Overland Segment 12

Case Number (10-T-0139)

Environmental Management and Construction Plan

Town of Stony Point to Town of Clarkstown

Rockland County, New York

EDR Project Number: 21075

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF ABBREVIATIONS AND ACRONYMS

ADZ	Allowed Deviation Zone
ANSI	American National Standards Institute
APA	Adirondack Park Agency
APE	Area of Potential Effects
AREMA	American Railway Engineering and Maintenance-of-Way Association
ATRAS	Annual Transmission Reliability Assessment Study
BMP	best management practice
CC	Certificate Condition
CI	Co-located Infrastructure
CNY	City of New York
CO	commercial operation
CP	Canada Pacific
CRIS	Capacity Resource Interconnection Service
CRMP	Cultural Resources Management Plan
ECL	Environmental Conservation Law
EDPL	Eminent Domain Procedure Law
EM&CP	Environmental Management and Construction Plan
USEPA	United States Environmental Protection Agency
FERC	Federal Energy Regulatory Commission
FPA	Federal Power Act
HDD	horizontal directional drill(ing)
HVAC	high voltage alternating current
HVDC	high voltage direct current
IEEE	Institute of Electrical and Electronics Engineers
kV	kilovolt(s)
LOW	Limit of Work
MCL	maximum contaminant level
MPT	Maintenance and Protection of Traffic
MS4	Municipal Separate Storm Sewers Systems
NAERO	North American Electric Reliability Organization
NAGPRA	Native American Graves Protection and Repatriation Act
NARC	North American Reliability Corporation
NESC	National Electrical Safety Code
NMFS	National Marine Fisheries Service
NPCC	Northeast Power Coordinating Council
NYCCC	New York City Construction Codes
NYCEC	New York City Electrical Code
NYCFC	New York City Fire Code
NYISO	New York Independent System Operator
NYPA	New York Power Authority
NYSBPS	New York State Bulk Power System
NYSDAM	New York State Department of Agriculture and Markets
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOS	New York State Department of State
NYSDOT	New York State Department of Transportation
NYSDPS	New York Station Department of Public Service
NYSHPO	New York State Historic Preservation Office
NYSRC	New York State Reliability Council
OATT	Open Access Transmission Tariff
OGS	Office of General Services
OPRHP	Office of Parks Recreation & Historic Preservation

OSHA	Occupational Safety and Health Administration
PCBs	polychlorinated biphenyls
PSC	Public Service Commission
PSL	Public Service Law
PWS	public water supply
ROV	remotely operated vehicle
ROW	right-of-way
SCFWH	Significant Coastal Fish and Wildlife Habitat
SIS	Systems Impact Study
SOP	Standard Operating Procedure
SPS	Special Protection System
SRIS	System Reliability Impact Study
SSESC	Standards and Specifications for Erosion and Sediment Control
SWPPP	Stormwater Pollution Prevention Plan
TPAS	Transmission Planning and Advisory Subcommittee
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
WQC	Water Quality Certification

GLOSSARY

Agricultural Land - Active agricultural land includes lands zoned for agricultural use which have been involved in the production of crops, livestock and livestock products for three (3) of the last five (5) years.

Allowed Deviation Zone (CC 3) – The Allowed Deviation Zone, as depicted in Appendix B to the Joint Proposal, defines the Facility/Project geographically around the nominal centerline (the "Centerline"). The Allowed Deviation Zone is depicted in Appendix B to the Joint Proposal and described in Certificate Condition 3, as amended by the Commission.

Centerline (CC 3) – The nominal centerline of the proposed cable trench, as depicted in Appendix B to the Joint Proposal, and as revised by the project design (See Appendix C Plans and Profiles).

Co-located Infrastructure (CC 27) – Co-located Infrastructure (C) shall consist of electric, gas, telecommunication, water, wastewater, sewer, cable-TV, and appurtenant facilities and associated equipment, whether above ground, below ground, or submerged, that are located within the Construction Zone. CI are either owned by a state agency or municipality or a subdivision thereof or owned or operated for public utility purposes by a regulated electric, gas, telecommunication, water, wastewater, sewer, or steam service provider but do not include railroads, railways, highways, roads, streets, or avenues.

Construction Zone (CC 4) – The portions of the Allowed Deviation Zone that may be affected by construction of the Facility. The Construction Zone may also include areas outside the Allowed Deviation Zone that are needed temporarily for site investigation, access, and construction.

Facility ROW (CC 5) – The portions of the Allowed Deviation Zone to be occupied by the Facility/Project once construction is complete.

Good Utility Practice (CC 20) – "Good Utility Practice" shall include any of the practices, methods or acts engaged in or approved by a significant portion of the electric, gas, steam, water, sewer or telecommunications industries, as applicable, during the relevant time period, including without limitation, the electric, gas, steam, water, sewer or telecommunications utility or utilities whose service territories the work in question is being performed and/or whose facilities are physically impacted by the work in question and, for the electric power industry only, NYISO, NYSRC, NPCC, NERC, NAERO, or any successor organizations. Good Utility Practice shall include any of the practices, methods, or acts in which, in the exercise of reasonable judgement in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is intended to delineate acceptable practices, methods, or acts generally accepted in the region, such as, in the case of the electric power industry only, those practices required by FPA Section 215(a) (4).

Project Corridor – the route that Segment 12 is located along, see Plan and Profile Drawings in Appendix C for details.

