



U.S. Army Corps of Engineers Baltimore District	In Reply to Application Number CENAB-OP-RMS (DPL Bozman Distribution Circuit/Harris Creek Crossing) 2016-61260 Maryland Tidal Wetlands License No. 16-WL-0720 Maryland Nontidal Wetlands License No. 16-NT-2072

PN 17-32 Comment Period: July 1, 2017 to August 1, 2017

The purpose of this Public Notice is to solicit comments from the Public about the work described below and to announce the date of a Corps Public Information Meeting/Maryland Department of the Environment Public Information Hearing on the subject application. At this time, no decision has been made as to whether or not authorizations will be issued. The Corps Public Information Meeting/MDE Public Information Hearing will be held:

Thursday, August 3, 2017 5:00 pm to 7:00 pm Talbot County Main Library 100 West Dover Street Easton, Maryland 21601

The Corps public information meeting/MDE public information hearing provides members of the public the opportunity to present views, opinions, and information which will be considered by the U.S. Army Corps of Engineers, Baltimore District (Corps) and the Maryland Department of the Environment (MDE) in evaluating the permit application. A poster session/display will be available from 5:00 PM to 6:00 PM where project drawings can be reviewed. Agency representatives will also be available to answer questions. From 6:00 PM to 7:00 PM, a brief project presentation will be given by the Delmarva Power and Light Company (DP&L) followed by public testimony. A time limit of three minutes per speaker may be set, depending on the number of speakers, to ensure that all interested parties have an opportunity to voice their views.

Anyone who is hearing impaired and/or is non-English speaking, who wishes to attend this public meeting/hearing should notify Mr. Jason R. Peters at the address/telephone number listed near the end of this public notice. All requests for an oral, sign language, or non-English language interpreter must be received by July 15, 2017. To the extent possible and feasible, an interpreter will be provided.

The Corps has received an application for a Department of the Army (DA) Permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (33 U.S.C. 1344), to connect two existing electrical distribution circuits for circuit reliability improvements by installing 6,000 linear feet of 25 kV utility line beneath Harris Creek from 22020 Benders Lane, near Sherwood, to 6556 Bozman Neavitt Road, near Neavitt, in Talbot County, Maryland. MDE has also received an application from DP&L for a Tidal and Nontidal Wetlands License to be authorized by the Maryland Board of Public Works pursuant to Title 16 of the Environment Article, Annotated Code of Maryland.

APPLICANT: Delmarva Power & Light Company Attn: Mr. Chuck Reed PO Box 9239 Mailstop 79NC64 Newark, Delaware 19714-9239

LOCATION AND WATERWAY: In Harris Creek, from 22020 Benders Lane, in Sherwood to 6556 Bozman Neavitt Road, in Neavitt, Talbot County, Maryland.

PURPOSE: The basic purpose of the project is to connect two existing Bozman Substation distribution circuits together to improve customer electrical reliability. The overall circuit improvement project would also allow for automatic switching to assure that no more than 400 customers lose power from a single outage, as mandated by the Maryland Public Service Commission (PSC) per Code of Maryland Regulations (COMAR) 20.50.12.

PROPOSED WORK: The applicant proposes to connect two existing electrical distribution circuits by installing a 25 kV utility line cable beneath Harris Creek for approximately 6,000 linear feet from the west shoreline to east shoreline all within an approximately 0.13-acre (6,000 square foot) area of review as follows: to bore by horizontal directional drilling (HDD) method, an 8 to 10-inch high-density polyethylene (HDPE) conduit containing a 25 kV utility line cable 4 to 5-feet beneath intertidal and tidal wetlands, beginning in the uplands and exiting in open tidal waters varying 100 to 300 (west to east) linear feet channelward of the approximate mean high water (MHW) shoreline; and to trench an approximately 5,475 linear foot cable alignment path beneath the creek bottom using a shear plow method, creating an approximately 6 to 12-inch wide by 4 to 5-foot deep cable lay down and embedment path.

The in-water cable installation includes the use of specialized equipment positioned above and below the surface of the water during underwater operation. The entire crossing would be a continuous operation. The shoreline HDD would transition to shear plowing where the plow is guided forward along the proposed alignment path and the cable is deployed and embedded directly into the substrate. The entire operation requires no line splicing during construction sequence. All vegetated tidal and nontidal wetland crossings would be performed by HDD method. The entire crossing would be accomplished using a combination of HDD and shear plowing to connect the two existing circuits. All work is proposed to be completed in accordance with the attached plan(s) and work description.

