ATTACHMENT D – OVERVIEW OF CONSTRUCTION PLANS

CONSTRUCTION PHASES

Construction will be performed in four major phases.

The first phase, site mobilization and preparation, will consist of construction surveying, installation of erosion controls and temporary construction fence, preliminary site grading for the converter station, preparation of temporary construction laydown areas, installation of access roads, establishment of temporary jobsite offices, and tree/vegetation removal.

The second phase of the construction process will be centered on excavation and foundation construction for the converter station. This will include major site excavations required for foundations, drainage systems, conduits, and all other major subsurface activities. The equipment and building foundations will be completed and backfilled.

The third phase of construction consists of building and equipment installation. It includes the installation of wire, cables, piping, support structures, perimeter fencing, and all other required equipment.

The fourth and final phase of the construction process is focused on site restoration and demobilization. This work will include the final paving of roads and driveways along the HVDC Land Cable route, restoration of temporary construction laydown areas, vegetation plantings, and the removal of construction debris, construction equipment, and any other temporary facilities used during construction.

CONDUIT INSTALLATION

VGLD will install the underground cable system through a total of three conduits. Two conduits with a nominal diameter of eight inches each will be used for the transmission cables, and the third, with a nominal diameter of two inches, will be used for the fiber optic cable.

To install the conduits (a process that happens prior to cable installation), VGLD will use a combination of different construction methods, including the following:

- Conventional cut-and-cover installation with concrete encasement
- Horizontal directional drill installation
- Jack-and-Bore installation

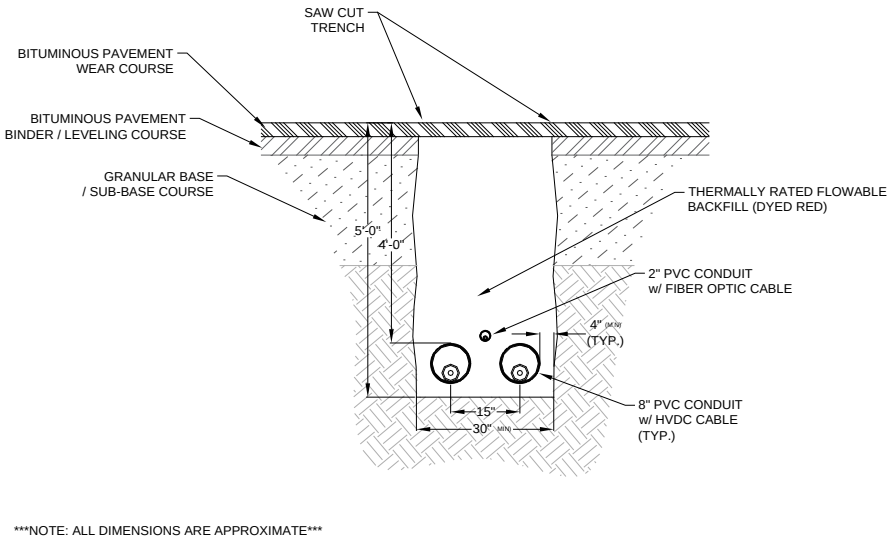
These methods are described in more detail below. The proposed conduit installation method utilized for a given location will depend on several factors, including: applicable requirements from rail or roadway authorities, potential effects to wetlands or other sensitive environmental areas, and possible impacts to the local community.

Conventional Cut-and-Cover

VGLD will install a majority of the conduit for the land cable system using the conventional cut-and-cover method. This method is typically used for the installation of water, sewer, gas, and other utility

underground infrastructure. VGLD will limit any traffic disruptions during construction to the maximum practicable extent and will manage any necessary disruptions using best practices.

VGLD will install the majority of the HVDC Land Cable Route following existing public roads and, except for sections along Route 7, the conduits will be placed within the paved travel lane. The trench required for the in-pavement cable system will be approximately five feet deep and thirty inches wide. The conduits will be installed and then backfilled with fill materials. A typical cross section view of the land cable in-pavement installation is shown below.



Typical In-Pavement Cable Installation

Some sections of the HVDC Land Cable Route are outside of the paved roadway. In those areas, the trench will be approximately five feet deep and thirty-inches wide. The conduit and use of fill materials will be the same as the in-pavement installation.