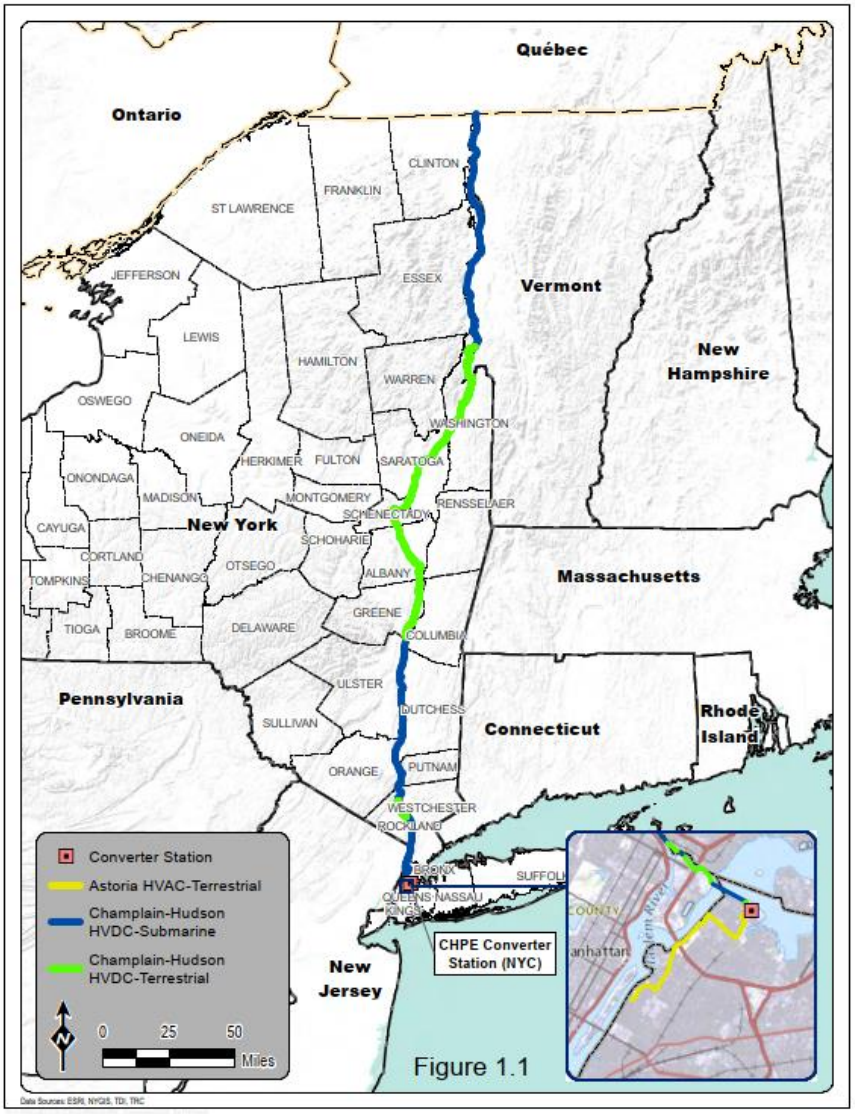
Package 7B - Segment 12 of the Project alignment is also referred to as "Package 7B" in some early Project documentation. See Table 1-1 for associated EM&CP Segments and Design Packages.

Limit of Work (LOW) - the boundary in which all construction activities, stockpile materials, equipment storage, access, parking, grading, landscaping, restoration, and any other construction related activities shall occur. Additionally, the LOW is the boundary for all potential disturbance during construction. Unless otherwise specified, when the limit of clearing and grubbing is shown on the plans, it shall also be the LOW. The LOW includes the area that would be considered the limit of disturbance (LOD).

1.0 SITE AND PROJECT DESCRIPTION

The Champlain Hudson Power Express (CHPE) project involves the construction of approximately 339 miles of high voltage direct current (HVDC) underground and underwater transmission cable from Montreal, Quebec, to Queens, New York (see Figure 1-1). It will bring 1,250 megawatts (MW) of renewable energy into New York by May 2026 to replace the use of fossil fuels and reduce carbon emissions. The proposed Project will provide enough power for more than 1 million homes, along with numerous environmental and economic benefits to millions of residents in New York State communities.

Figure 1-1. Overview Map



1.1 EM&CP PURPOSE AND INTENT

On March 30, 2010, Champlain Hudson Power Express, Inc. filed an Application for a Certificate of Environmental Compatibility and Public Need (the Application) with the New York State Public Service Commission (PSC) pursuant to Article VII of the New York Public Service Law (PSL) to construct and operate the transmission project known as the Champlain Hudson Power Express Project (the Project) (PSC Case 10-T-0139) (CC 1). An Order granting the Granting Certificate of Environmental Compatibility and Public Need (the Certificate) was granted on April 18, 2013. In August 2020, CHPE, Inc. converted from a corporation to a limited liability company and received the PSC's approval to transfer its interest in the Certificate to CHPE, LLC and CHPE Properties, Inc. (hereafter collectively referred to as CHPE and/or Certificate Holders). The Certificate was amended eight times (March 20, 2020, August 13, 2020, September 21, 2020, January 26, 2021, May 14, 2021, February 17, 2022, March 16, 2022, and December 15, 2022) to reflect revisions in the alignment and other Certificate Conditions (CCs).

The Article VII Application included the development of numerous documents which identified natural resources within the Project Corridor and best management practices (BMPs) to minimize impacts to those natural resources as a result of the construction or operation of the Project. Specifically, the Article VII Application and the resulting Certificate included the following environmental guidance documents:

- Joint Proposal (Case 10-T-0139 Item 295)
- Certificate Conditions contained within the issued Certificate
- EM&CP Guidelines (Appendix E to the Joint Proposal)
- Best Management Practices (BMP Document) (Attachment F to the Certificate).

Other relevant authorizations/approvals/guidance include the following:

- U.S. Army Corps of Engineers (USACE) Section 404 Clean Water Act Permit
- Section 401 Water Quality Certification
- Applicant Proposed Impact Avoidance and Minimization Measures (Appendix G to the Environmental Impact Statement prepared in accordance with the National Environmental Policy Act [NEPA]).

This Environmental Management and Construction Plan (EM&CP) has been developed in to facilitate construction, operation and maintenance of the Facility in accordance with the terms and conditions of the Certificate issued by the PSC on April 18, 2013 and documents listed above. Certificate Conditions (CCs) 6 and 7 allow for the creation of segmented EM&CPs to be developed in accordance with CCs 145 through 164 (as applicable) and the EM&CP Guidelines included as Appendix E to the Certificate. Section 1.1.1 summarizes additional resources used to develop this EM&CP.

In accordance with CC 6, Table 1-1 contains the Certificate Holders' anticipated Project schedule and sequencing for dividing the overland and marine portions of the Project into EM&CP Segments to facilitate construction and sequencing. Separate EM&CPs will be developed for the overland and marine segments as outlined in Table 1-1. On October 13, 2022, the Commission approved the first CHPE EM&CP for Segments 1 and 2 of project construction; subsequent approvals were issued in February and March 2023, as outlined in the below table.

Table 1-1. Overland and Marine Segments/Packages: Project Construction and Sequencing and Scheduling

EM&CP Segment	Design Package	Location Description	Segment Length (miles)	Anticipated/ (Actual) EM&CP Submittal	PSC Approval of EM&CP	Anticipated Schedule of Construction Commencement
OVERLAND SEGMENTS						
1, 2	1A/ 1B	Putnam to Dresden/ Dresden to Whitehall	17.6	(April 15, 2022)	October 13, 2022	November 2022
3	1C/2	Whitehall to Fort Ann, Fort Ann to Kingsbury	20.8	(December 23, 2022)	May 18, 2023	June 2023
4, 5	3	Kingsbury to Milton	26.5	(April 24, 2023)	TBD	August 2023
6	4A	Milton to Ballston	10.2	August 2023	TBD	September 2023
7	4B	Ballston to Schenectady/Rotterdam	9.6	August 2023	TBD	September 2023
8	5A	Rotterdam to Selkirk	16.9	(December 21, 2022)	June 26, 2023	August 2023
9	5B	Selkirk Bypass	5.3	(December 21, 2022)	June 26, 2023	August 2023
10	6	Ravena to Catskill	20.9	August 2023	TBD	October 2023
11	7A	Catskill	8.6	(March 30, 2023)	TBD	August 2023
12	7B	Stony Point to Clarkstown	7.6	(April 28, 2023)	TBD	August 2023
13, 14, 15	8	Bronx to Queens	2.1	August 2023	TBD	September 2023
Laydown Yards EM&CP	3, 5B, 6	Fort Edward, Bethlehem, Coxsackie	N/A	(November 11, 2022)	February 21, 2023	March 2023

