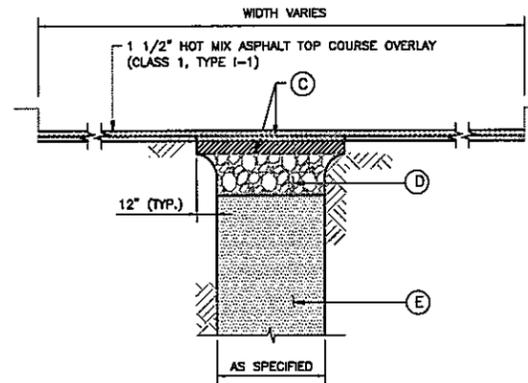
PROJECT No.: E159-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>CD-2</b>
SHEET No.:	
SCALE: 1"=40'	





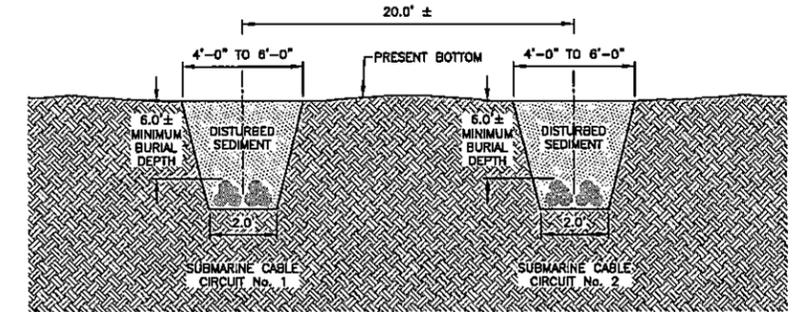
NOTE: CONSTRUCT CROWN WITH 2% CROSS SLOPE FROM CENTERLINE OF EXISTING PAVEMENT. POSITION OF TRENCH WITHIN ROADWAY WILL VARY.

**FULL WIDTH ROADWAY OVERLAY**  
(NEW HAMPSHIRE AVE, BERRY AVE, WILLOW ST, AND HIGGINS CROWELL ROAD SOUTH OF INDUSTRIAL PARK ROAD)

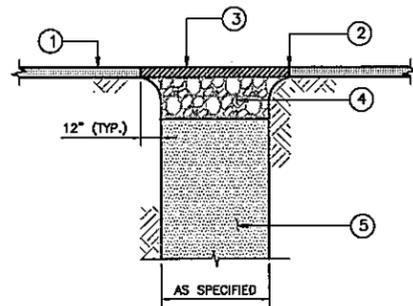


NOTE: CONSTRUCT CROWN WITH 2% CROSS SLOPE FROM CENTERLINE OF EXISTING PAVEMENT. POSITION OF TRENCH WITHIN ROADWAY WILL VARY.

**FULL WIDTH ROADWAY OVERLAY**  
(WHERE SPECIFIED)



**TYPICAL CROSS SECTION OF SUBMARINE CABLE TRENCH USING JET PLOW EMBEDMENT**  
N.T.S.



**TEMPORARY (ROADWAY)**

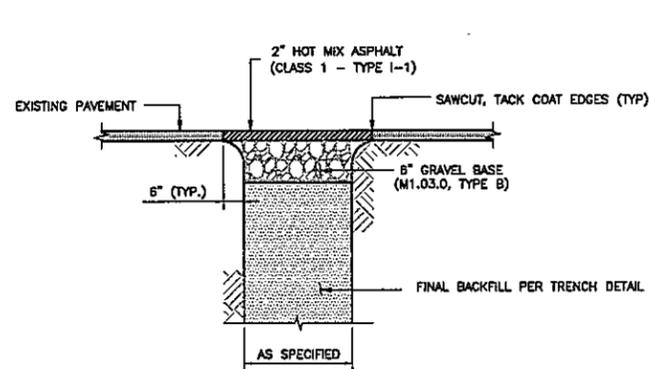
NOTES:

- 1 EXISTING PAVEMENT
- 2 SAWCUT, TACK COAT EDGES (TYP)
- 3 1 1/2" HOT MIX ASPHALT TOP COURSE - CLASS 1, TYPE I-1 & 2 1/2" HOT MIX ASPHALT BINDER COURSE - CLASS 1, TYPE I-1, OR MATCH EXISTING PAVEMENT SECTION IF > 4".
- 4 8 1/2" COMPACTED 3/4" DENSE GRADED CRUSHED STONE
- 5 FINAL BACKFILL PER TRENCH DETAIL

NOTES: 1) ALL WORK SHALL CONFORM TO TOWN OF YARMOUTH DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR TRENCH EXCAVATION/REPAIR.  
2) UNLESS OTHERWISE INDICATED, ALL MATERIALS AND CONSTRUCTION METHODS MUST MEET THE MASSACHUSETTS HIGHWAY DEPARTMENT'S 1985 STANDARD SPECIFICATIONS AND 2000 SUPPLEMENTAL SPECIFICATIONS, AS AMENDED.

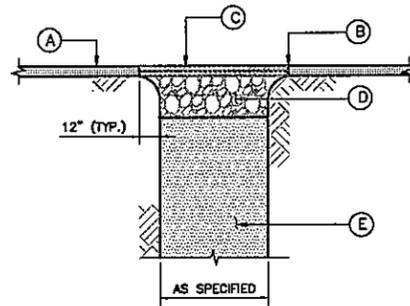
**TRENCH REPAIR DETAILS - YARMOUTH PUBLIC RIGHT-OF-WAYS**

N.T.S.



**TRENCH REPAIR - HOT MIX ASPHALT SIDEWALK**

N.T.S.

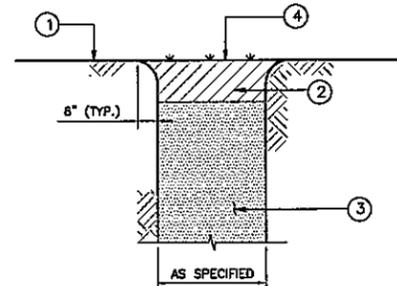


**PERMANENT (ROADWAY)**

WHERE NOT OTHERWISE SPECIFIED FOR FULL WIDTH ROADWAY OVERLAY

NOTES:

- A EXISTING PAVEMENT
- B SAWCUT, TACK COAT EDGES (TYP). SEAL JOINTS BY INFRARED TECHNIQUES (6 MONTHS FOLLOWING PLACEMENT OF PERMANENT PATCH).
- C 1 1/2" HOT MIX ASPHALT TOP COURSE - CLASS 1, TYPE I-1 & 2 1/2" HOT MIX ASPHALT BINDER COURSE - CLASS 1, TYPE I-1, OR MATCH EXISTING PAVEMENT SECTION IF > 4".
- D 8 1/2" COMPACTED 3/4" DENSE GRADED CRUSHED STONE
- E FINAL BACKFILL PER TRENCH DETAIL

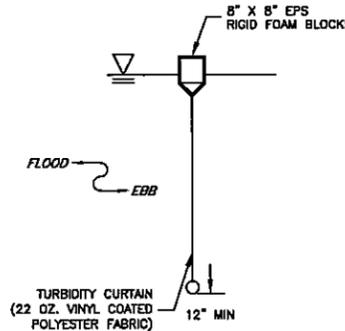


NOTES:

- 1 EXISTING LANDSCAPED AREAS
- 2 6" LOAM WITHIN PUBLIC RIGHT-OF-WAY, 4" LOAM OTHERWISE
- 3 FINAL BACKFILL PER TRENCH DETAIL
- 4 FERTILIZE, LIME, AND SEED

**TRENCH REPAIR - LANDSCAPED AREAS**

N.T.S.



NOTES: 1. TURBIDITY CURTAIN TO BE DESIGNED FOR PROJECT SITE.  
2. TO BE USED FOR COFFERDAM.

**TYPICAL TURBIDITY CURTAIN**

N.T.S.

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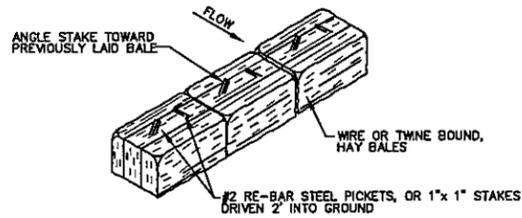
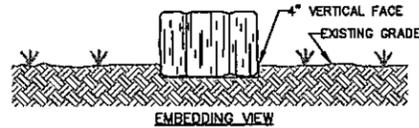
CAPE WIND ASSOCIATES, LLC

**CAPE WIND PROJECT**  
COMPILED PLAN SET OF  
THE UPLAND 115KV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

**TRENCH DETAILS  
&  
TURBIDITY DETAILS**

PROJECT No.: E159-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>CD-4</b>
SHEET No.:	
SCALE: 1"=40'	

FOR PERMITTING PURPOSES ONLY

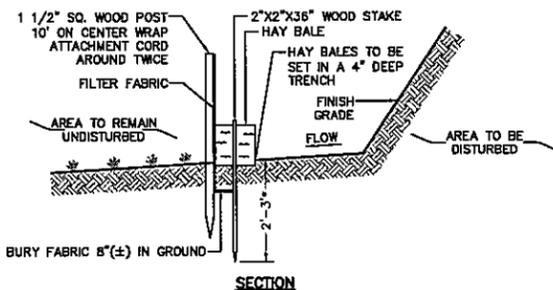
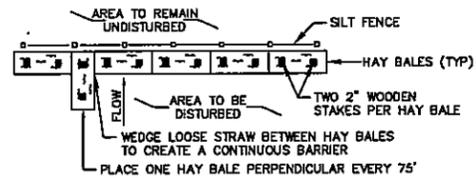


NOTES:

1. PLACE BALES 5 FEET BEYOND THE TOE OF SLOPE.
2. REMOVE BALES, AS DIRECTED, WHEN THEY ARE NO LONGER NEEDED. AFTER REMOVAL, STABILIZE AREA WITH SUITABLE EARTH MATERIAL AND VEGETATION.

TYPICAL HAYBALE

NOT TO SCALE

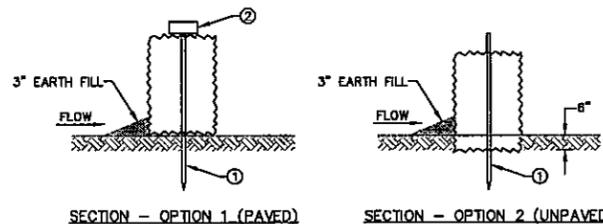
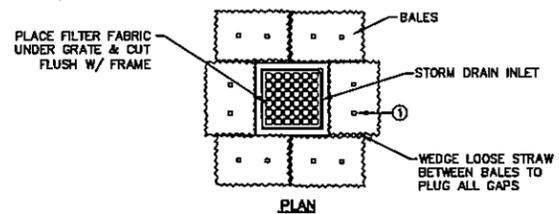
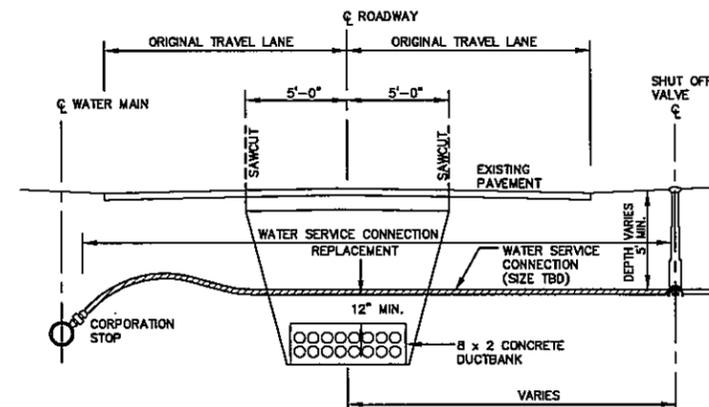
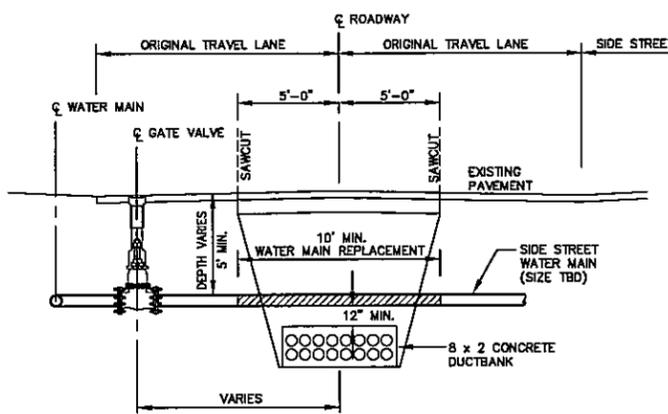


NOTE:

- \* = DEPTH TO BE 2' UNLESS POST IS TO BE SET IN PEAT; IN PEAT DRIVE BEYOND 2' DEPTH BY HAND TO REFUSAL OR 3' MAX.