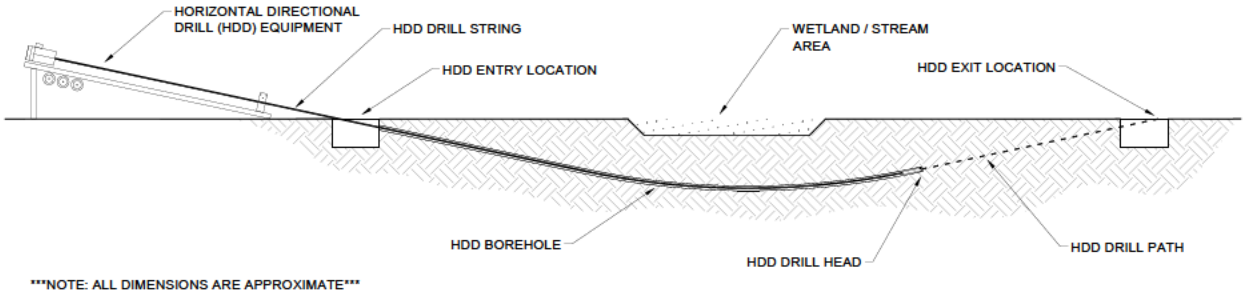
Horizontal Directional Drilling (HDD)

VGLD will use horizontal directional drilling or "HDD" at the landfall location in Kingsland Bay State Park as well as at locations where the Project crosses certain sensitive resource area (e.g. streams and wetlands) and critical transportation infrastructure (e.g. railroads and highways).

At the crossing locations where HDD will be used, a drilling rig will be placed directly in front of the entry location and will push the drill into the soil. The distance between the HDD entry and exit locations will be affected by several factors including: size of pipe to be installed, geological conditions at the HDD location, clearances required between the drill path and other existing infrastructure, and elevation changes between the entry and exit locations. These same factors also affect the depth of the conduit installation along the drill path.

The dimensions of the HDD entry location will be approximately ten feet long, fifteen feet wide and ten feet deep. The dimensions for the exit location will be approximately ten feet long, ten feet wide and

ten feet deep. The drilling will create a borehole that extends from the entry location under the resource or infrastructure being crossed, to the exit location.



HDD Drilling Operation

Each high voltage cable will require its own conduit due to thermal requirements and therefore the process described above will be performed twice at each proposed HDD location for the HVDC cable system and three times for the HVAC cable system. The smaller conduit for the fiber optic cable will be installed simultaneously with one of the larger conduits.

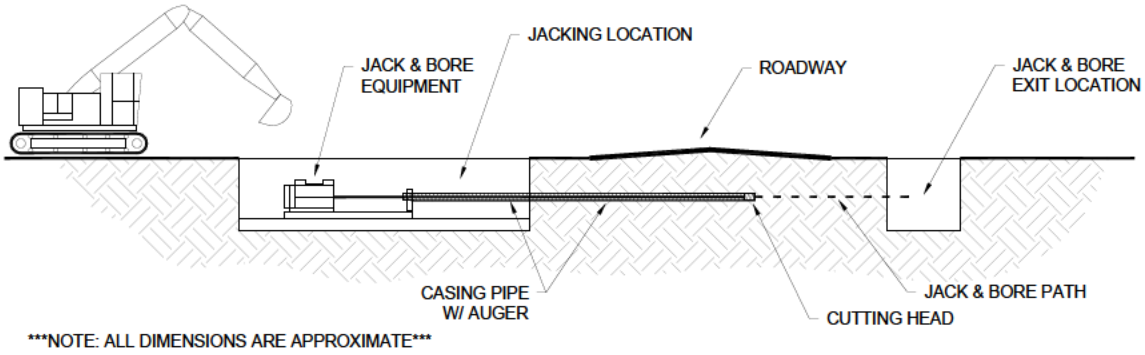
The land-to-water HDD method is very similar to the methods described above, except that the exit location will be underwater. The underwater exit requires the installation and use of a temporary gravity cell (described below) to minimize water quality impacts during excavation down to the target conduit-burial depth of 4 feet below the lakebed.