Avoidance and minimization measures were incorporated into the proposed project by minimizing the project's design to meet the project purpose. The initial proposed utility line crossing and conduit installation method beneath Harris Creek was redesigned to avoid areas in the Harris Creek Sanctuary where joint federal and state oyster restoration projects occur. Preliminary mapping of the project alignment shows areas of submerged aquatic vegetation (SAV) from years 2016-2012 (5-years) and state designated Natural Oyster Bars (NOBs). In the shallow-water areas where the shoreline directional boring is proposed, specialized divers and turbidity curtains would be deployed to minimize the potential for turbidity plumes or inadvertent return of drilling fluids and bottom substrate that may occur as a result of undertaking the crossing work. The entire length of this project

would be placed underground; no overhead power lines would be installed. All land-based underground cable installation would be completed via HDD. The Harris Creek crossing would utilize HDD to install the cable beneath the shoreline, to minimize impacts, rather than open trenching. Once beyond the shoreline, the cable would be installed via submarine shear plow method to minimize turbidity and sedimentation to the greatest extent possible. Compensatory mitigation is not being proposed by the applicant since no wetlands are proposed to be impacted by this work.

If you have any questions or concerns that pertain to the facilities in uplands or on your specific property, please contact:

Ms. Renee Stephens Sr. External Affairs Specialist Delmarva Power & Light Company Phone: 410-860-6009 Email: Renee.Stephens@delmarva.com

REVIEW PROCESS: By this public notice, the Corps and MDE are soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps and MDE to determine whether to issue, modify, condition or deny a permit or license for this proposal. To make these decisions, comments are used to assess impacts on navigation, endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed below. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the overall public interest of the proposed activity.

WRITTEN COMMENTS: Written comments and information provided by interested parties must be received by the Corps and MDE by the closing date of this notice's comment period, <u>August 1, 2017</u>, to receive consideration. If you have any questions, or would like to submit written comments, please contact the following:

Questions or comments pertaining to impacts to waters of the United States, including jurisdictional wetlands may be submitted to:

Mr. Jason R. Peters Baltimore District, Corps of Engineers Regulatory Branch – Easton Field Office Talbottown Shopping Center 218 N. Washington Street, Suite 51 Easton, Maryland 21601 Phone: 410-820-8550 Email: Jason.R.Peters@usace.army.mil Questions or comments pertaining to the State's Tidal Wetlands License should be directed to:

Ms. Mary Phipps-Dickerson Maryland Department of the Environment Tidal Wetlands Division - Cambridge Office 407 Race Street Cambridge, MD 21613 Phone: 410-901-4033 Email: mary.phipps-dickerson@maryland.gov

Questions or comments pertaining to the State's Nontidal Wetlands License should be directed to:

Mr. Al Kampmeyer Maryland Department of the Environment Nontidal Wetlands Division – Salisbury Office 201 Baptist Street. Room 3307 Salisbury, MD 21801 Phone: 410-713-4227 Email: alan.kampmeyer@maryland.gov

The decision whether to authorize this project will be based on an evaluation of probable impacts including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, and, in general, the needs and welfare of the people. The evaluation of the impact of the work described above on the public interest will include application of the Clean Water Act Section 404(b)(1) Guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 of the Clean Water Act.

SECTION 401 WATER QUALITY CERTIFICATION: The applicant is required to obtain a water quality certification in accordance with Section 401 of the Clean Water Act from the Maryland Department of the Environment. Any written comments concerning the work described above which relate to water quality certification must be received by the Tidal Wetlands Division, Wetlands and Waterways Program, Maryland Department of the Environment, Montgomery Park Business Center, 1800 Washington Boulevard, Suite 430, Baltimore, Maryland 21230-1708 within the comment period as specified above to receive consideration. The Section 401 certifying agency has a statutory limit of one (1) year from the date of this public notice to make its decision.

COASTAL ZONE MANAGEMENT PROGRAMS: The applicant has certified in this application that the proposed activity complies with and will be conducted in a manner consistent with the State's federally-approved Coastal Zone Management Program (CZMP). By this public notice, we are requesting the State's concurrence or objection to the applicant's consistency certification statement. Public comments relating to consistency must be received by the Coastal Zone Division, MDE, Montgomery Park Business Center, 1800 Washington Blvd., Suite 430, Baltimore, Maryland, 21230-1708, within the comment period as specified above. It should be noted that Maryland's CZMP has a statutory limit of six (6) months from the date of this public notice in which to make its consistency determination.