HAYBALE AND SILT FENCE

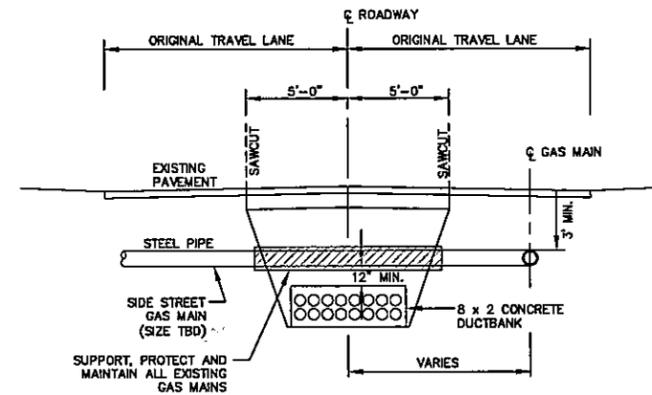
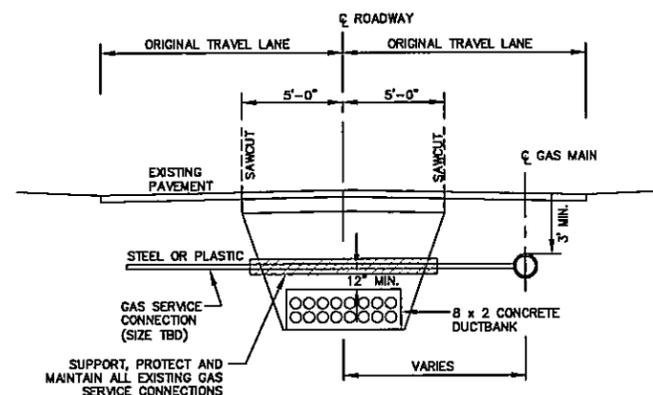
NOT TO SCALE



- ① TWO 1" x 1" WOOD STAKES OR REINFORCING BARS IN EACH BALE AND EMBEDDED IN THE GROUND 10" MINIMUM.
- ② PLACE DEAD WEIGHT AS NECESSARY TO HOLD HAYBALE IN PLACE.

HAYBALE EROSION CONTROL AT DRAIN INLETS

NOT TO SCALE

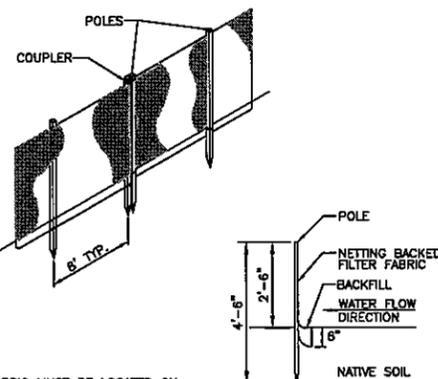


UTILITY CROSSING/ GAS SERVICE CONNECTION

SCALE: 1"=4'

UTILITY CROSSING/ SIDE STREET GAS MAIN

SCALE: 1"=4'

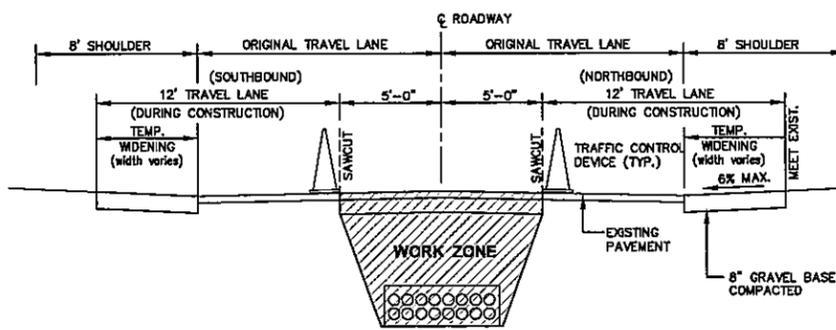
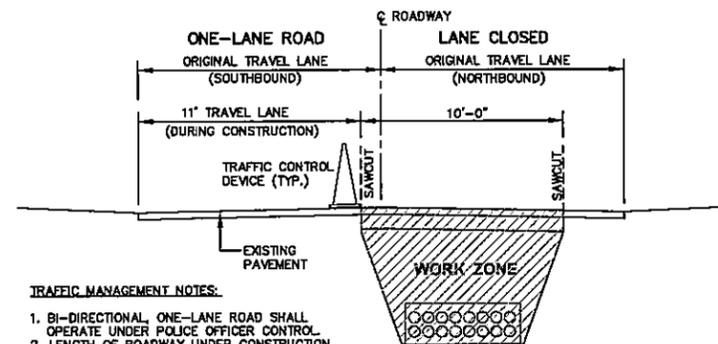


NOTES:

1. THE FILTER FABRIC MUST BE LOCATED ON THE UP-SLOPE SIDE OF THE FENCE.
2. THE BOTTOM 6" OF FILTER FABRIC MUST BE BURIED IN A PRE-EXCAVATED TRENCH WHICH WILL BE BACKFILLED, TAMPED AND SEEDED FOR STABILITY.

TYPICAL SILT FENCE

NOT TO SCALE



CENTER ROADWAY CLOSURE/ TWO-WAY TRAFFIC

SCALE: 1"=4'

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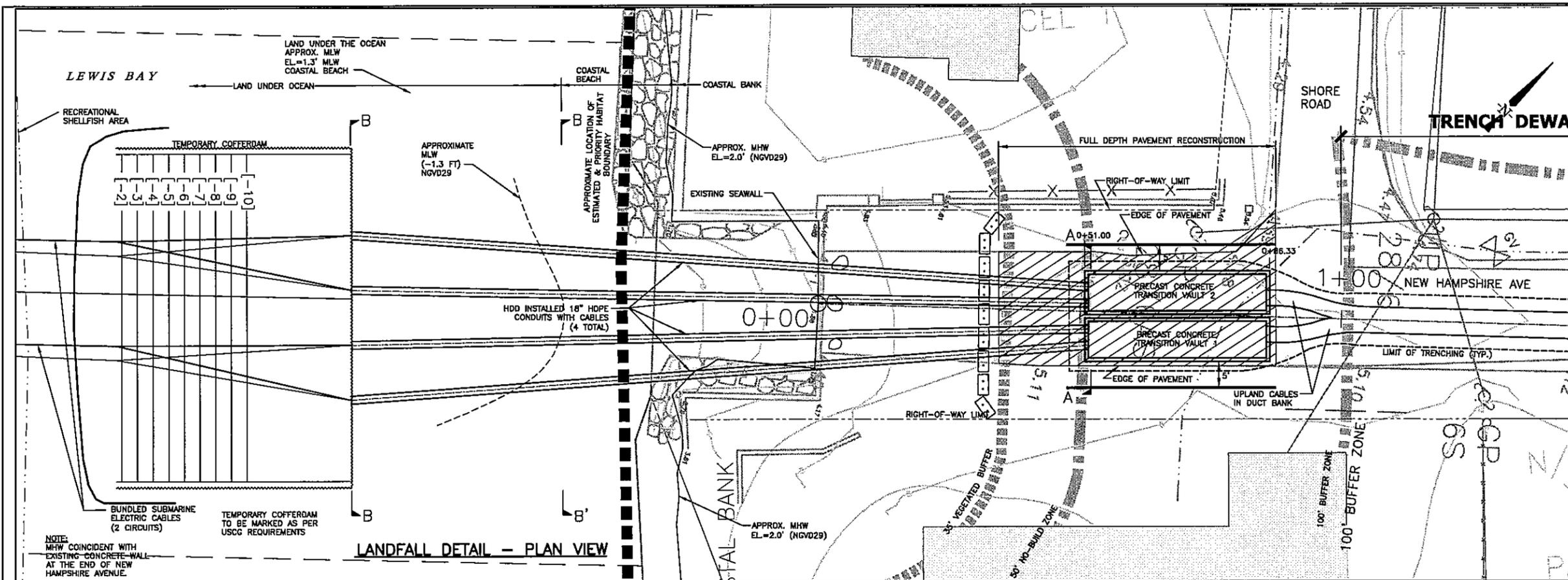
No.	REVISION	DATE	APP BY

CAPE WIND ASSOCIATES, LLC

CAPE WIND PROJECT  
COMPILED PLAN SET OF  
THE UPLAND 115KV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

TYPICAL DETAILS

PROJECT No.: E159-004.10	DRAWING No.
DATE OF ISSUE: 02/26/10	CD-5
SHEET No.:	
SCALE: 1"=40'	

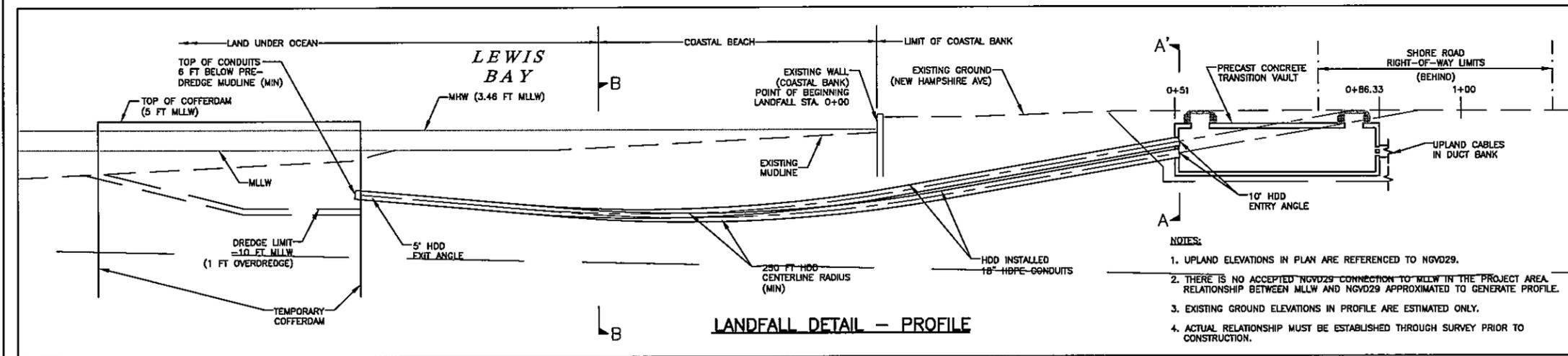
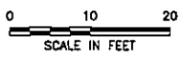


VERTICAL DATUM RELATIONSHIPS IN FEET  
(HYANNIS HARBOR - HYANNISPORT)  
(NOAA TIDAL BENCHMARK NO. 8447805)

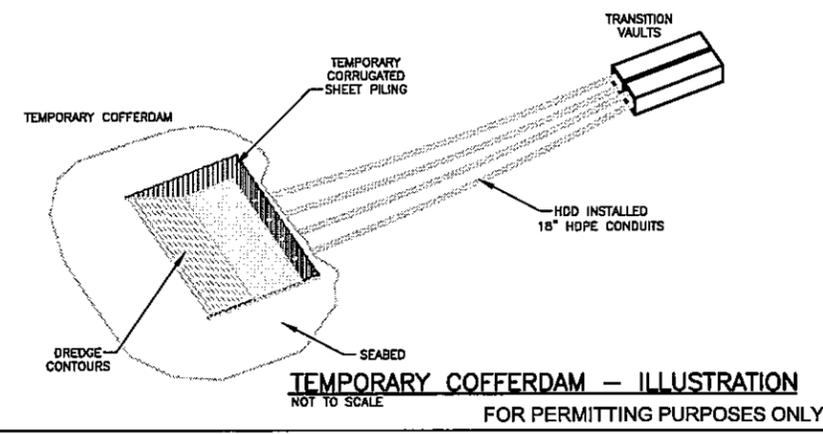
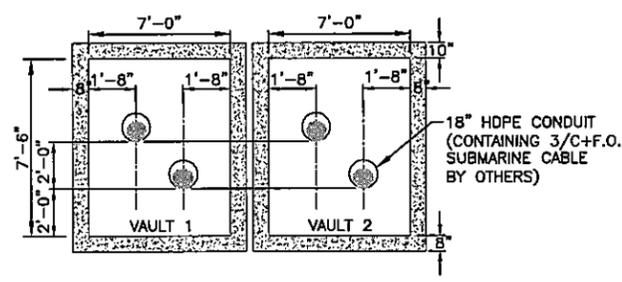
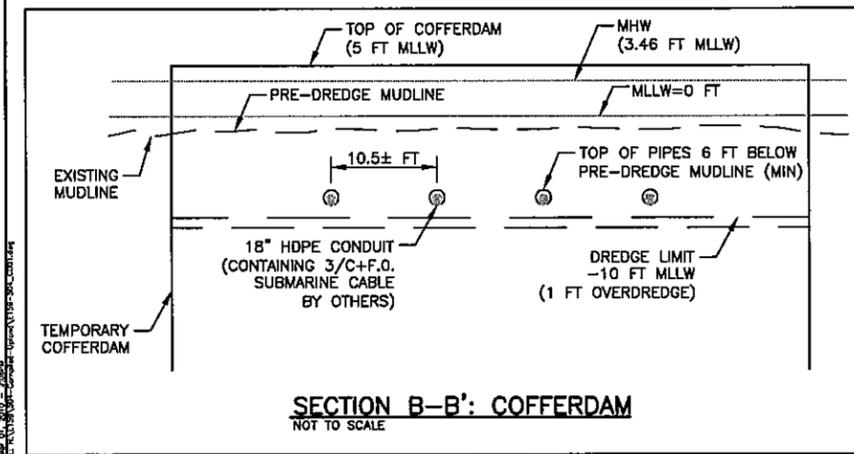
MLW DATUM	NGVD29 DATUM
MHW - 3.48	MHW - 0.00
MLW - 0.24	MLW - 0.00
MLW - 0.00	MLW - 0.24

TOTAL RANGE = 3.22 FT

NOTE: NO ACCEPTED REFERENCE BETWEEN MLW AND NGVD29 EXISTS AT THIS LOCATION. RELATIONSHIPS ESTIMATED BASED ON OTHER CAPE WIND LOCATIONS. DECIMALS NUMBERS ARE ESTIMATED.