EM&CP Segment	Design Package	Location Description	Segment Length (miles)	Anticipated/ (Actual) EM&CP Submittal	PSC Approval of EM&CP	Anticipated Schedule of Construction Commencement
MARINE SEGMENTS						
16	9	Transitional HDD (Stony Point)	N/A	(September 29, 2022)	March 20, 2023	June 2023
17	10	3 Transitional HDDs (Putnam, Cementon, Congers)	N/A	(December 14, 2022)	April 20, 2023	June 2023
18A	11A	Lake Champlain (Pre-Lay Mattressing)	96	(April 4, 2023)	July 20, 2023	August 2023
18B	11B	Lake Champlain (Cable Installation)	96	November 2023	TBD	May 2024
19	12	Hudson River (Pre-Lay Mattressing	89.1	July 2023	TBD	September 2023
20	13	Hudson River (Cable Installation)	185	December 2023	TBD	July 2024
21	14	Harlem River	~6.3	November 2023	TBD	July 2024
NEW YORK CITY INTERCONNECTION						
22	TBD	Converter Station, Astoria Complex, (Queens)	N/A	(January 31, 2023)	May 18, 2023	June 2023
23	TBD	Astoria-Rainey Cable HVAC System, (Queens)	~3.5	November 2023	TBD	August2024

Appendix A includes documentation showing that Certificate Holders completed required pre-submission agency consultations and correspondence related to this EM&CP. Notices of Filing of the EM&CP are located in Appendix B. All design drawings including Plans and Profiles, Erosion and Sediment Control Plans, and Maintenance and Protection of Traffic (MPT) Plans are included in Appendix C.

1.1.1 EM&CP Certificate Conditions and Environmental Protection Measures

As previously indicated, multiple documents developed in support of the Article VII Application, Certificate, and other permits/approvals issued in accordance with state and federal regulatory processes outline environmental protection measures relevant to the Project. Appendix D to this EM&CP includes a summary table describing how the CCs, BMPs, and EM&CP Guidelines have been addressed and incorporated into this EM&CP to assist in review by agencies. Section 2.0 provides the details of all CCs along with the location

within this EM&CP the CC is addressed. Table 1-2 provides a summary of all CCs applicable Table 1-2 and will be discussed in any applicable EM&CP Segments (CC 145).

Table 1-2. Summary of Applicable EM&CP Certificate Conditions

Section	Certificate Conditions	Section Title	Location of Conditions within EM&CP
A	1-15e	General Conditions of the Order	Included in Sections 1 and 3; Appendices A, B, and C; and separate filings, as cited in Section 2.0 or discussed elsewhere in this document.
B	16-20	Laws and Regulations	General requirements and best practices for entire construction of the Project
C	21-26	HVDC-AC Converter Station Design, Interconnection and Construction	Does not apply to Segment 12.
D	27-29d	Special Conditions Regarding Co-Located Infrastructure and Related Matters	Addressed in Section 13 Co-Located Infrastructure and Appendix R
E	30-40	Public Health and Safety	Addressed in Sections 3, 4, 12, 13
F	41-52	Notices and Public Complaints	Addressed in Section 3, Appendix A, B, I
G	53-57	Environmental Supervision	Addressed in Section 3 and Appendix F
H	58-74	Overland Installation	Addressed in Sections 1, 3, 4, 6, 7, 11, 12, 13, 14
I	75-80	Agricultural Lands	Addressed in Section 1, 3, 4, 7, 14
J	81-84	Herbicide Use	N/A – Herbicides will not be used in construction
K	85-87	Building Code and Inspections – Converter Station and Related Buildings	Does not apply to Segment 12
L	88-89	Overland Restoration	Addressed in Section 14
M	90-91	Overland Habitat Areas	Addressed in Section 9, Appendix M and T
N	92-101	Underwater Cable Installation	Does not apply to Overland Segments
O	102-106	Water Supply Intakes	Does not apply to Overland Segments
P	107-112	Cultural resources	Addressed in Section 11 and Appendix O

Section	Certificate Conditions	Section Title	Location of Conditions within EM&CP
Q	113-118	Waterbodies and Regulated Wetlands	Addressed in Section 9 and Appendix M
R	119-137	Transmission System Reliability	Conditions require filings/reports/studies not related to EM&CP; relevant filings and correspondence discussed in Section 3 and Table 3-2
S	144	Mapping, Land Acquisition, and As-Built Drawings for the Facility	Addressed in Sections 1, 3, 4, and Appendix C
T	145-164	EM&CP	All Sections addressed throughout this document
U	165(d)(xi)	Environmental Trust	Does not apply to Overland Segments

1.2 CHPE SEGMENT 12 PROJECT LOCATION AND DESCRIPTION

This EM&CP outlines CHPE's environmental management and construction plan for Segment 12 of the Project including the terrain and facilities that will be encountered during construction and installation of the overland transmission cable beginning in the Town of Stony Point (Rockland County) and ending in the Town of Clarkstown (Rockland County) (Figure 1-2). This Segment begins at the Stony Point Transitional HDD location and continues south for approximately 7.6 miles within the public road right-of-way (ROW) of Route 9W to the southern terminus at the Congers Transitional HDD location. This terrestrial Segment leaves and then reenters the Hudson River in order to avoid placement of the CHPE line in Haverstraw Bay, a Significant Coastal Fish Habitat, and impacts to marine resources in that portion of the Hudson River. The Certificate Holders have been coordinating directly with the ROW owners to obtain the consents necessary to construct the Facility. Section 13 includes a summary of the consultations with ROW owners.