The applicant must obtain any State or local government permits, which may be required.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 04-267), requires all Federal agencies to consult with the National Marine Fisheries Service (NMFS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely affect essential fish habitat (EFH).

The project site lies in or adjacent to EFH in Harris Creek as described under the MSFCMA in for *Scopthalmus aquosos* (windowpane flounder) juvenile and adult; *Pomatomus saltatrix* (blue fish) juvenile and adult; *Paralicthys dentatus* (summer flounder) juvenile and adult; and the eggs, larvae, juvenile, and adult stages of *Sciaenops ocellatus* (red drum), *Scomberomorus cavalla* (king mackerel), *Scomberomorus maculatus* (spanish mackerel), and *Rachycentron canadum* (cobia).

The project has the potential to adversely affect EFH or the species of concern by alteration of spawning, nursery, forage and/or shelter habitat. The project may have an adverse effect on approximately 0.13-acres (6,000 square feet) of Essential Fish Habitat as described under the Magnuson-Stevens Fishery Conservation and Management Act for the species and life stages identified above. This nearshore habitat consist of intertidal and tidal wetlands that transitions to shallow-water habitat that does support submerged aquatic vegetation (SAV) during the past 5 years of annual monitoring data published by the Virginia Institute for Marine Sciences between 2012 to 2016. SAV is designated as a habitat area of particular concern (HAPC) for summer flounder by the Mid-Atlantic Fishery Management Council. HAPCS are discrete subsets of EFH that provide important ecological functions and/or are especially vulnerable to degradation. The benthic bottom habitat type is characterized as consisting mostly of medium sand, silt and sandy silt substrate. The Baltimore District has made a preliminary determination that site-specific impacts would not be substantial and an abbreviated consultation will be conducted with NMFS. This determination may be modified if additional information indicates otherwise and would change the preliminary determination. The applicant has proposed as a best management practice to deploy turbidity curtains for the shoreline directional boring exit points, and to prohibit all in-water work during the SAV growing season from 15 April to 15 October, inclusive on any year.

ENDANGERED SPECIES ACT: A preliminary review of this application using the U.S. Fish and Wildlife Service IPaC online screening tool indicates that the proposed work will not affect any Federal listed threatened or endangered species or their critical habitat, pursuant to Section 7 of the Endangered Species Act, as amended. The project location and vicinity is not mapped as critical habitat for any known Federally-listed threatened or endangered species. The project waterway including the areas of review in Harris Creek may be utilized by transient individuals of the following marine species of concern to the National Marine Fisheries Service (NMFS): Caretta caretta (Loggerhead sea turtles); Lepidochelys kempii (Kemp's Ridley sea turtles); Dermochelys coriacea (Leatherback sea turtles); Chelonia mydas (Green sea turtles); Acipenser brevirostrum (Shortnose sturgeon); and Acipenser oxyrinchus (Atlantic sturgeon). Although a few transient threatened and endangered NMFS listed species may occur in Harris Creek, the work will not individually or cumulatively have an adverse effect on ESA-listed species. Based on the preliminary analysis that all effects of the proposed actions will be insignificant and/or discountable, we have determined that the entire project for 0.13-acres (6,000 square feet) of submarine utility line cable crossing in Harris Creek, "may affect, but is not likely to adversely affect" any listed species or critical habitat under NMFS' jurisdiction. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

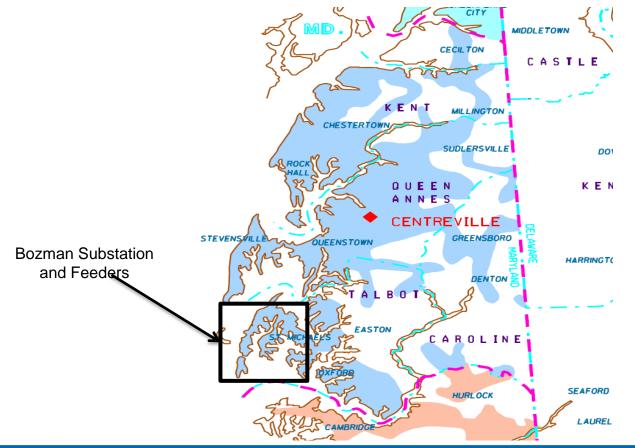
NATIONAL HISTORIC PRESERVATION ACT: Review of the latest published version of the National Register of Historic Places indicates that no registered properties listed as eligible for inclusion therein are located at the site of the proposed work. Currently unknown archeological, scientific, prehistoric, or historical data may be lost or destroyed by the work to be accomplished under the requested permit. As the evaluation of this proposal continues, additional information may become available which could modify this preliminary determination.