- NOTES:
1. UPLAND ELEVATIONS IN PLAN ARE REFERENCED TO NGVD29.
  2. THERE IS NO ACCEPTED NGVD29 CONNECTION TO MLLW IN THE PROJECT AREA. RELATIONSHIP BETWEEN MLLW AND NGVD29 APPROXIMATED TO GENERATE PROFILE.
  3. EXISTING GROUND ELEVATIONS IN PROFILE ARE ESTIMATED ONLY.
  4. ACTUAL RELATIONSHIP MUST BE ESTABLISHED THROUGH SURVEY PRIOR TO CONSTRUCTION.



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Wellesley, Massachusetts 02482  
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f 781.431.7434  
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NO.	REVISION	DATE	APP BY

DRAWN BY: KCM      CHECKED BY: PRW  
DESIGNED BY: RAH      APPROVED BY:

CAPE WIND ASSOCIATES, LLC

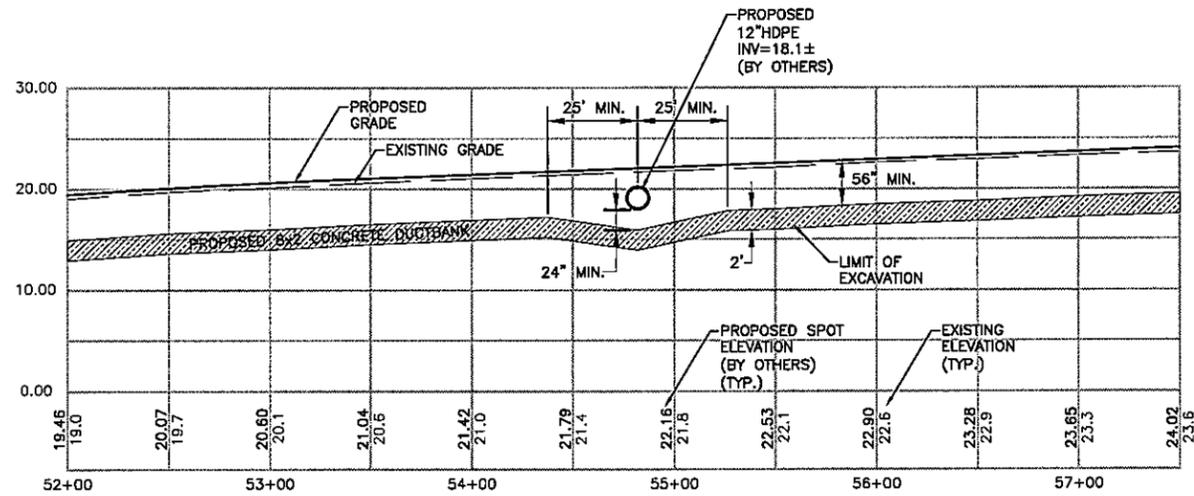
CAPE WIND PROJECT

COMPILED PLAN SET OF  
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TRANSMISSION CABLE ROUTE  
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LANDFALL  
DETAILS

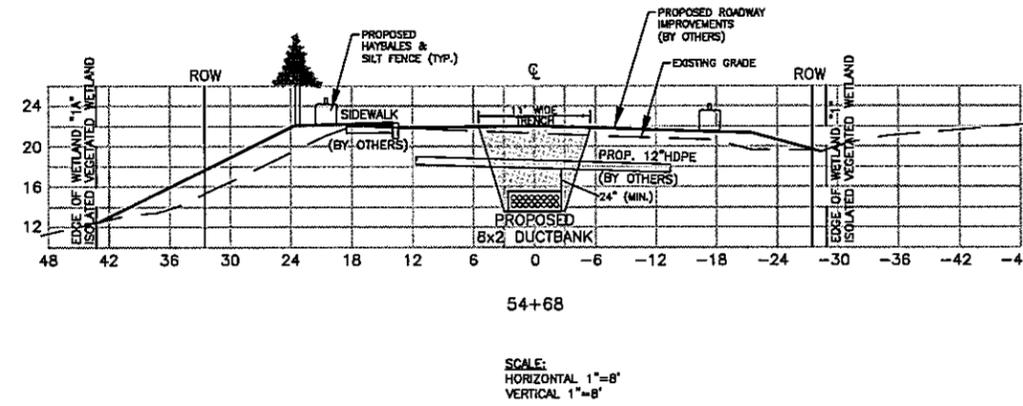
PROJECT No.: E159-50410	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>CD-6</b>
SHEET No.:	
SCALE: 1"=40'	

DATE: 02/26/10 10:28 AM



SCALE:  
HORIZONTAL 1"=40'  
VERTICAL 1"=8'

HIGGINS CROWELL ROAD CROSSING  
SECTION B-B' (STA 53+00 TO STA 56+50)



SECTION E-E' HIGGINS CROWELL ROAD

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	DESIGNED BY: RAH	APPROVED BY:	

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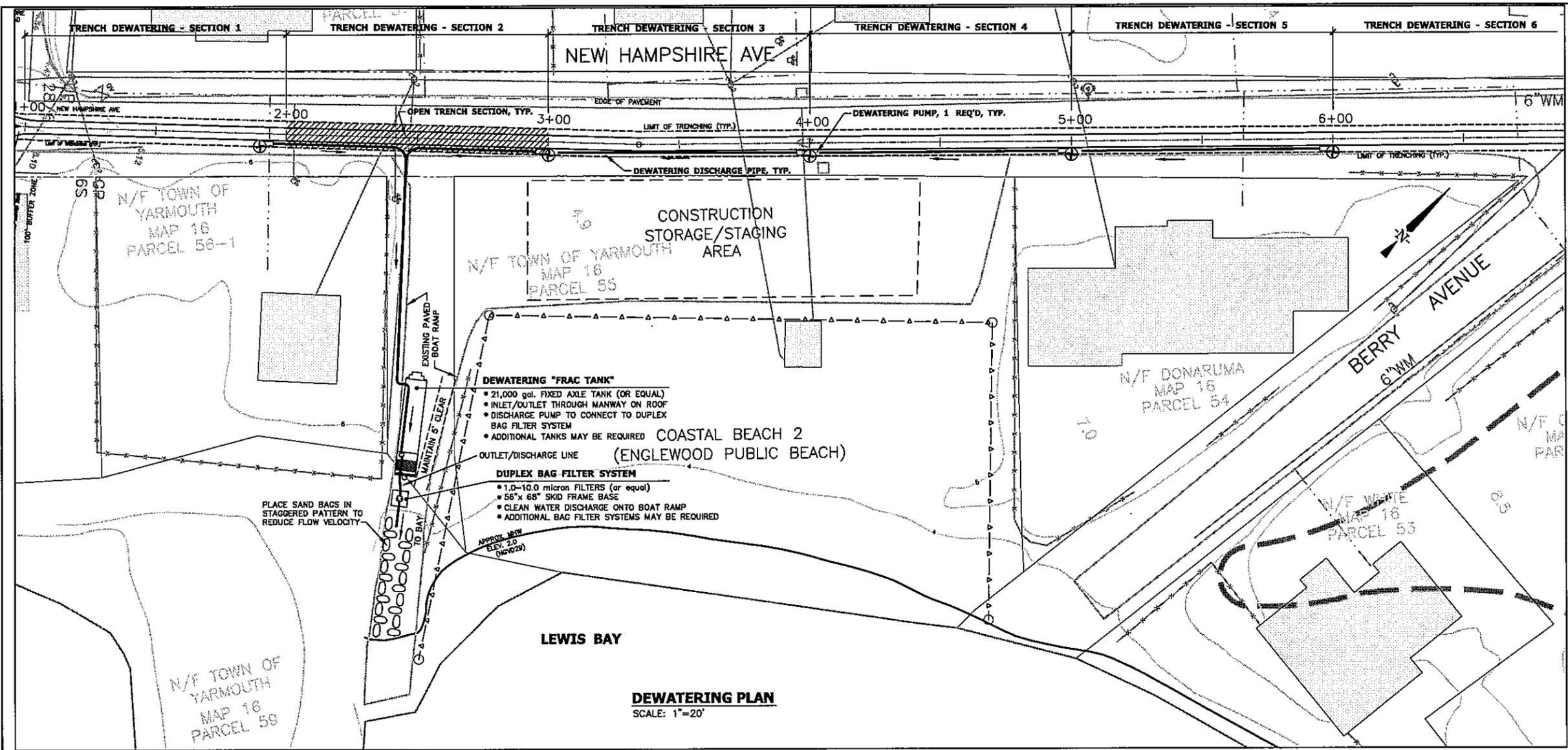
CAPE WIND PROJECT

COMPILED PLAN SET OF  
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TRANSMISSION CABLE ROUTE  
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DRAIN CROSSING  
DETAIL  
(HIGGINS CROWELL RD)

PROJECT No.: E159-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	CD-7
SHEET No.:	
SCALE: 1"=40'	

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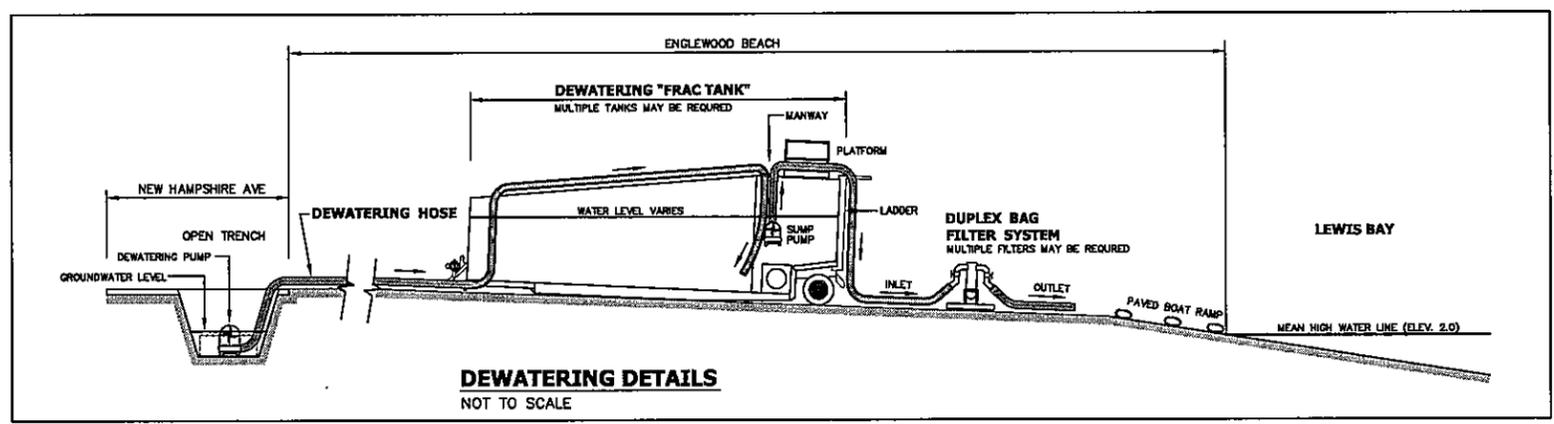
DRAWN BY: KCM    CHECKED BY: PRW  
DESIGNED BY: RAH    APPROVED BY:

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CAPE WIND PROJECT

COMPILED PLAN SET OF  
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DEWATERING PLAN  
AND DETAILS  
(ENGLEWOOD BEACH)



PROJECT No.: E159-004.10	DRAWING No.
DATE OF ISSUE: 02/26/10	CD-8
SHEET No.:	
SCALE: 1"=40'	

**NOTES:**

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS.
- ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, AND REFLECTORIZED PLASTIC DRUMS WITH LIGHTING DEVICES MOUNTED ON THEM, MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES."
- CONTRACTORS SHALL NOTIFY EACH ADJUTANT AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
- THE FIRST THREE PLASTIC DRUMS OF A TAPER MAY BE MOUNTED WITH TYPE A LIGHTS.
- THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
- DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- MINIMUM LANE WIDTH IS TO BE 10 FEET (3.0m) UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY POLICE DETAILS

**LEGEND:**

- REFLECTORIZED PLASTIC DRUM
- ▨ WORK ZONE
- ▭ WORK VEHICLE
- P POLICE DETAIL
- DIRECTION OF TRAFFIC
- ▭ TRUCK MOUNTED ATTENUATOR
- ▭ TYPE III BARRICADE
- ▭ IMPACT ATTENUATOR
- TRAFFIC OR PEDESTRIAN SIGNAL
- ▭ FLASHING ARROW PANEL
- ▭ MEDIAN BARRIER
- ▭ SIGN
- ▭ FLASHING ARROW PANEL
- ▭ MEDIAN BARRIER WITH WARNING LIGHTS

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1800 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI-LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

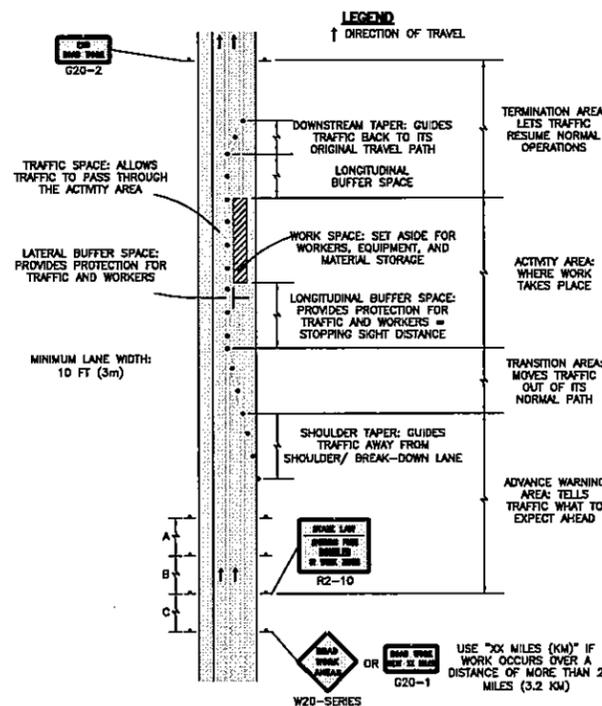
**MEASURED AVERAGE WORK ZONE CAPACITIES**

Number of Lanes (existing)	Number of Lanes (to traffic)	Number of Studies	Average Capacity	
			VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	8	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: Dornik, C. *Modeling Work Zone Construction Level of Service*. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48-HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

**GENERAL GUIDELINES**



**COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE**  
NOT TO SCALE

**SUGGESTED WORK ZONE WARNING SIGN SPACING**

Road Type	Distance Between Signs*		
	A	B	C
LOCAL OR LOW VOLUME ROADWAYS*	350 (100)	350 (100)	350 (100)
MOST OTHER ROADWAYS*	500 (150)	500 (150)	500 (150)
FREEWAYS AND EXPRESSWAYS*	1,000 (300)	1,500 (450)	2,640 (800)

\* SPEED CATEGORY TO BE DETERMINED BY HIGHWAY AGENCY

\*\* DISTANCES ARE SHOWN IN FEET (METERS). THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TMP SETUPS. IT IS THE ONE WHICH MAY OFTEN HAVE THE "STANDARD RED OR RED-ORANGE FLAGS (16 in. X 16 in.)" MOUNTED ON IT. THESE ADVANCE WARNING SIGNS ARE LOCATED AT THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

R2-10 SIGNS SHALL BE PLACED BETWEEN THE FIRST AND SECOND SIGNS.

R2-10 AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

Based on: Table 6C-1 2003 MUTCD

**STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED**

SPEED* (km/h)	DISTANCE (m)	SPEED* (mph)	DISTANCE (ft)
30	35	20	115
40	50	25	155
50	65	30	200
60	85	35	250
70	105	40	305
80	130	45	380
90	160	50	425
100	185	55	485
110	220	60	570
120	250	65	645
		70	730
		75	820

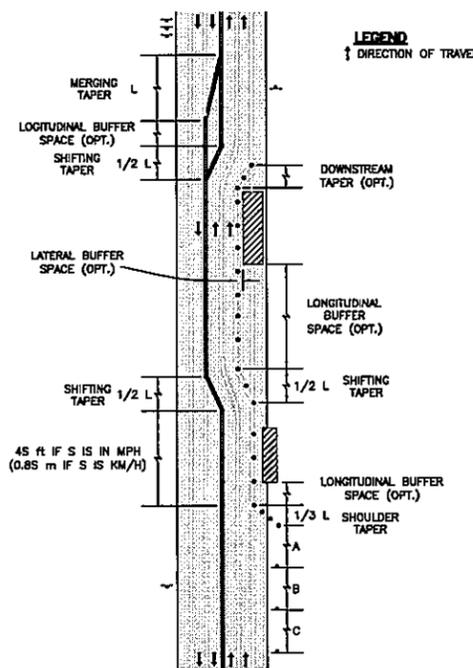
\*POSTED SPEED, OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

THESE VALUES MAY BE USED TO DETERMINE THE LENGTH OF LONGITUDINAL BUFFER SPACES.

THE DISTANCES IN THE ABOVE CHART REPRESENT THE MINIMAL VALUES FOR BUFFER SPACING.

Source: Table 6C-2 2003 MUTCD

**NOTES ON WORK ZONE DISTANCES**



**TYPES OF TAPERS AND BUFFER SPACES**  
NOT TO SCALE

**CONVENTIONAL ROADWAY**— A STREET OR HIGHWAY OTHER THAN A LOW-VOLUME ROAD, EXPRESSWAY, OR FREEWAY.

**EXPRESSWAY**— A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.

**FREEWAY**— A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

**LOW-VOLUME ROAD**— A FACILITY LYING OUTSIDE OF BUILT-UP AREAS OF CITIES, TOWNS, AND COMMUNITIES, AND IT SHALL HAVE A TRAFFIC VOLUME OF LESS THAN 400 AADT. IT SHALL NOT BE A FREEWAY, EXPRESSWAY, INTERCHANGE RAMP, FREEWAY SERVICE ROAD, OR A ROAD ON A DESIGNATED STATE HIGHWAY SYSTEM.

Source: 2003 MUTCD

**TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES**

Type of Taper	Taper Length (L)*
MERGING TAPER	AT LEAST L
SHIFTING TAPER	AT LEAST 0.5L
SHOULDER TAPER	AT LEAST 0.33L
ONE-LANE, TWO-WAY TRAFFIC TAPER	100 FT (30 m) MAXIMUM
DOWNSTREAM TAPER	100 FT (30 m) PER LANE

Source: Table 6C-3 2003 MUTCD

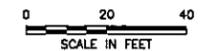
**FORMULAS FOR DETERMINING TAPER LENGTHS**

Speed Limit (S)	Taper Length (L) Feet	Speed Limit (S)	Taper Length (L) Meters
40 MPH OR LESS	$L = \frac{WS^2}{60}$	60 KM/H OR LESS	$L = \frac{WS^2}{155}$
45 MPH OR MORE	$L = WS$	70 KM/H OR MORE	$L = \frac{WS}{1.6}$

WHERE: L = TAPER LENGTH IN FEET (METERS)

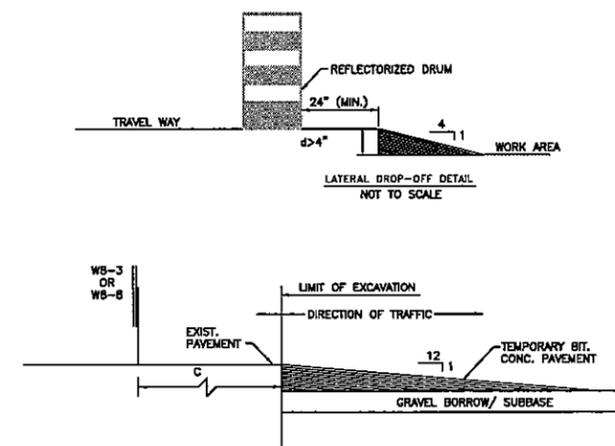
W = WIDTH OF OFFSET IN FEET (METERS)

S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH (KM/H)



Source: Table 6C-4 2003 MUTCD

**NOTES ON WORK ZONE DISTANCES**



**LONGITUDINAL DROP-OFF DETAIL**  
NOT TO SCALE

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DRAWN BY: KCM	CHECKED BY: FRW	
DESIGNED BY: RAH	APPROVED BY:	

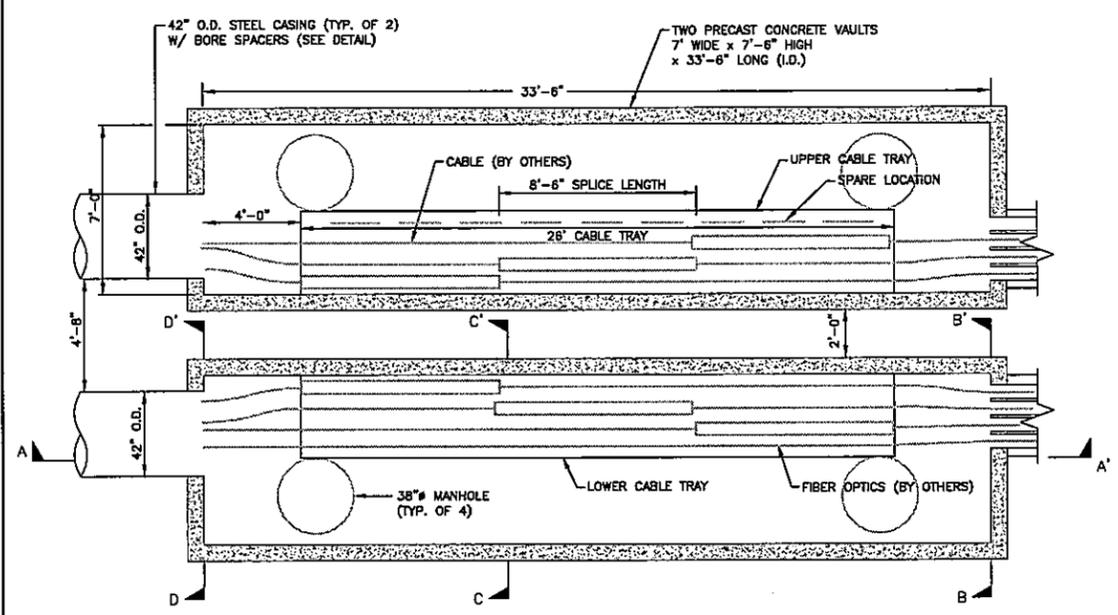
CAPE WIND ASSOCIATES, LLC

CAPE WIND PROJECT  
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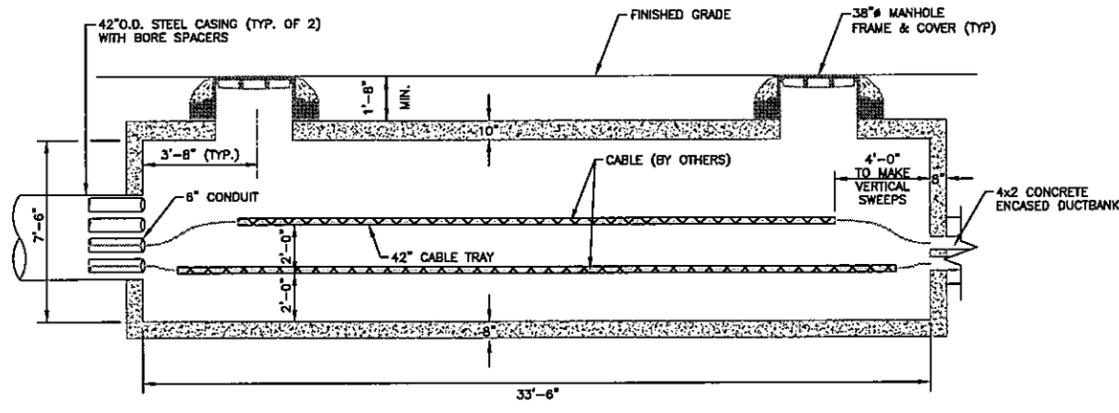
ROAD OPENING PERMIT  
TRAFFIC MANAGEMENT  
PLAN DETAILS  
(SHEET 1 OF 2)