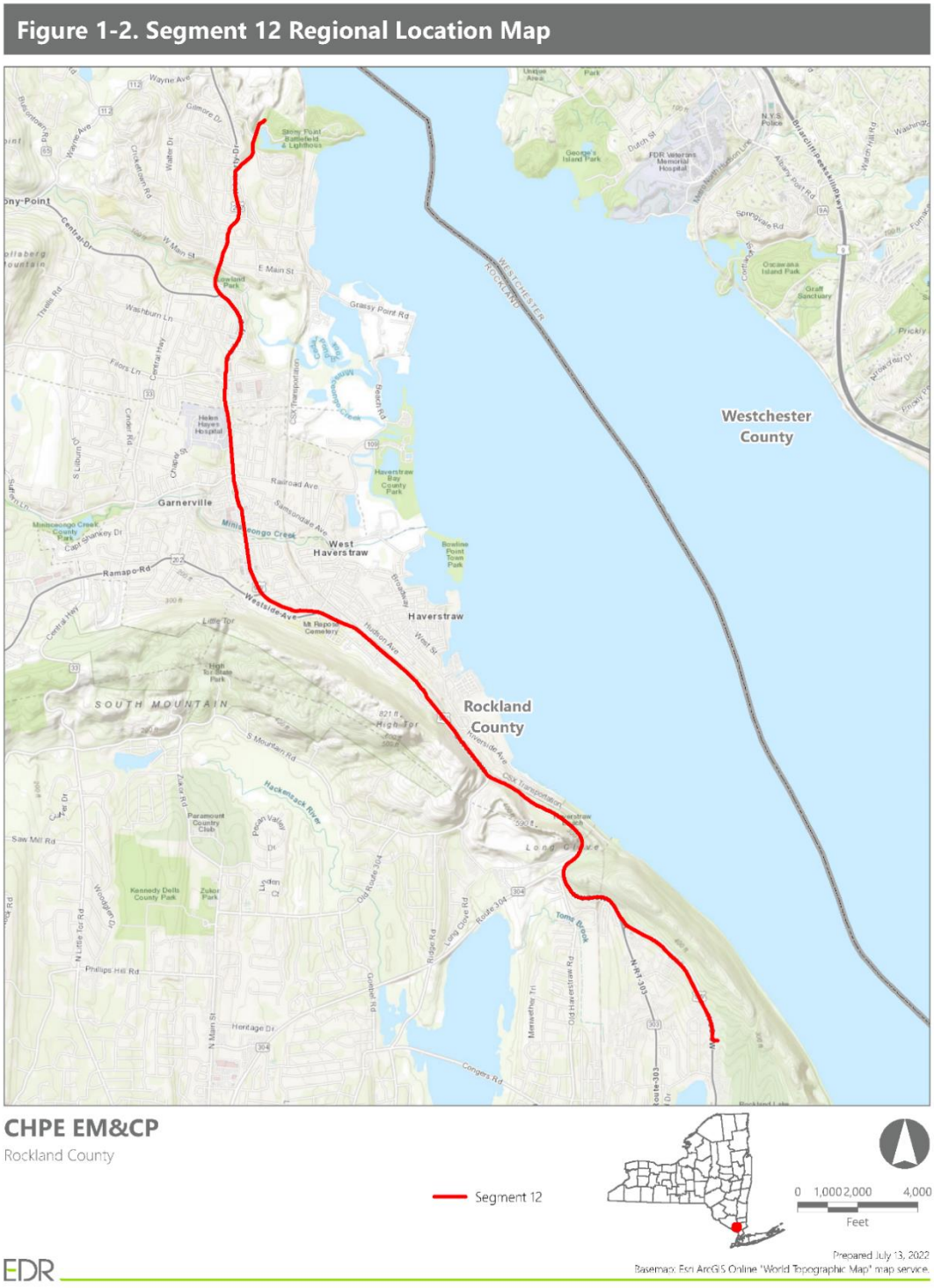
Ownership of the lands underlying any state, county and town roads crossed by this segment are vested in the municipalities; the Certificate Holders have obtained municipal consents necessary to place its infrastructure within these municipally owned ROWs. The Certificate Holders have also obtained or are in the process of obtaining options, easements, or other agreements to utilize privately owned lands on a temporary or permanent basis to facilitate installation of Segment 12. The Certificate Holders will provide required documentation to the Secretary prior to commencement of work on those lands as required by CC 10 and 142, as discussed further in Table 3-2 and Section 4.

Proposed work consists of installing two 8-inch SCH 40 PVC Conduits (or approved equal), associated access and site work required for trenching, and the subsequent installation of electric cable within the casings. All trenching activities and horizontal directional drilling (HDD) work will be located within the permitted deviation zone unless as otherwise noted in Section 1.3 and outlined in Appendix E, Justification for Deviation Zone Excursions. In accordance with CC 140, except as may be detailed, justified, and approved by the New York State Department of Public Service (NYSDPS) pursuant to the EM&CP process, the Facility ROW will be no closer than the following distances:

- 6 feet to the outer surface of the nearest installed cable (when located entirely within lands owned or controlled by a railroad company or public highway)
- 8 feet to the outer surface of the nearest installed cable (in all other areas).

The design Plan and Profile Drawings are provided in Appendix C.

Figure 1-2. Segment 12 Project Regional Location Map



1.3 DEVIATION ZONE EXCURSIONS IN SEGMENT 12

The Allowed Deviation Zone (ADZ) is defined as the boundary of the Facility ROW, as approved by the Certificate. Any installation of cable outside the ADZ requires DPS approval prior to construction (CC 140, 156a, 157). Table 1-3 summarizes the unique locations where cable is designed to be installed outside the ADZ for Segment 12 as well as the justification and any changes in environmental and cultural impact for each location. In the instance of an excursion that occurs as the result of an HDD, there will be no negative change in environmental impact due to resources being avoided by the HDD. This design choice actually results in a positive change versus trenching within the deviation zone in that it reduces impacts to surface resources and minimizes ground disturbance and any attendant environmental or community impact arising from the project. Additional information is included in Appendix E, Justification for Deviation Zone Excursions.

Table 1-3. Deviation Zone Excursions in Segment 12

Excursion	Parcel ID	Location (Approximate – see Drawings for Details)				Justification for Revision
		Sheet	Mile Point	Station Start	Station End	
S12-1	15.02-4-59	C-100	0.6	72495+00	72498+50	Transition Vault 3; End Marine HDD, Begin Segment 12
S12-2	15.19-2-45	C-102	1.2	72526+50	72528+50	Splice Vault 245
S12-3	15.19-2-75	C-103	1.4	72539+50	72539+50	Splice Vault 245A
S12-4	20.07-3-68, 20.07-3-67, 20.07-3-66,	C-104	1.75	72558+00	72559+25	Splice Vault 246
S12-5	20.02-11-31./300 20.02-11-30 20.11-3-1	C-106		72584+00	72586+00	Splice Vault 246B; HDD 126 work area
S12-6	20.15-3-1 20.19-1-1 20.19-1-4 20.19-1-3	C-108	2.7 – 2.9	72609+00	72619+00	HDD Work Area; Avoidance of subsurface utilities
S12-7	20.19-4-16, 20.19-4-17, 26.07-5-70	C-109 – C-110	3.1 – 3.25	72630+50	72640+00	Splice Vault 247; HDD Work Area; Avoidance of subsurface utilities