It is requested that you communicate this information concerning the proposed work to any persons known by you to be interested and not being known to this office, who did not receive a copy of this notice.

FOR THE DISTRICT ENGINEER:

KATHY B. ANDERSON Chief, Maryland Section Southern

Delmarva Power – Centreville District Service Territory

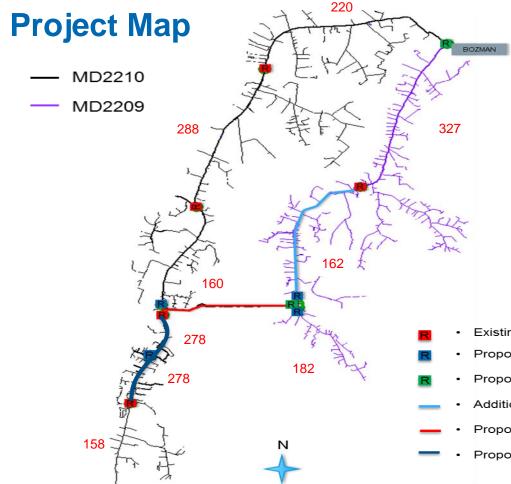




Centreville District – Bozman Substation, MD2210, MD2209







- Existing 3ph Recloser (Incorporated into ASR Scheme)
- Proposed Normally Closed Recloser (Incorporated into ASR)
- Proposed Normally Open Recloser (Incorporated into ASR)
- Additional 600A Rebuilding Required MD2209 (Currently 2ph only)
- Proposed Upland Cable Installation & Harris Creek Crossing
- Proposed Express Feed to Tilghman Island

Cable Crossing Procedure – Installing Cables in Conduit





Cable Crossing Procedure – Plowing Operations



Cable Crossing Procedure – Plowing Operations

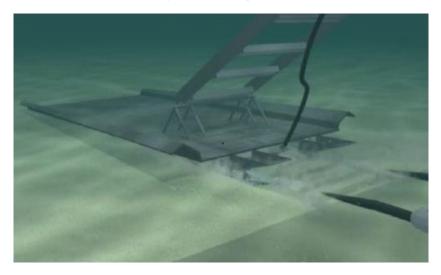


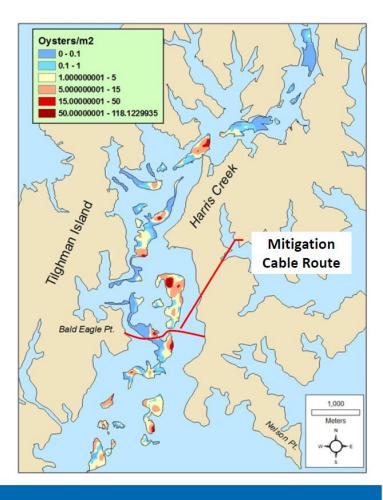
During the plowing sequence, divers monitor the underwater install operation.