PROJECT No.: E159-504-10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>CD-9</b>
SHEET No.:	
SCALE: 1"=40'	

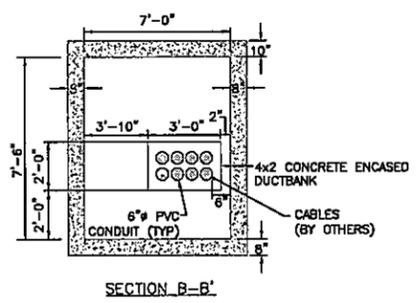




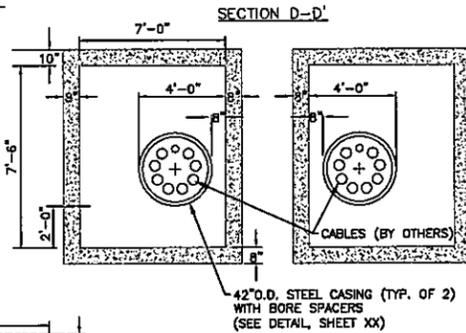
PLAN



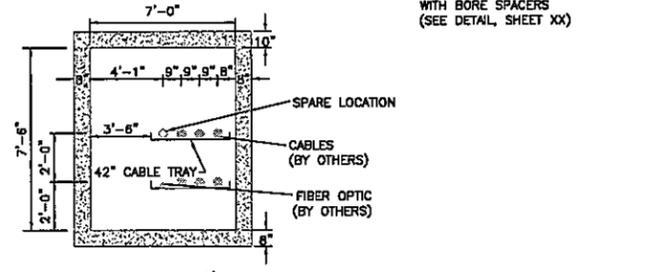
SECTION A-A'



SECTION B-B'



SECTION D-D'

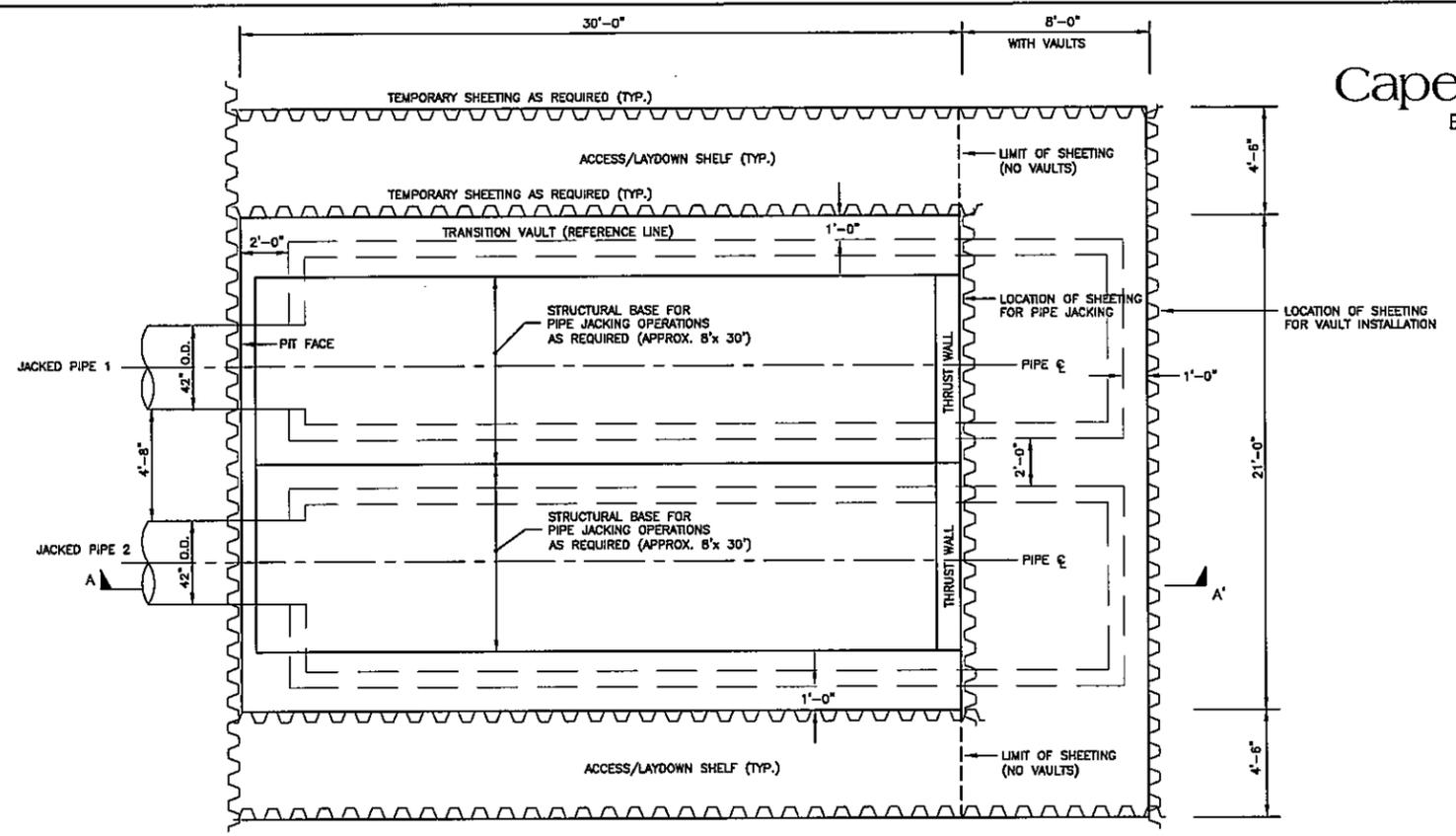


SECTION C-C'

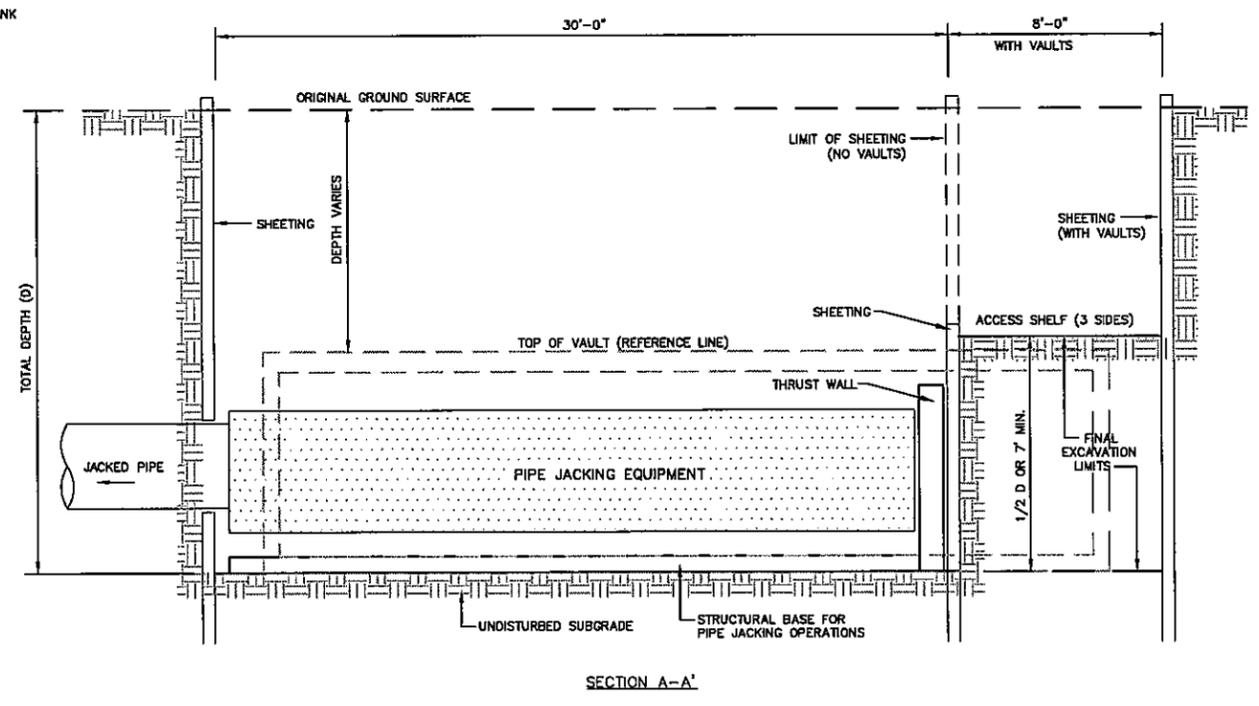
- NOTES:**
1. CONCRETE MINIMUM STRENGTH = 6000 PSI @ 28 DAYS.
  2. STEEL REINFORCEMENT - ASTM A615, GRADE 60.
  3. COVER TO STEEL - 1" MIN.
  4. DESIGN LOADING - AASHTO HS20-44.
  5. CONSTRUCTION JOINT - SEALED WITH 1" BUTYL RUBBER.
  6. DESIGN SPECIFICATION - ACI 350R& 318& AASHTO LOAD FACTOR DESIGN METHOD.

SEE TYPICAL VAULT INSTALLATION DETAIL, NEXT SHEET

**UPLAND TRANSITION VAULT DETAIL**  
OPEN TRENCH TO PIPE JACKING  
NOT TO SCALE



PLAN



SECTION A-A'

**PIPE JACKING BORING PIT DETAILS**  
NOT TO SCALE

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NO.	REVISION	DATE	APP BY

DESIGNED BY: RAH      CHECKED BY: FRW  
APPROVED BY:

CAPE WIND ASSOCIATES, LLC

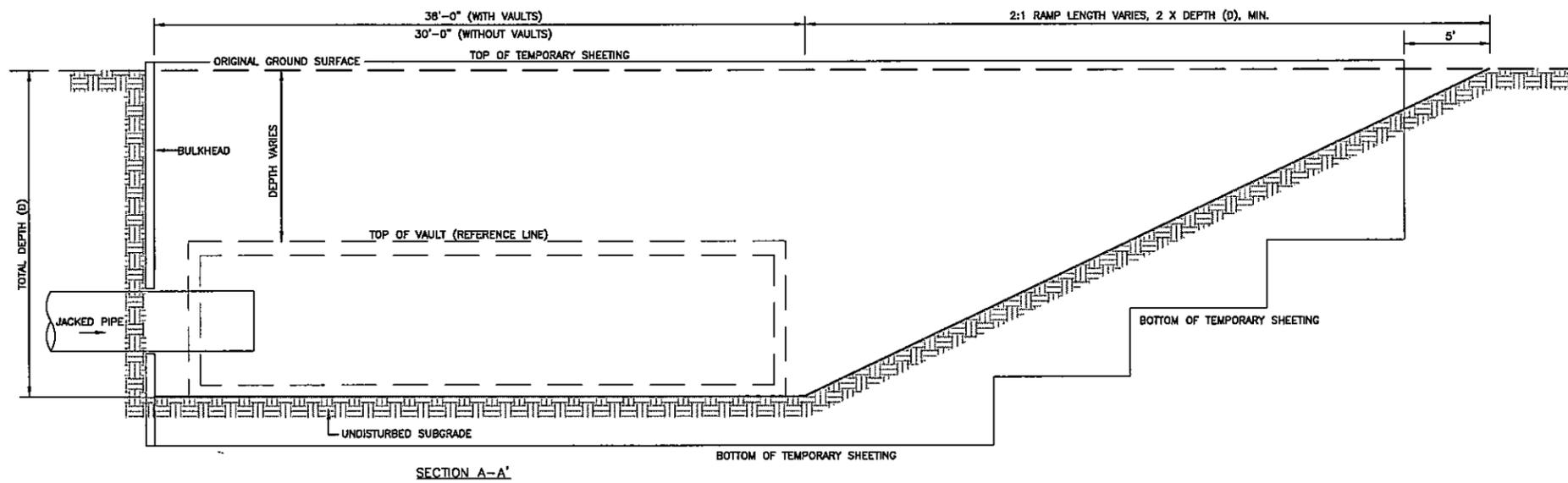
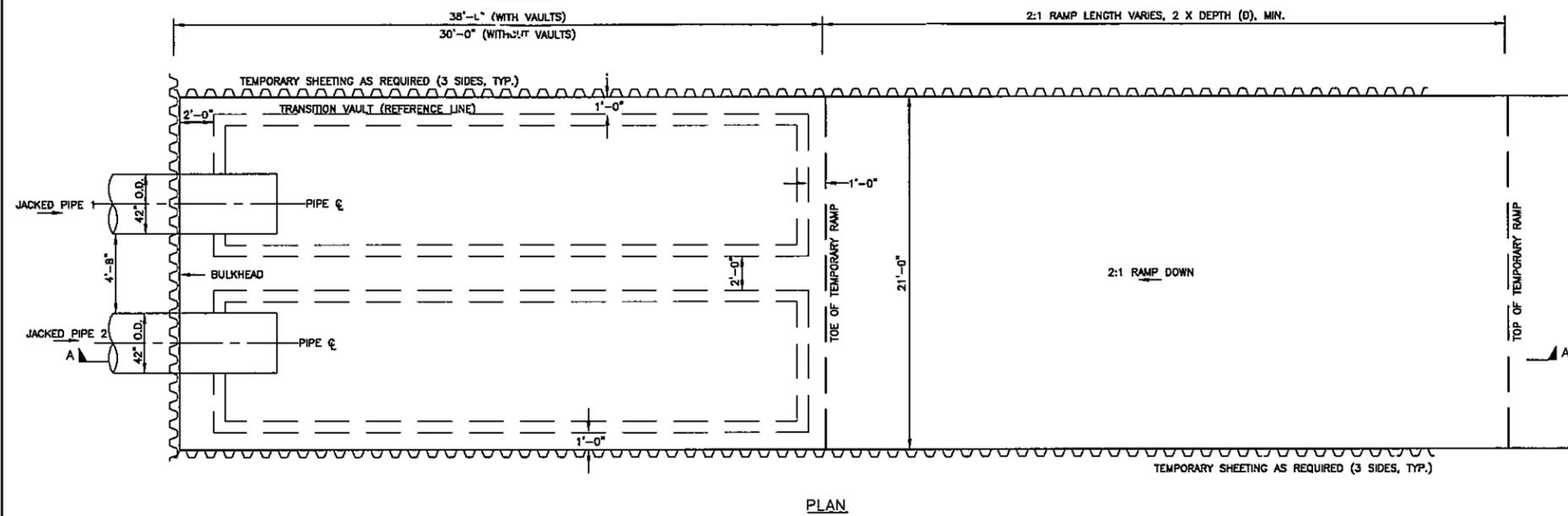
**CAPE WIND PROJECT**