Excursion	Parcel ID	Location (Approximate – see Drawings for Details)				Justification for Revision
		Sheet	Mile Point	Station Start	Station End	
S12-8	26.07-3-25 26.11-1-12.4 26.11-1-12.3 26.11-1-12.2	C-111	3.5 – 3.6	72651+00	72659+00	HDD workspaces; avoidance of subsurface utilities
S12-9	26.51-1-51	C-112	3.95	72675+00	72676+00	Splice Vault 248; HDD workspace; avoidance of subsurface utilities
S12-10	26.51-1-49	C-112 – C-113	4	72678+50	72681+00	Splice Vault 248; HDD workspace; avoidance of subsurface utilities
S12-11	27.61-1-3.1	C-115	4.6 – 4.7	72711+00	72714+00	Splice Vault 248A
S12-12	35.10-1-1	C-118	5.65	72765+00	72765+25	Splice Vault 249A
S12-13	35.10-1-1	C-118	5.7	72766+75	72767+50	Splice Vault 249A
S12-14	35.11-2-1	C-121	6.5	72809+50	72812+00	Splice Vault 250A

1.4 TEMPORARY LAYDOWN YARDS

During the construction of the CHPE Project, and as previously outlined in other EM&CP submissions made to date, the Project will construct temporary laydown yards (estimated to be in service for two – four years), to serve as storage for construction equipment, construction materials, and assembly of construction crews. Temporary laydown yard locations may require connection to public water systems, a drilled non-potable water well, or other water source. Additionally, connection and disposal of sanitary waste may utilize public sewer system, septic holding and transfer system, or similar system. Article VII generally preempts the local permits related to the construction and operation of major electric transmission lines (NY Public Service Law Section 130). The construction of the temporary laydown yards will meet the substantive requirements of local laws, engineering standards, and regulations. Where appropriate and authorized by the PSC, CHPE will obtain local ministerial permits related to the temporary laydown yards, for example, an interconnection to public water system. Decommissioning and site restoration of the temporary laydown yards will be completed at the end of construction. See Section 3.5 for more information on decommissioning.

Construction work on Segment 12 of the CHPE Project will utilize the temporary laydown yard located at Tompkins Cove proposed in the Town of Stony Point, for which the Certificate Holders have filed as part of

the Stony Point Transitional HDD EMCP which obtained approval from the Commission on March 20, 2023 (DMM Item 287). Therefore, CHPE will not be seeking additional authorization for a laydown yard with this Segment. Parking for workers will occur at the Tompkins Cove laydown yard.

2.0 CERTIFICATE CONDITIONS

Table 2-1 below identifies where each CC is addressed in this EM&CP if it is applicable.

Table 2-1. Certificate Conditions		**CHPE Response**	**EM&CP Section/ Appendix**
A. General Conditions of the Order		**CHPE Response**	**EM&CP Section/Appendix**
1	Subject to the Conditions set forth in this Opinion and Order, CHPE, LLC and CHPE Properties, Inc. (Certificate Holders), are granted a Certificate of Environmental Compatibility and Public Need (Certificate), pursuant to Article VII of the New York PSL, authorizing the construction and operation of an electric transmission facility comprised of the following components: (i) two HVDC cables capable of transmitting 1,000 MW extending from the United States/Canada border east to the Town of Champlain, New York under the waters of Lake Champlain to the Town of Dresden, New York, extending to the hamlet of Cementon in the Town of Catskill, New York where the cables will exit the water to proceed along existing highways and railroad ROW, as well as under state park land through horizontal directional drill (HDD) borings, to bypass Haverstraw Bay, reentering the Hudson River at Hook Mountain State Park in Clarkstown, New York and continuing in the waters of the Hudson and Harlem Rivers to a point south of the Willis Avenue Bridge and north of the Bronx Hill, following the railroad ROW in the Bronx and then across the East River to terminate at Astoria, Queens (the HDVC Line); (ii) a voltage source converter station to convert HVDC to high voltage alternating current (HVAC) be constructed at Astoria, Queens, that will be connected to the New York Power Authority (the Authority or NYPA) 345-kilovolt (kV) HVAC gas insulated switchgear (GIS) Substation (the Converter Station and, collectively with the HVDC Line, the HVDC Transmission System); and (iii) a HVAC cable circuit extending from the NYPA's 345 kV GIS Substation at Astoria, Queens to Con Edison's 345 kV Rainey Substation located on the corner of 36th Avenue and	CHPE will generally comply, though this EM&CP includes requested Deviation Zone Exceedances outlined in Appendix E, and CHPE submitted a request to amend the route in conjunction with this Segment EM&CP.	Section 1.0; Appendix C and E

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	Vernon Boulevard in Queen, New York (the Astoria-Rainey Cable and, collectively with the HVDC Transmission Line System, the Facility). [As Amended by Certificate Amendment 2 (August 13, 2020, authorizing use of Preferred Alternatives), Amendment 3 (January 26, 2021, modifying certain routing in the Harlem River Yard in New York City and augmenting Deviation Zone for Rockland County locations), Amendment 4 (May 14, 2021, increasing capacity from 1,000 to 1,250 MW), and Amendment 5 (February 17, 2022, making certain modifications to Facility components in the Astoria complex)].		
2	The Facility route is authorized as depicted on a series of maps included in Appendix B to the Joint Proposal. [As Amended by Certificate Amendment 2 (August 13, 2020, authorizing use of Preferred Alternatives), Amendment 3 (January 26, 2021, modifying certain routing in the Harlem River Yard in New York City and augmenting Deviation Zone for Rockland County locations), and Amendment 5 (February 17, 2022, making certain modifications to Facility components in the Astoria complex)].	CHPE will generally comply, though this EM&CP includes requested Deviation Zone Exceedances outlined in Appendix E, and CHPE submitted a request to amend the route in conjunction with this Segment EM&CP.	Appendix C and E
3	The Facility is defined geographically by a deviation zone (ADZ) around a nominal centerline (the Centerline), as depicted in Appendix B to the Joint Proposal. For the portion of the Facility located on land, the Allowed Deviation Zone is depicted in Appendix B to the Joint Proposal. For the portions of the HVDC Transmission System located in Lake Champlain and the Hudson, Harlem, and East Rivers, the Allowed Deviation Zone is as specified in Certificate Condition 155.	CHPE will generally comply, though this EM&CP includes requested Deviation Zone Exceedances outlined in Appendix E.	Appendix C Section 1.3; Glossary. See also, Appendix E.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
4	Those portions of the Allowed Deviation Zone that may be affected by construction of the Facility are included in the construction zone (Construction Zone), which may also include areas outside the Allowed Deviation Zone that are needed temporarily for site investigation, access, and construction.	CHPE will generally comply, though this EM&CP includes requested Deviation Zone Exceedances outlined in Appendix E.	Appendix C Section 1.3; Glossary. See also, Appendix E.
5	The portions of the Allowed Deviation Zone to be occupied by the Facility once construction is complete are referred to herein as the Facility ROW. The Certificate Holders shall also acquire and maintain the continuing right to enter onto and use certain additional lands immediately adjacent to the Facility ROW needed for repair and maintenance purposes, including preclusion of vegetative encroachment, on terms prohibiting the owners of such land from taking any action on that land that would interfere with such repair and maintenance activities.	CHPE will comply	Section 1.3; Glossary, Appendix C
6	The Facility may be developed in segments (each, a Segment) to facilitate construction sequencing and scheduling, including the commencement of construction of overland components thereof, provided that, with the EM&CP filing regarding the first Segment, the Certificate Holders shall identify the anticipated Segments and include a schedule for their construction, and, provided further that the EM&CP filings regarding subsequent Segments shall include updates to the Segment identification and construction schedule.	CHPE complied in connection with first Segment EM&CP submission on April 15, 2022 (DMM Item 862).	Section 1.1
7	In the event of any conflict between the express provisions of this Certificate and any of the provisions of the Joint Proposal, including the BMP Document and the EM&CP Guidelines), both of which are attached as appendices to the Joint Proposal, the express provisions of this Certificate shall govern.	CHPE will comply	Section 1.1, Section 2.0
8	The Certificate Holders shall, within 30 days after Commission approval of this Certificate, file with the Secretary to the Public Service Commission either a petition	CHPE has complied	Acceptance Letter of Champlain Hudson