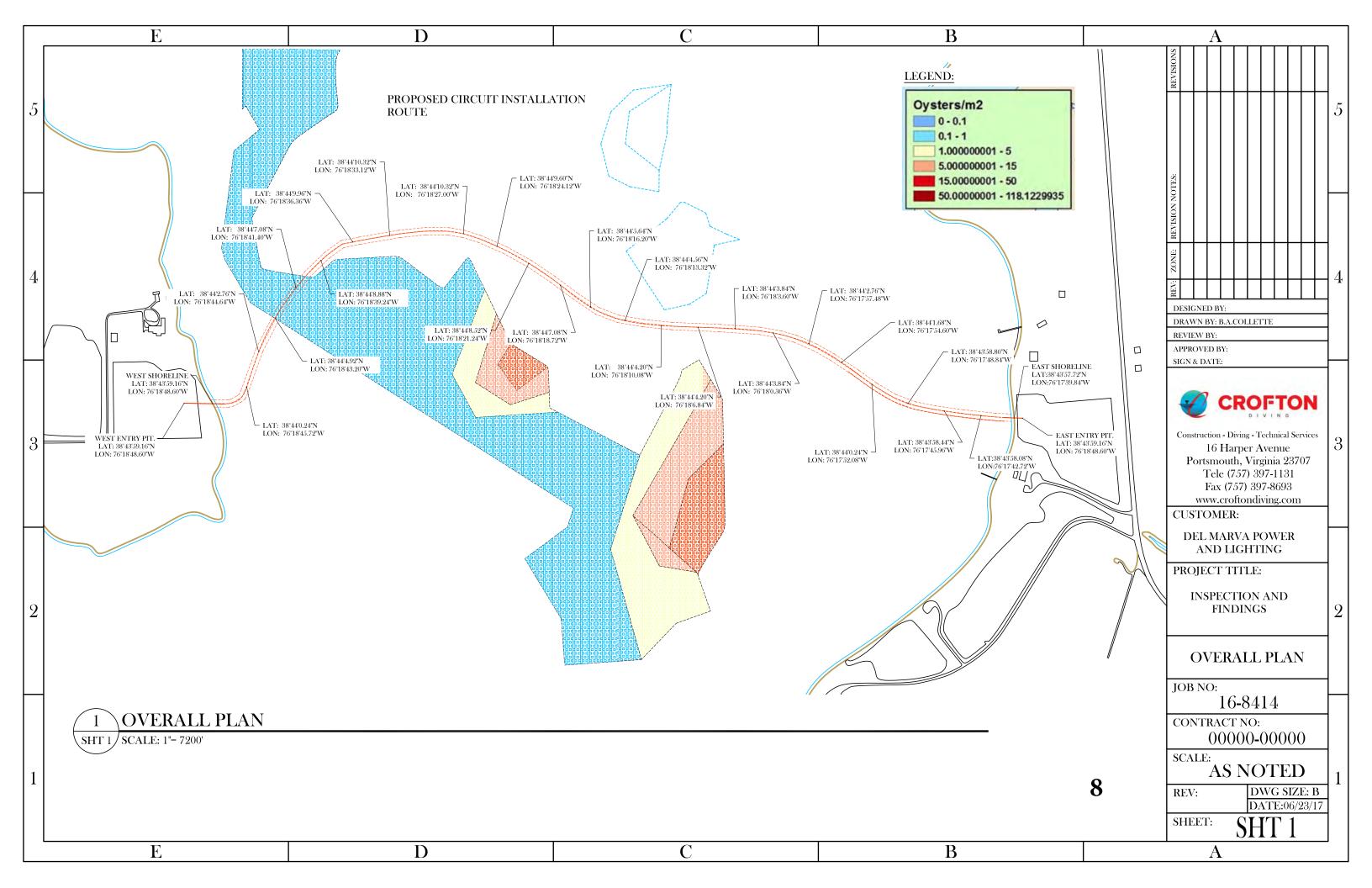
Shear Plow Method

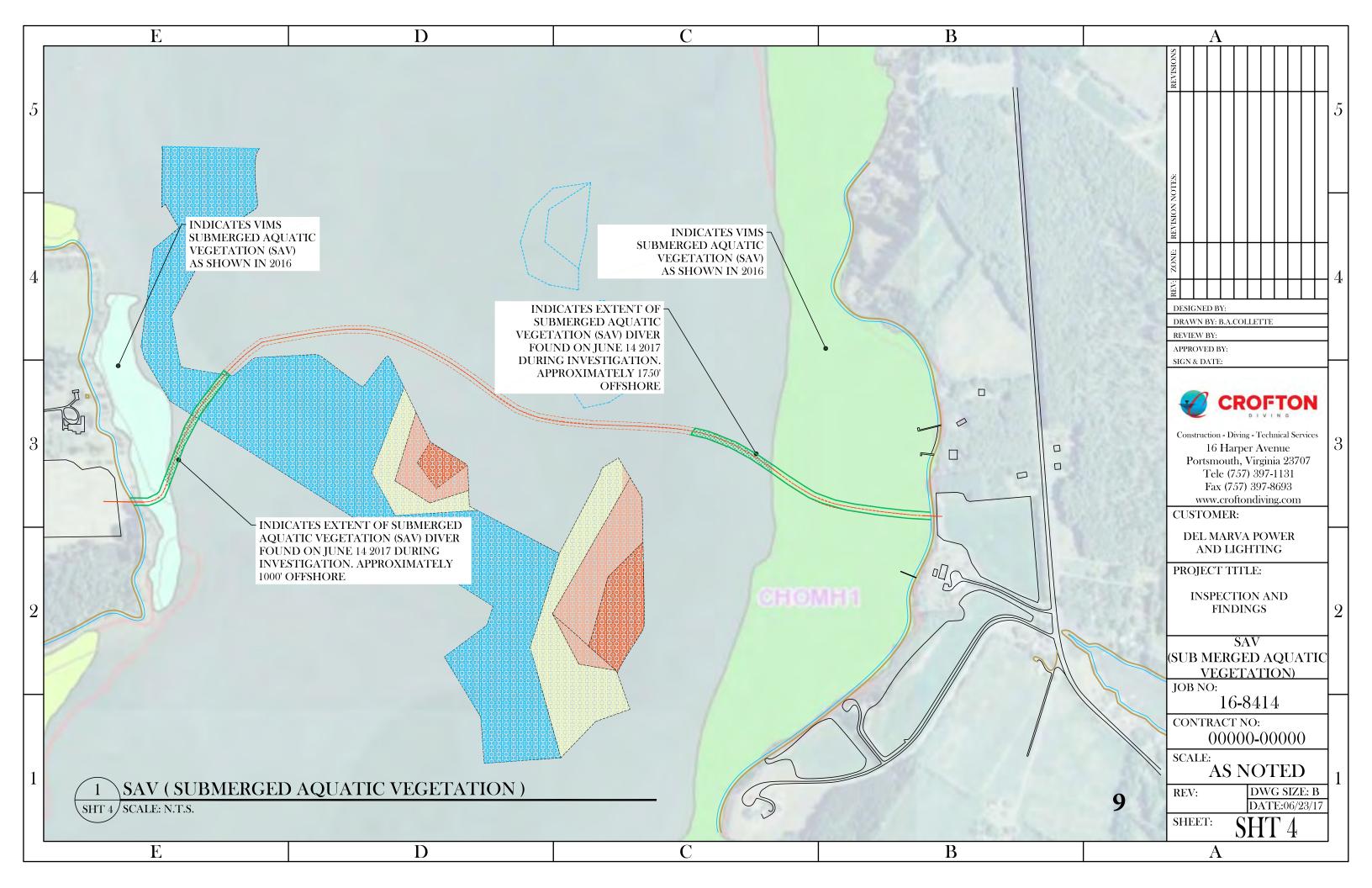
- Shear plow minimizes area of substrate affected. Design modified to eliminate the use of a hydro plow (e.g., high pressure jets displacing material).
- As the plow moves forward along the route, the cable is deployed and embedded, where the soil returns to original location without infilling over time. The later is typical condition experienced where hydro plowing is used instead of shear plow.











HDD Entry Points

2.5x the distance from the shore



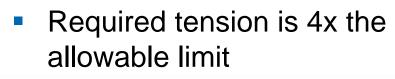
3.5x the distance from the shore

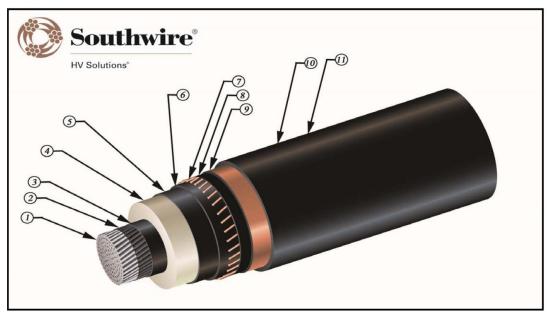




HDD Cable Limitation

- Cable weights 3.1lbs/ft
- Total cable weight (6000') is 18,600lbs per phase
- Maximum allowable pulling tension is 6000lbs
- Basic pull tension necessary to pull the cable through the conduit is over 22,000ibs





High Voltage Solid Dielectric Cable 35 kV — Al conductor with concentric Cu wires and laminate sheath

 Profile/Cross Section scale reduced to 1" = 50' and a detail of smaller scale broken out on page one of the cross section drawing set