COMPILED PLAN SET OF  
THE UPLAND 115KV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

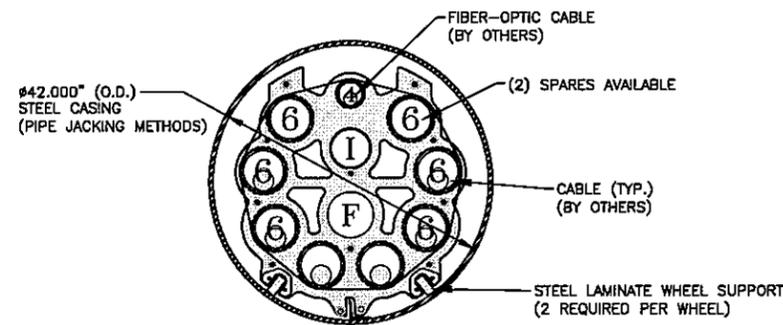
**PIPE JACKING PIT  
DETAILS**

PROJECT No: E159-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>CD-11</b>
SHEET No:	
SCALE: 1"=40'	

FOR PERMITTING PURPOSES ONLY



**PIPE JACKING RECEIVING PIT DETAILS**  
NOT TO SCALE



**42" BORE SPACER DETAIL**  
NOT TO SCALE

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f 781.431.7434  
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No.	REVISION	DATE	APP BY

DRAWN BY: KCM      CHECKED BY: PRW  
DESIGNED BY: RAH      APPROVED BY:

CAPE WIND ASSOCIATES, LLC

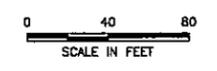
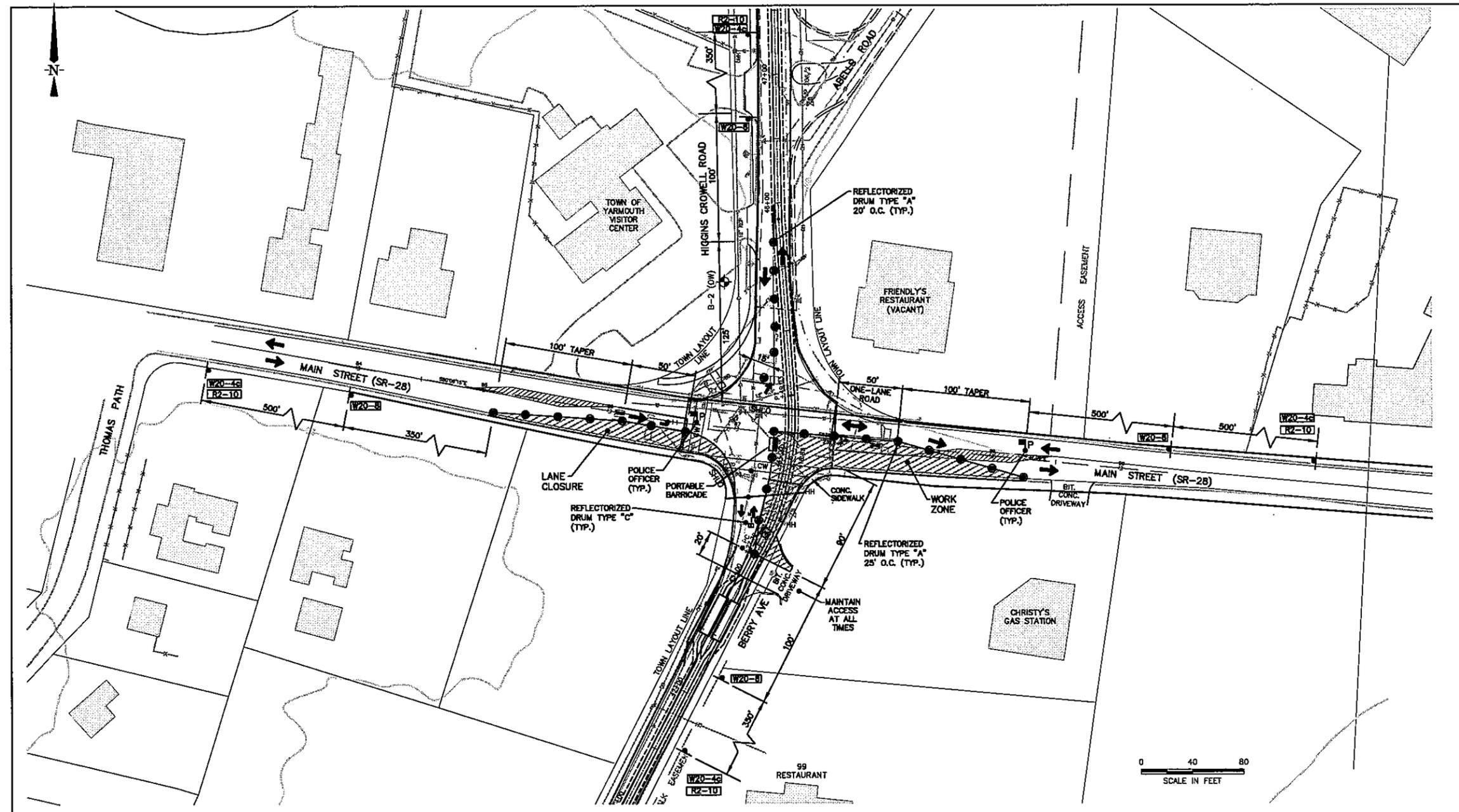
**CAPE WIND PROJECT**

COMPILED PLAN SET OF  
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TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

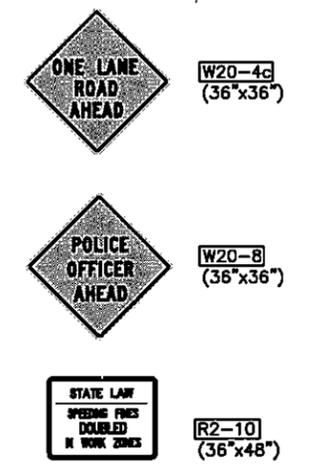
PIPE JACKING PIT  
DETAILS

PROJECT No: E159-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>CD-12</b>
SHEET No:	
SCALE: 1"=40'	

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**SIGN LEGEND**



**LEGEND**

- WORK ZONE
- POLICE OFFICER
- REFLECTORIZED DRUM WITH TYPE 'A' LIGHT
- REFLECTORIZED DRUM TYPE 'C'
- TRAFFIC SIGN
- DIRECTION OF TRAFFIC
- ONE LANE ALTERNATING TRAFFIC
- CROSS WALK
- HAND HOLE
- ON CENTER
- TYPICAL

**NOTES:**

1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS.
2. ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
3. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
4. TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
5. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, AND REFLECTORIZED PLASTIC DRUMS WITH LIGHTING DEVICES MOUNTED ON THEM, MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES."
6. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
7. THE FIRST THREE PLASTIC DRUMS OF A TAPER MAY BE MOUNTED WITH TYPE A LIGHTS.
8. THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
9. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
10. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
11. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
12. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

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f 781.431.7434  
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NO.	REVISION	DATE	APP. BY

DESIGNED BY: RAH      CHECKED BY: PRW  
APPROVED BY: \_\_\_\_\_

CAPE WIND ASSOCIATES, LLC

CAPE WIND PROJECT

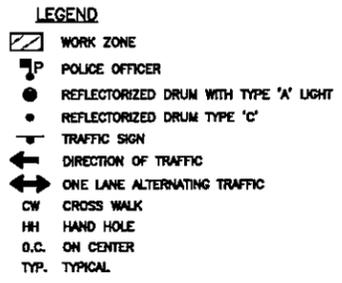
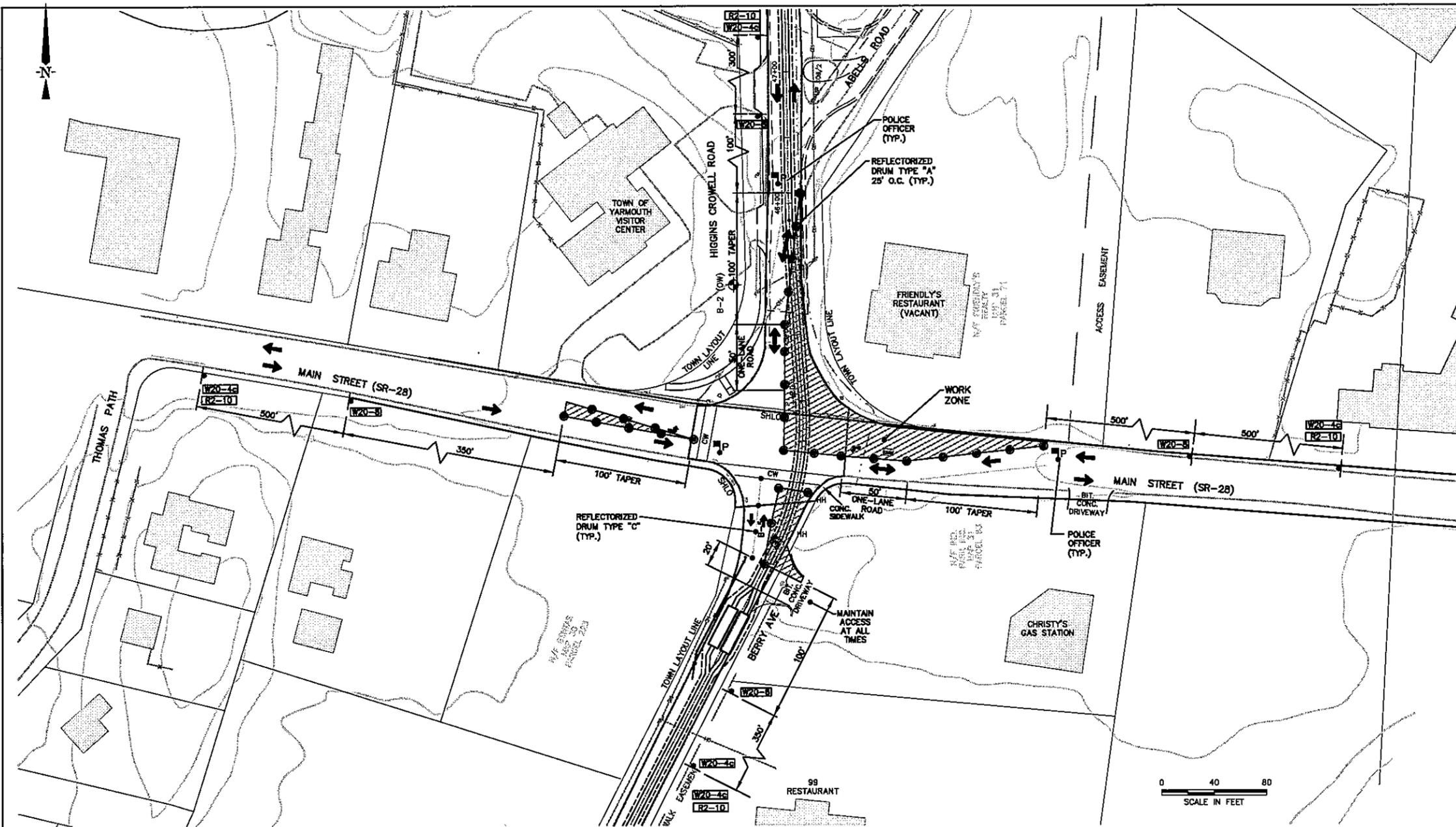
COMPILED PLAN SET OF  
THE UPLAND 115KV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