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	for rehearing or a verified statement that they accept and will comply with this Certificate. Failure to comply with this condition shall invalidate this Certificate.		Power Express (April 23, 2013 (DMM Item 727)
9	The Certificate Holders shall not commence site preparation or construction of a particular Segment unless and until all the necessary permits and consents referred to in Certificate Condition 16 that pertain to that Segment are received and unless and until the EM&CP for that Segment (each such EM&CP filing for a particular Segment being referred to as a Segment EM&CP) is approved by the Commission. Copies of all permits/consents required for or obtained in connection with site preparation and construction shall be provided to the Secretary to the Commission (Secretary) before commencement of any such activity. For the purposes of this Certificate, construction shall include site preparation, installation, delivery of equipment and supplies, maintenance of construction equipment during construction, clearing, and grading, but shall not include component manufacture, including cable manufacture.	CHPE will comply. All permits/consents required for or obtained in connection with site preparation and construction shall be provided to the Secretary before commencement of any activity requiring such permits.	Section 3.3
10	The Certificate Holders shall not commence work on any Segment until they shall have obtained all required interests in real estate, including interests in real estate to be used for access roads (whether obtained through a conveyance, consent, permit, or other approval) as are necessary and applicable for such Segment. Evidence of the obtaining of such interests shall be provided to the Secretary prior to commencement of the work.	CHPE will comply. Evidence of the obtaining of such interests shall be provided to the Secretary prior to commencement of the work on lands for which such interests are required.	See Section 1.2-1.3; Table 3-2.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
11(a)	The Certificate Holders shall not place transmission cable in any waterway, trench, conduits, or other location intended for permanent installation prior to the issuance of (i) by appropriate Canadian federal and/or provincial authorities of those approvals and permits necessary in order to allow for the construction of transmission facilities interconnecting with the bulk power system operated by TransÉnergie (or a successor to such organization) and extending to the New York border; (ii) by the United States Department of Energy of an approval pursuant to Executive Orders 10485 and 12038 (the Presidential Permit); and (iii) by the United States Army Corps of Engineers of permits pursuant to section 404 of the Federal Clean Water Act and section 10 of the Federal Rivers and Harbors Act (the Corps Permit). The Certificate Holders shall provide copies of said permits to the Secretary within 15 days of receipt. In no event shall a delay or failure to obtain any of the above-referenced approvals serve as occasion or justification for a deferral or alteration of any and all required state cleanup and restoration activities as set forth in the applicable Environmental Management and Construction Plan and relevant sections of this Certificate and the BMPs, including, without limitation, section 11 of the BMPs. [as Amended by Order Approving Amendment Issued September 21, 2020]	CHPE has complied necessary approvals (see DMM items 755 and 756) and will comply for those approvals not yet obtained.	Section 3.3; Presidential Permit: Submitted October 15, 2014 (DMM Item 755) ACOE Permit: Submitted April 24, 2015 (DMM Item 756)
11(b)	Work shall advance generally in accordance with the schedule of gating events as described in Appendix 1 [This Appendix was attached the Order Approving Amendment Issued September 21, 2020]	CHPE will comply	See Table 1-1 and Section 1.
11(c)	The Certificate Holders shall provide reports to the Commission regarding the status of efforts to achieve certifications and approvals of upstream facilities in Canada every six months from the date of this Order until the certifications and approvals are obtained. If Hydro Quebec-TransÉnergie is unable to achieve certification in Canada, the Certificate Holders shall (i) notify the Secretary; and (ii) stop work in New York State and initiate stabilization of disturbed sites, and (iii) undertake restoration of any sites not previously restored, as set forth in the applicable EM&CP and relevant	CHPE will comply. Reports have been filed periodically to DMM as required since this provision was Ordered on Sept. 21, 2020, most	Section 3.3; reports have been filed periodically to DMM as required since this provision was Ordered on September 21, 2020, most recently on

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	sections of this Certificate and the BMPs, including, without limitation, section 11 of the BMPs. [as amended by Order Approving Amendment Issued September 21, 2020]	recently on March 29, 2023 (DMM Item 1053).	March 29, 2023 (DMM Item 1053).
12	The Certificate Holders shall promptly notify the Secretary in writing should they decide not to complete construction of all or any portion of the Facility and shall serve a copy of such notice upon all parties to this proceeding.	CHPE will comply	Section 3.3
13	This Certificate may be vacated on notice to the Certificate Holders if (a) the Certificate Holders has not submitted the EM&CP or the initial Segment EM&CP to the Commission for its review within 12 months of the date upon which Certificate Holders has received all permits and approvals required for the commencement of construction of the Facility from any and all governmental agencies and authorities having jurisdiction with respect thereto, and any finding made or action taken by any such agency or authority that is subjected to administrative and/or judicial review has been conclusively upheld as a result of such review, or the time period for the initiation of any such review has definitively expired, or (b) unless reasonable cause as defined in this Condition is shown, the Certificate Holders has not commenced construction of the Facility on or before the date that is six months following the approval by the Commission of the EM&CP for the initial Segment EM&CP submitted to the Commission, or the date that is 18 months following the date of the grant of this Certificate, whichever is later. Reasonable cause may include delays in the issuance of permits and approvals required for the Facility by federal agencies and other circumstances beyond the reasonable control of the Certificate Holders.	CHPE will comply	Section 1.2; see permitting status report filed March 29, 2023 (DMM Item 1053).
14	The Certificate Holders shall integrate and coordinate maintenance of the Facility with that of adjacent facilities, structures, and property in accordance with the EM&CP.	CHPE will comply	Appendix F