The gravity cell is a four-sided steel box, with approximate dimensions of thirty-feet by ten-feet by ten-feet, that will be placed over the drill head exit point. Due to the lakebed sediment conditions, it is expected that the gravity cell will settle into the unconsolidated sediment. The gravity cell will hold back the soft sediments and prevent them from collapsing into the hole during HDD installation operations.

Jack and Bore

In locations where the HVDC land cable system must cross a short distance under critical transportation infrastructure, such as railroads or highways, VGLD may use the Jack and Bore method to install the conduits. The Jack and Bore method uses an auger and cutting head inside in a "casing pipe" to bore a hole underground. Although the Jack and Bore method is less complicated than HDD, it is used only where soil and subsurface conditions are appropriate for this method. The depth of the bore path is

determined by the soil conditions at the installation location and the clearance required from any existing infrastructure.



Jack and Bore Operation

Prior to the start of the Jack and Bore operation, an area that is approximately forty feet long by thirty-five feet wide and ten feet deep will be excavated for the equipment needed for the process. This area is called the "jacking pit." The Jack and Bore equipment pushes the casing pipe with the auger and cutting head simultaneously into the soil, advancing slowly as the cutting head drills into the soil. An auger string carries the cuttings back through the casing pipe to the jacking pit where the cuttings are removed by an excavator.

Once the casing pipe installation is completed, the cutting head and auger sections are removed and the pipe is cleaned. Conduit for the cable system is then installed within the casing pipe.

Each high voltage cable will require its own casing pipe with HDPE conduit, due to thermal requirements. Therefore, the process described above will be performed twice at each proposed HDD location for the HVDC land cable system. A smaller conduit for the fiber optic cable will be inserted into one of the high voltage cable casing pipes.