ROUTE 28  
TRAFFIC MANAGEMENT PLAN  
(OFF PEAK HOURS)  
HALF ROADWAY CLOSURE  
AT INTERSECTION  
(1 OF 2)

PROJECT No: E159-304.10	DRAWING No.
DATE OF ISSUE: 02/26/10	<b>CD-13</b>
SHEET No:	
SCALE: 1"=40'	

FOR PERMITTING PURPOSES ONLY

DATE: 02/26/10 11:04 AM PROJECT: C:\Users\raheem\Documents\CapeWind\CD-13.dwg



- NOTES:**
- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS.
  - ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
  - TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
  - TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
  - SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, AND REFLECTORIZED PLASTIC DRUMS WITH LIGHTING DEVICES MOUNTED ON THEM, MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES."
  - CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
  - THE FIRST THREE PLASTIC DRUMS OF A TAPER MAY BE MOUNTED WITH TYPE A LIGHTS.
  - THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
  - DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
  - MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
  - MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
  - ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

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NO.	REVISION	DATE	APP BY

CAPE WIND ASSOCIATES, LLC  
CAPE WIND PROJECT  
COMPILED PLAN SET OF  
THE UPLAND 115KV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

ROUTE 28  
TRAFFIC MANAGEMENT PLAN  
(OFF PEAK HOURS)  
HALF ROADWAY CLOSURE  
AT INTERSECTION  
(2 OF 2)

PROJECT No.: E159-504.10	DRAWING No.
DATE OF ISSUE: 02/28/10	<b>CD-14</b>
SHEET No.:	
SCALE: 1"=40'	

FOR PERMITTING PURPOSES ONLY

**NOTES:**

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS.
- ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, AND REFLECTORIZED PLASTIC DRUMS WITH LIGHTING DEVICES MOUNTED ON THEM, MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES."
- CONTRACTORS SHALL NOTIFY EACH ADJUTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
- THE FIRST THREE PLASTIC DRUMS OF A TAPER MAY BE MOUNTED WITH TYPE A LIGHTS.
- THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
- DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- MINIMUM LANE WIDTH IS TO BE 10 FEET (3.0m) UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY POLICE DETAILS

**LEGEND:**

- REFLECTORIZED PLASTIC DRUM
- WORK ZONE
- WORK VEHICLE
- POLICE DETAIL
- DIRECTION OF TRAFFIC
- TRUCK MOUNTED ATTENUATOR
- TYPE III BARRICADE
- IMPACT ATTENUATOR
- TRAFFIC OR PEDESTRIAN SIGNAL
- FLASHING ARROW PANEL
- MEDIAN BARRIER
- SIGN
- FLASHING ARROW PANEL
- MEDIAN BARRIER WITH WARNING LIGHTS

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI-LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

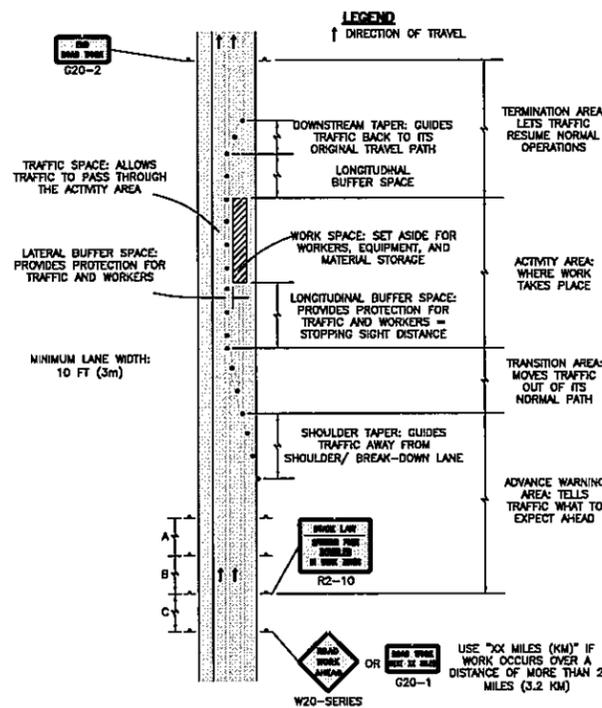
**MEASURED AVERAGE WORK ZONE CAPACITIES**

Number of Lanes (existing)	Number of Lanes (to traffic)	Number of Studies	Average Capacity	
			VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	8	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: David C. Nelson, "Work Zone Capacity and Level of Service," Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48-HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

**GENERAL GUIDELINES**



**COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE**  
NOT TO SCALE

**SUGGESTED WORK ZONE WARNING SIGN SPACING**

Road Type	Distance Between Signs*		
	A	B	C
LOCAL OR LOW VOLUME ROADWAYS*	350 (100)	350 (100)	350 (100)
MOST OTHER ROADWAYS*	500 (150)	500 (150)	500 (150)
FREEWAYS AND EXPRESSWAYS*	1,000 (300)	1,500 (450)	2,640 (800)

\* SPEED CATEGORY TO BE DETERMINED BY HIGHWAY AGENCY

\*\* DISTANCES ARE SHOWN IN FEET (METERS). THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TMP SETUPS. IT IS THE ONE WHICH MAY OFTEN HAVE THE "STANDARD RED OR RED-ORANGE FLAGS (16 in. X 16 in.)" MOUNTED ON IT. THESE ADVANCE WARNING SIGNS ARE LOCATED AT THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

R2-10 SIGNS SHALL BE PLACED BETWEEN THE FIRST AND SECOND SIGNS.

R2-10 AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

Based on: Table 6C-1 2003 MUTCD

**STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED**

SPEED* (km/h)	DISTANCE (m)	SPEED* (mph)	DISTANCE (ft)
30	35	20	115
40	50	25	155
50	65	30	200
60	85	35	250
70	105	40	305
80	130	45	360
90	160	50	425
100	185	55	485
110	220	60	570
120	250	65	645
		70	730
		75	820

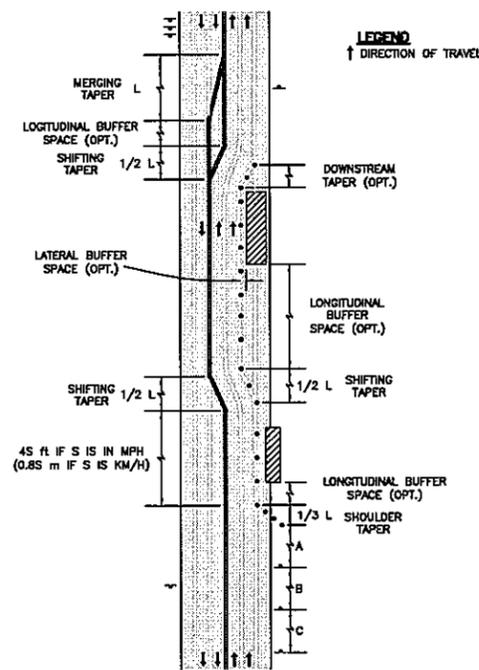
\*POSTED SPEED, OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

THESE VALUES MAY BE USED TO DETERMINE THE LENGTH OF LONGITUDINAL BUFFER SPACES.

THE DISTANCES IN THE ABOVE CHART REPRESENT THE MINIMAL VALUES FOR BUFFER SPACING.

Source: Table 6C-2 2003 MUTCD

**NOTES ON WORK ZONE DISTANCES**



**TYPES OF TAPERS AND BUFFER SPACES**  
NOT TO SCALE

**CONVENTIONAL ROADWAY**— A STREET OR HIGHWAY OTHER THAN A LOW-VOLUME ROAD, EXPRESSWAY, OR FREEWAY.

**EXPRESSWAY**— A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.

**FREEWAY**— A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

**LOW-VOLUME ROAD**— A FACILITY LYING OUTSIDE OF BUILT-UP AREAS OF CITIES, TOWNS, AND COMMUNITIES, AND IT SHALL HAVE A TRAFFIC VOLUME OF LESS THAN 400 AADT. IT SHALL NOT BE A FREEWAY, EXPRESSWAY, INTERCHANGE RAMP, FREEWAY SERVICE ROAD, OR A ROAD ON A DESIGNATED STATE HIGHWAY SYSTEM.

Source: 2003 MUTCD

**TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES**

Type of Taper	Taper Length (L)*
MERGING TAPER	AT LEAST L
SHIFTING TAPER	AT LEAST 0.5L
SHOULDER TAPER	AT LEAST 0.33L
ONE-LANE, TWO-WAY TRAFFIC TAPER	100 FT (30 m) MAXIMUM
DOWNSTREAM TAPER	100 FT (30 m) PER LANE

Source: Table 6C-3 2003 MUTCD

**FORMULAS FOR DETERMINING TAPER LENGTHS**

Speed Limit (S)	Taper Length (L) Feet	Speed Limit (S)	Taper Length (L) Meters
40 MPH OR LESS	$L = \frac{WS^2}{60}$	60 KM/H OR LESS	$L = \frac{WS^2}{155}$
45 MPH OR MORE	$L = WS$	70 KM/H OR MORE	$L = \frac{WS}{1.6}$

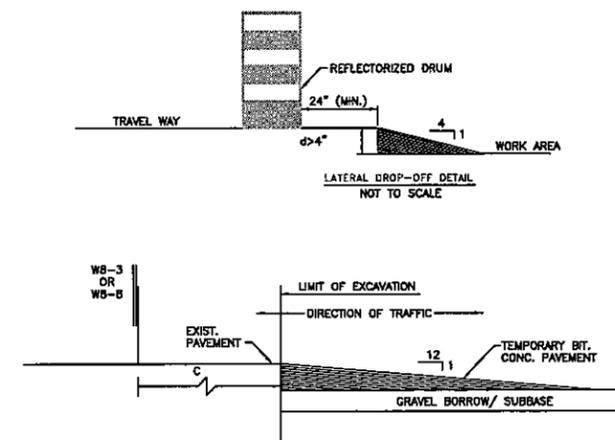
WHERE: L = TAPER LENGTH IN FEET (METERS)

W = WIDTH OF OFFSET IN FEET (METERS)

S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH (KM/H)

Source: Table 6C-4 2003 MUTCD

**NOTES ON WORK ZONE DISTANCES**



**LONGITUDINAL DROP-OFF DETAIL**  
NOT TO SCALE

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Wellesley, Massachusetts 02482  
p 781.431.0500  
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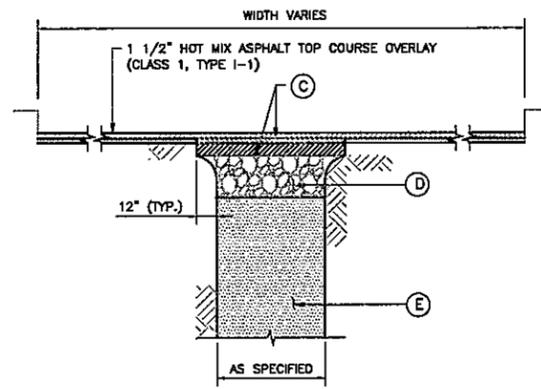
CAPE WIND ASSOCIATES, LLC  
CAPE WIND PROJECT  
COMPILED PLAN SET OF THE UPLAND 115KV TRANSMISSION CABLE ROUTE YARMOUTH & BARNSTABLE, MA.