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
15(a)	The Certificate is granted and the required determinations of the need for the Facility and that the Facility will serve the public interest, convenience and necessity are explicitly made contingent on Certificate Holders delivering a minimum of 1,550 MW of energy (including 550 MW of energy not flowing through the HVDC Transmission System) out of the NYPA's Astoria substation. The Certificate Holders shall file a report documenting how they will achieve this level of deliverability prior to, or at the time they file their EM&CP for the first segment of the Facility. If the Certificate Holders cannot demonstrate compliance with this deliverability requirement, the Certificate Holders shall file with the Secretary a Request for Reconsideration of the need and public interest, convenience and necessity determinations made with respect to the Facility. The request shall be served on all parties to this proceeding and shall clearly state that all parties may submit comments on the filing within 30 days of service. Such request shall explain why Certificate Holders believes that a lesser amount of energy deliverability is consistent with the Commission's findings that the Facility is needed and will serve the public interest, convenience and necessity. Such request shall include a discussion of each option the Certificate Holders considered as a means of achieving the minimum threshold level of deliverability. The Certificate Holders may not commence construction of the Facility unless and until the Commission has accepted the report or approved the request filed pursuant to this subpart.	CHPE has complied	Compliance Filing on December 22, 2021 (DMM Item 843 and 881), as affirmed in the Order Approving Segment 1 and 2 EM&CP, Ordering Clause 2 (October 13, 2022) (DMM Item 903)
15(b)	The Certificate is granted and the required determination that the Facility will serve public interest, convenience and necessity is explicitly made contingent on the HVDC Transmission System being developed, financed, constructed, and operated on a merchant basis with no reliance on cost-of-service rates set by either a federal or state regulatory entity, and will not be included in utility rate base, either directly or through a contractual arrangement between Certificate Holders and any agency, authority or other entity of the State of New York, any municipal subdivision of the State of New York, any utility subject to cost-based regulation, or any instrumentality of any of the	CHPE will comply.	CHPE LLC executed a Firm Electric Transmission Rights Purchase Agreement (TRA) with H.Q. Energy Services (U.S.) Inc. (HQUS) on November 29, 2021.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	foregoing, and on the further condition that all costs associated with the use of Astoria-Rainey Cable to deliver electric energy and capacity transmitted over the HVDC Transmission System will also be recovered exclusively on a merchant basis with no reliance on cost-of-service rates set by either a federal or state regulatory entity, and will not be included in utility rate base, either directly or through a contractual agreement between Certificate Holders and any agency, authority or other entity of the State of New York, any municipal subdivision of the State of New York, any utility subject to cost-based regulation, or any instrumentality of any of the foregoing. Prior to, or at the same time they file their EM&CP for the first segment of the Facility, the Certificate Holders shall file a report documenting that they have received building contractual commitments from one or more financially responsible entities for a combined total of no less than 750 MW of Firm Transmission Service over the Facility for a period of no less than twenty-five (25) years. The Certificate Holders may not commence construction of the Facility unless and until the Commission has accepted this report. If Certificate Holders seeks to recover any of the costs of the HVDC Transmission System, or any of the costs associated with the use of the Astoria-Rainey Cable to deliver electric energy and capacity transmitted over the HVDC Transmission System, in cost-based rates set by a Federal or State regulatory authority, the Certificate shall be deemed invalid. In the event that the Certificate Holders recovers all of any part of the costs of the HVDC Transmission System, or any of the costs associated with the use of the Astoria-Rainey Cable to deliver electric energy and capacity transmitted over the HDVC Transmission System, under a contract between Certificate Holders and any agency, authority or other entity of the State of New York, any municipal subdivision of the State of New York, any utility subject to cost-based regulation, or any instrumentality of any of the foregoing, the Certificate shall also be deemed invalid. For purposes of this provision, the term "rates" shall include any charges established by the NYPA or a utility		Pursuant to the TRA, HQUS is contracted for 100% of the transmission line capacity (1,250 MW). Further, a proposed 25-year contract between HQUS and the NYSERDA for 1,250 MW to be delivered from Quebec to the City of New York over the CHPE line was approved by Order of the Commission on April 14, 2022, in Case 15-E-0302 (DMM Item 993, Order Approving Contracts for the Purchase of Tier 4 Renewable Energy Certificates).