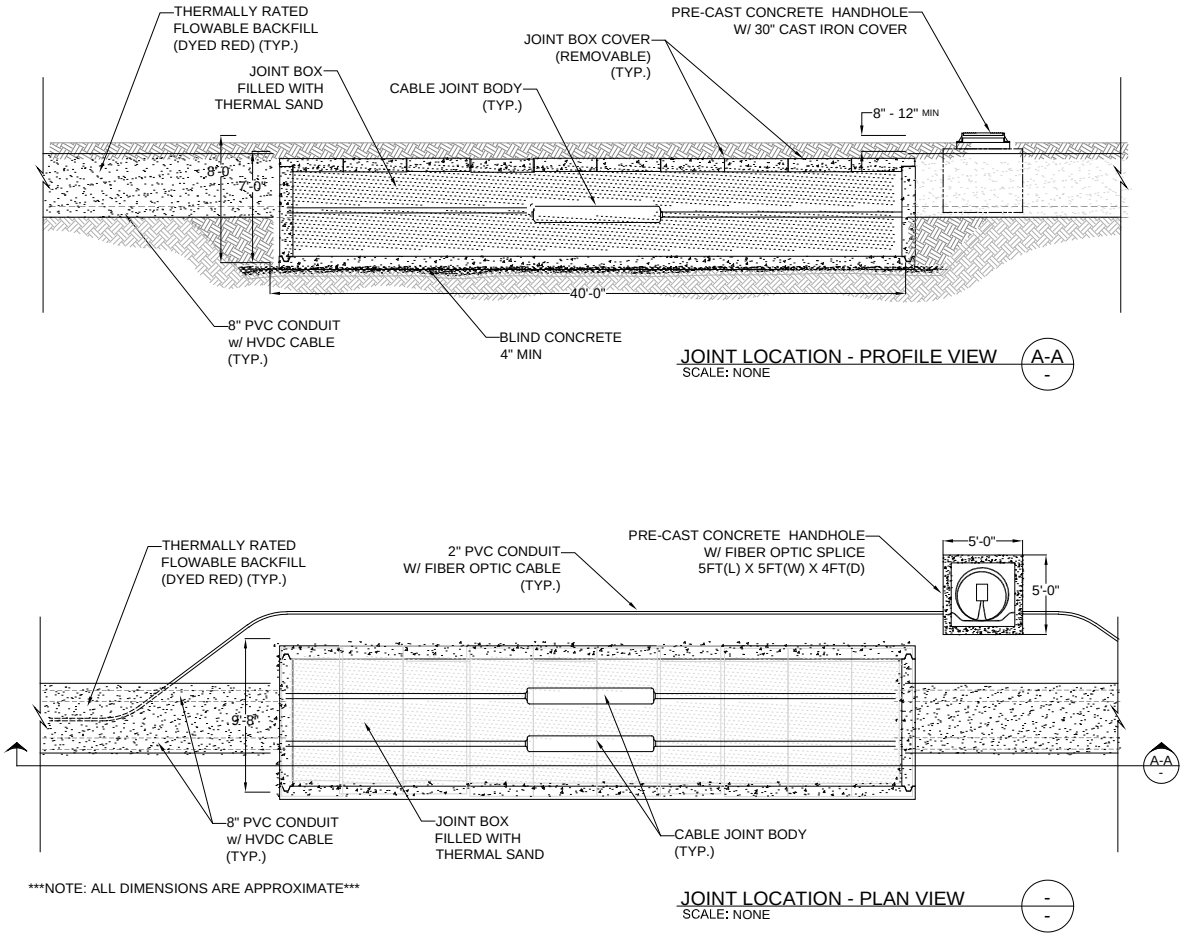
CABLE INSTALLATION

Land Cable Installation

After VGLD installs the conduit systems, the HVDC and HVAC land cable systems will be installed through them. The maximum cable segment length is expected to be between 2,500 feet and 3,000 feet. Each cable segment will require a field splice joint to connect to the other cable segments. Each joint location will be located outside the paved area of existing roads and will include a joint bay enclosure to protect the cable joints from mechanical damage. A temporary jointing shelter will be placed over the entire joint bay to provide a clean, climate controlled environment for the jointing process.

After a given joint is completed, the temporary shelter will be removed and the joint box filled with a suitable fine grained sand that will encase the joint bodies. Concrete covers will then be placed on the joint box to provide additional mechanical protection for the joint bodies. The final eight to twelve inches above the joint bay will be backfilled with native soils and loam, and the entire disturbed area will

be re-seeded to inhibit erosion. Upon completion, no above ground structures will remain at the joint location.



Joint Location Typical Plan & Profile

Each high voltage power cable joint location will also have a fiber optic splice. The fiber optic splices will be kept separate from the power cable joints for maintenance considerations. The splicing process for the fiber optic cable will be the same as for communications-grade fiber optic cable. The splicing will take place in a van or trailer with a clean, climate controlled environment.

Underwater Cable Installation

Prior to installing the underwater cable, a pre-lay "grapnel run" will be performed along the entire route. A grapnel is an anchor with hooks ("flukes") that will clear debris such as nets, ropes, wires, etc., to allow cable laying and burial activity to be done with minimal hindrance, operational risk, or threat to the cables during installation. The grapnel will be towed from a vessel equipped with a full navigation system. The grapnel will be hoisted back to the vessel at regular intervals and when tension monitoring indicates possible debris collection on the grapnel. Any recovered items will be collected and disposed of in accordance with proper standards and practices.

VGLD will perform cable installation using a Dynamically Positioned ("DP") cable laying barge. The laying barge will be equipped with redundant navigation systems and propulsion systems, along with numerous lay monitoring and control systems.

The underwater cable installation will begin at the Point Au Roche State Park landfall. The laying barge will lay out the cables and simultaneously attach temporary floats to them so they can be positioned at the mouth of the previously installed conduits (i.e. at the HDD exit location). A pulling rope will be attached to each of the cable ends so it can be pulled through the conduit onto the land. One of the high voltage cables will also include the underwater fiber optic cable. As the cable is slowly pulled into the conduit, the temporary floats will be removed, allowing the cable to be submerged and enter the conduit. Small marine support vessels and divers will assist the entire operation.

The cables will be buried to a target depth of four feet below the existing lakebed in locations where water depths are less than 150 feet. This will be accomplished by simultaneous lay and bury operations using a specially designed jet plow. The jet plow blade is equipped with nozzles that fluidize the lakebed sediments in situ, allowing the cables to be buried as the plow is towed forward. The use of simultaneous lay and bury installation minimizes the disturbance to the lakebed.

Where the water depth is greater than 150 feet, the cable bundle will be laid on the surface of the lakebed. The same cable laying barge used for jet plow operations will be used for surface-laying operations. VGLD will fully document and provide vertical and horizontal as-built locations for the HVDC cable system to the U.S. Coast Guard for inclusion on navigational charts.