TRAFFIC MANAGEMENT PLAN DETAILS (SHEET 1 OF 2)

PROJECT No.: E159-304.10  
DATE OF ISSUE: 02/26/10  
SHEET No.:  
SCALE: 1"=40'

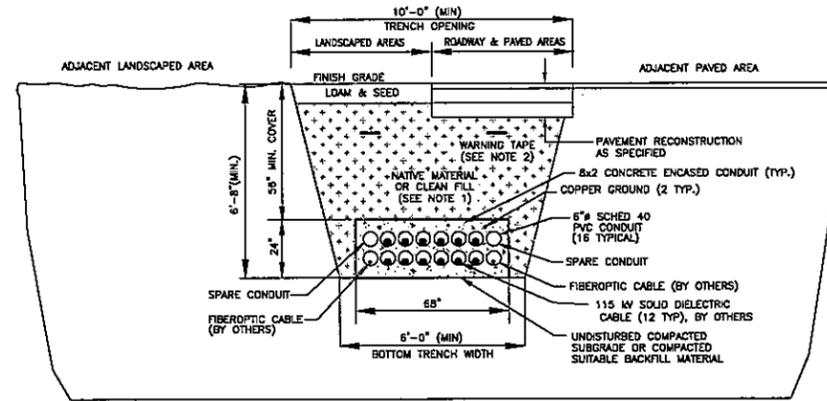
DRAWING No.:  
**CD-15**





NOTE: CONSTRUCT CROWN WITH 2% CROSS SLOPE FROM CENTERLINE OF EXISTING PAVEMENT. POSITION OF TRENCH WITHIN ROADWAY WILL VARY.

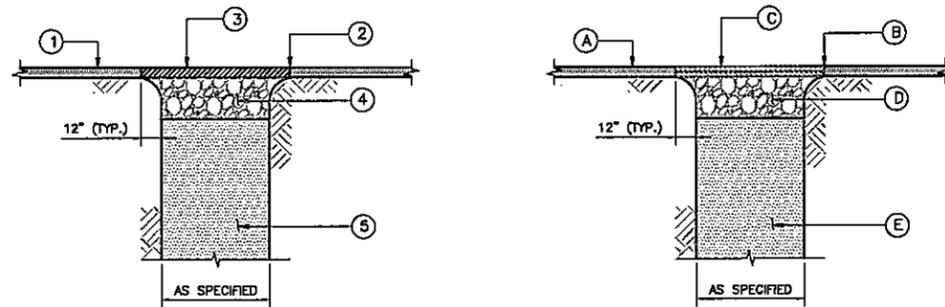
FULL WIDTH ROADWAY OVERLAY  
(WHERE SPECIFIED)



TRENCH NOTES:

1. NATIVE MATERIAL TO BE USED ONLY IF DETERMINED TO HAVE APPROPRIATE THERMAL RESISTIVITY AND TO BE ACCEPTABLE IN ACCORDANCE WITH THE SOIL MANAGEMENT PLAN.
2. WARNING TAPE SHALL BE DETECTABLE TRACER TAPE LABELED "CAUTION: HIGH VOLTAGE ELECTRICAL LINES BURIED BELOW". MINIMUM COVER SHALL BE 12" UNPAVED AND LANDSCAPED AREAS. MINIMUM COVER SHALL BE 18" IN AREAS OF FULL DEPTH PAVEMENT RECONSTRUCTION.

UPLAND CABLE TRENCH CROSS-SECTION (IN ROADWAYS)



TEMPORARY (ROADWAY)

NOTES:

- 1 EXISTING PAVEMENT
- 2 SAWCUT, TACK COAT EDGES (TYP)
- 3 1 1/2" HOT MIX ASPHALT TOP COURSE - CLASS 1, TYPE I-1 & 2 1/2" HOT MIX ASPHALT BINDER COURSE - CLASS 1, TYPE I-1, OR MATCH EXISTING PAVEMENT SECTION IF > 4".
- 4 6" COMPACTED 3/4" DENSE GRADED CRUSHED STONE
- 5 FINAL BACKFILL PER TRENCH DETAIL

PERMANENT (ROADWAY)

WHERE NOT OTHERWISE SPECIFIED FOR FULL WIDTH ROADWAY OVERLAY

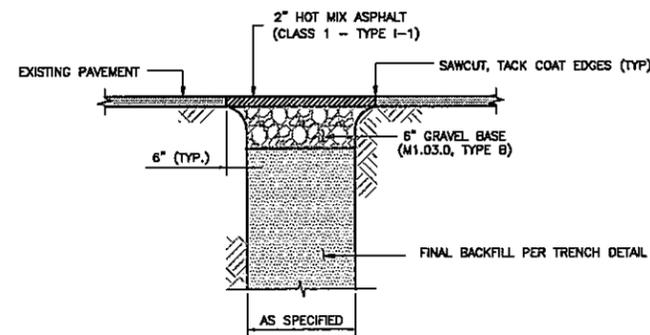
NOTES:

- A EXISTING PAVEMENT
- B SAWCUT, TACK COAT EDGES (TYP) SEAL JOINTS BY INFRARED TECHNIQUES (6 MONTHS FOLLOWING PLACEMENT OF PERMANENT PATCH)
- C 1 1/2" HOT MIX ASPHALT TOP COURSE - CLASS 1, TYPE I-1 & 2 1/2" HOT MIX ASPHALT BINDER COURSE - CLASS 1, TYPE I-1, OR MATCH EXISTING PAVEMENT SECTION IF > 4".
- D 6" COMPACTED 3/4" DENSE GRADED CRUSHED STONE
- E FINAL BACKFILL PER TRENCH DETAIL

- NOTES:
- 1) ALL WORK SHALL CONFORM TO TOWN OF BARNSTABLE DEPARTMENT OF PUBLIC WORKS STREET EXCAVATION RULES AND REGULATIONS DATED MARCH, 1995.
  - 2) UNLESS OTHERWISE INDICATED, ALL MATERIALS AND CONSTRUCTION METHODS MUST MEET THE MASSACHUSETTS HIGHWAY DEPARTMENT'S 1995 STANDARD SPECIFICATIONS AND 2000 SUPPLEMENTAL SPECIFICATIONS, AS AMENDED.

TRENCH REPAIR DETAILS - BARNSTABLE PUBLIC RIGHT-OF-WAYS

N.T.S.

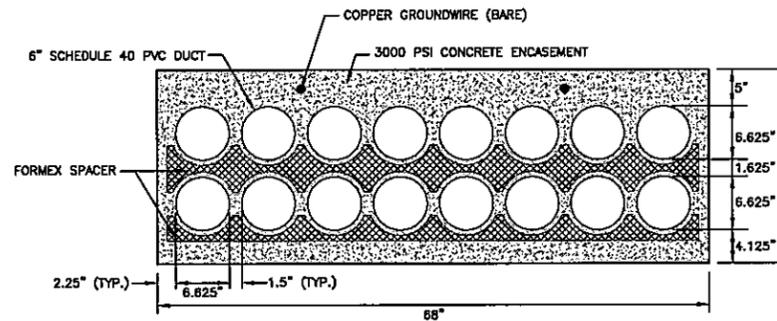


TRENCH REPAIR - HOT MIX ASPHALT SIDEWALK

N.T.S.

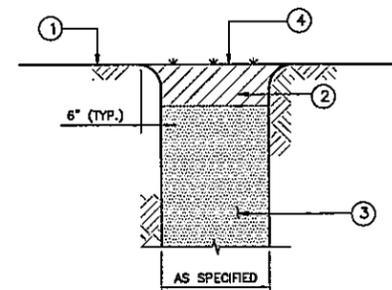
8x2 CONCRETE DUCTBANK TRENCH DETAIL

NOT TO SCALE



8x2 CONCRETE DUCTBANK DETAIL

NOT TO SCALE



NOTES:

- 1 EXISTING LANDSCAPED AREAS
- 2 6" LOAM WITHIN PUBLIC RIGHT-OF-WAY, 4" LOAM OTHERWISE
- 3 FINAL BACKFILL PER TRENCH DETAIL
- 4 FERTILIZE, LIME, AND SEED

TRENCH REPAIR - LANDSCAPED AREAS

N.T.S.

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888 Worcester Street, Suite 240  
Wellesley, Massachusetts 02482  
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No.	REVISION	DATE	APP BY

CAPE WIND ASSOCIATES, LLC

CAPE WIND PROJECT  
COMPILED PLAN SET OF  
THE UPLAND 115kV  
TRANSMISSION CABLE ROUTE  
YARMOUTH & BARNSTABLE, MA.

ROAD OPENING PERMIT  
TRENCH DETAILS

PROJECT No.: E158-504.10	DRAWING No.
DATE OF ISSUE: 02/26/10	CD-17
SHEET No.:	
SCALE: 1"=40'	

FOR PERMITTING PURPOSES ONLY

Attachment 7

SPCC Plan Review Log



### SPCC PLAN REVIEW LOG

The purpose of this log is to demonstrate that the appropriate reviews have been completed and that the Plan does or does not require amendments.

Date of Review	Certification of Review	Plan Amendments Required? (Indicate Yes Or No)	If Amendments Are Required, Provide Details	Date Next Review Is Required
	<p>"I have completed review and evaluation of the SPCC Plan for Cape Wind on the referenced date and will amend the plan as noted in this table."</p> <p>Signature: _____</p>		<p>Brief reason for amendments:</p> <p>Plan must be amended by (date):</p> <p>Is PE certification required (indicate yes or no)?</p>	
	<p>"I have completed review and evaluation of the SPCC Plan for Cape Wind on the referenced date and will amend the plan as noted in this table."</p> <p>Signature: _____</p>		<p>Brief reason for amendments:</p> <p>Plan must be amended by (date):</p> <p>Is PE certification required (indicate yes or no)?</p>	
	<p>"I have completed review and evaluation of the SPCC Plan for Cape Wind on the referenced date and will amend the plan as noted in this table."</p> <p>Signature: _____</p>		<p>Brief reason for amendments:</p> <p>Plan must be amended by (date):</p> <p>Is PE certification required (indicate yes or no)?</p>	

Attachment 8

SPCC Inspection Forms

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**CAPE WIND  
INSTRUCTIONS FOR SPCC INSPECTIONS**

Conduct the inspection at least *once per week*. Fill in the date and time of the inspection and the inspector's name at the top of the form at the time the inspection is performed. If any items are deficient, record the deficiencies and corrective actions taken. Record the final resolution or outcome of each corrective action. ALL DEFICIENCIES MUST BE CORRECTED AS SOON AS POSSIBLE.

Use the following guidelines for inspecting each area detailed on the inspection form, completing the form, and taking corrective actions. A copy of all inspection reports must be kept for ten (10) years from the date of the inspection.

1. Inspect the area for adequate *housekeeping*. If there is trash, clutter, spilled materials, or waste in the area, clean it up.
2. Inspect the *condition* of accessible portions of containers. Check for signs of release or corrosion. Releases may be evident by observation of liquid in the secondary containment system, or moisture at the seams or other locations on the container. If this is observed, ensure that the container is tagged, emptied and that no additional oil is added. If any signs of rust are observed on the exterior of a container wall, note the size and location in the inspection log and have the container repaired/repainted the next time the container is emptied. In the meantime, continue to watch for any increase in size of the rust spot and any signs of release.
3. Inspect accessible portions of the *area immediately surrounding containers and the secondary containment* systems to detect signs of release (e.g., wet spots, stains, etc.). If signs of a release are observed, ensure that the container is tagged, emptied and that no additional material is added to the container. Inspect the secondary containment system to ensure it is in good condition (e.g., no cracks or gaps in concrete dikes, no signs of corrosion in steel dikes). In addition, the floors and walls should be examined for signs of cracks or deterioration. If deterioration is noted the area should be repaired.
4. Inspect all *ancillary equipment*. Ancillary equipment includes piping, fittings, pumps, valves, gauges, etc. used to distribute, meter, or control the flow of oil or to view the level of material. Inspect all visible portions of the ancillary equipment. Check for signs of releases (e.g., drips, corrosion, damage, missing or loose parts, etc.). If these problems are detected, ensure that the equipment is tagged and replaced and no additional material is transferred to the ancillary equipment.
5. Any deficiencies must be documented and corrected immediately. *Describe corrective actions*, if any, for all inspected areas. If the integrity of the container or containment structure is compromised, and/or if there is evidence of a release or potential release of oil, the system must be shut down until the deficiency is corrected, and re-inspected prior to resuming operations.

6. Enter the ***date that corrective action described above was completed***. If corrective action cannot be completed on the same day as the inspection, indicate the date that it is anticipated to be completed, and, once completed, make a notation to confirm that it was completed and the actual date of completion.



Attachment 9

SPCC Training Documentation