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	operating under cost-based regulation, including without limitation base rates, surcharges, adjustments, or any other recovery mechanism.		
15(c)	The Certificate is granted and the required determination that the Facility will serve public interest, convenience and necessity is explicitly made based on the cost estimate for the Astoria-Rainey Cable set out in paragraph 23 of the Joint Proposal in this proceeding. Certificate Holders shall include as part of their EM&CP for the Astoria-Rainey Cable a report providing an updated construction cost estimate for the Astoria-Rainey Cable, including supporting documentation. If the updated cost estimate exceeds the cost estimate in the evidentiary record of this proceeding by 10% or more, the Certificate Holders shall file with the Secretary a Request for Reconsideration of the determination of public interest, convenience and necessity made with respect to the Facility. The request shall be served on all parties to this proceeding and shall clearly state that all parties may submit comments on the filing within 30 days of service. Such request shall explain how such increased cost would be consistent with the Commission's public interest, convenience and necessity determination made in this proceeding.	CHPE will comply.	Does not apply to Segment 12; will be addressed in EM&CP for Astoria-Rainey segment.
15(d)	Upon commencement of construction, the Certificate Holders shall file with the Secretary monthly reports showing the costs for the Astoria-Rainey Cable as they occur, broken out as follows: excavation costs, traffic control costs, cable installation costs, splicing costs, thermal back fill, manhole and vault costs, costs relating to damage to other facilities (gas, electric, telephone, fiber optic cables, sewer, water, etc.), engineering costs, inspector costs, fines, cable costs, and all other costs by category. The reports shall include the names of the individuals responsible for providing the information, along with their contact information, and shall contain all supporting documentation.	CHPE will comply.	Does not apply to Segment 12; will be addressed in EM&CP for Astoria-Rainey segment.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
15(e)	Subject to the limitations of 15(b), nothing contained in this Certificate shall be construed as affecting in any way the rights of Certificate Holders to unilaterally make application to the Federal Energy Regulatory Commission (FERC) for a change in rates, terms and conditions, charges, classification of service, Service Agreement, rule or regulation under section 205 of the Federal Power Act (FPA) and pursuant to FERC's rules and regulations promulgated thereunder.	CHPE will comply.	General condition not related to EM&CP.
B. Laws and Regulations		**CHPE Response**	**EM&CP Section/Appendix**
16	Each substantive federal, state, and local law, regulation, code, and ordinance applicable to the Facility authorized by this Certificate shall apply except as set forth in Condition 17 and except and to the extent that the Commission has refused to apply any substantive local ordinances, laws, resolutions, or other actions issued thereunder or local standards or requirements, as being unreasonably restrictive as listed in the Revised and Updated Exhibit 7 to the Application (see Exhibit 115 to the Joint Proposal). [As Amended by Amendment 2 (August 13, 2020) authorizing additional waivers for Preferred Alternative routing]	CHPE will comply.	All Sections of EM&CP (designed to ensure adherence to Certificate).
17	No State or municipal legal provision purporting to require any approval, consent, permit, certificate, or other condition for the construction or operation of the Facility authorized by this Certificate shall apply, except (i) those of the PSL and regulations and orders adopted thereunder, (ii) those provided by otherwise applicable state law for the protection of employees engaged in the construction and operation of the Facility, (iii) those regarding permits issued pursuant to federally approved authority, (iv) those regarding the right to use or occupy state or municipal property (including ROW), and (v) those discussed in CC 18.	CHPE will comply.	All Sections of EM&CP (designed to ensure adherence to Certificate)
18	Subject to the Commission's ongoing jurisdiction, the Certificate Holders shall apply for certain local regulatory permits and approvals, to wit:	CHPE will comply.	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
18(a)	The following City of New York (CNY) regulatory permits and approvals that would be applicable to construction and operation of those portions of the Facility located within the boundaries of CNY in the absence of PSL § 130: building permits, street excavation permits, street closure permits, permits for structural welding, permits under the CNY Fire Code, permits under the CNY Construction Codes and Electrical Code, permits for the discharge of wastewater and stormwater to CNY's sewer system, permits for the use and supply of water, and forestry permits.	CHPE will comply.	Does not apply to Segment 12; will be addressed for EM&CP Segments in CNY
18(b)	If the Certificate Holders believes that any action taken, or determination made, in connection with the permits and approvals referenced in subpart (a) of this Certificate Condition is unreasonable or unreasonably delayed, they may petition to Commission, upon reasonable notice to the permitting authority, to seek a resolution of any such unreasonable requirement or unreasonable delay. The permitting authority may respond to the petition, within 10 business days, to address the reasonableness of any requirement or delay.	CHPE will comply	Does not apply to Segment 12; will be addressed for EM&CP Segments in CNY
19	The Certificate Holders shall construct the Facility in a manner that conforms to Good Utility Practice, as herein defined, and all applicable standards of the American National Standards Institute (ANSI) including, without limitation, the National Electrical Safety Code (NESC), Institute of Electrical and Electronics Engineers (IEEE), Standard IEEE C2-2002, and any stricter standards adopted by the Certificate Holders. Upon completion thereof, the Certificate Holders shall certify to the Commission that the Facility was constructed in full conformance with the standards specified herein.	CHPE will comply	Section 4.0 and Appendix C

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
20	For the purposes of this Certificate, "Good Utility Practice" shall include any of the practices, methods or acts engaged in or approved by a significant portion of the electric, gas, steam, water, sewer or telecommunications industries, as applicable, during the relevant time period, including without limitation, the electric, gas, steam, water, sewer or telecommunications utility or utilities whose service territories the work in question is being performed and/or whose facilities are physically impacted by the work in question and, for the electric power industry only, the New York Independent System Operator (NYISO), the New York State Reliability Council (NYSRC), the Northeast Power Coordinating Council (NPCC), the North American Reliability Corporation (NERC) and the North American Electric Reliability Organization (NAERO) or any successor organizations. Good Utility Practice shall include any of the practices, methods, or acts in which, in the exercise of reasonable judgement in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to delineate acceptable practices, methods, or acts generally accepted in the region, such as, in the case of the electric power industry only, those practices required by FPA Section 215(a)(4).	CHPE will comply	Section 4.0 & Glossary
C. HVDC-AC Converter Station Design, Interconnection and Construction		**CHPE Response**	**EM&CP Section/Appendix**
21	The Converter Station shall be located entirely on and within Subdivision Parcel A as shown on Hearing Exhibit 130 along Luyster Creek in the Astoria neighborhood of the borough of Queens (Subdivision Parcel A), a copy of which is annexed to these Certificate Conditions. The Certificate Holders shall be responsible for the cost of protecting or relocating any utility infrastructure during or as a result of construction activity by them in Subdivision Parcel A. The Certificate Holders may not use, occupy, or take (by condemnation or otherwise) any other real property owned or occupied	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	by Con Edison at Astoria for the Converter Station, a ring bus and related facilities that are required to complete the Facility without ConEdison's prior written consent.		
22(a)	The tallest building serving as part of the Converter Station shall not exceed 70 feet in height above finished grade, as defined below, and the tallest support tower shall not exceed 70 feet above finished grade. The finished grade shall be the grade at the elevation of the 100-year floodplain, and such additional minimal fills as necessary to provide drainage of the site. The height and arrangement of all station facilities shall be indicated in the EM&CP site plan discussed in Section 1(A) of the EM&CP Guidelines.	CHPE will comply	Does not apply to Segment 12
22(b)	The Converter Station shall be designed to minimize visibility and visual impacts.	CHPE will comply	Does not apply to Segment 12
22(c)	The Converter Station shall use materials that minimize glare and that are neutral in color. The design shall also include appropriate landscaping at the site.	CHPE will comply	Does not apply to Segment 12
22(d)	Maintenance and enhancement of the shoreline area vegetative cover between the Converter Station site and the Luyster Creek waterway shall be addressed in the final site plan and station maintenance plans.	CHPE will comply	Does not apply to Segment 12
22(e)	Exterior night lighting of the Converter Station shall be designed to provide illumination necessary for worker safety and site security purposes, giving full consideration to energy conservation, glare, and the minimization of light trespass. All such lighting shall be selected and installed to shield the lamp filaments from direct view to the greatest extent possible, which may include the use of full-cutoff fixtures without drop-down optics, use of task lighting for maintenance purposes where feasible, and minimizing upward lighting. Lighting shall comply with worker safety requirements.	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
22(f)	If ConEdison moves forward with its recently announced plan to interconnect a PAR to the NYPA's 345 kV Astoria GIS Substation, the Converter Station may also include a fourbreaker 345 kV GIS ring bus, which ring bus, if owned and operated by Applicants, shall be located entirely on Subdivision Parcel A and shall be interconnected at 345 kV to the Astoria-Rainey Cable, NYPA's Astoria GIS Substation and the Converter Station as described in Hearing Exhibit 125 to the Joint Proposal.	CHPE will comply	Does not apply to Segment 12
23	The EM&CP Site Plan for the Converter Station site shall include the following:	CHPE will comply	Does not apply to Segment 12
23(a)	a site plan of sufficient detail to demonstrate conformance with the requirements of this Certificate, the Noise Mitigation Procedures of the CNY, and the EM&CP Guidelines.	CHPE will comply	Does not apply to Segment 12
23(b)	construction drawings including architectural, structural, HVAC, mechanical, electrical, plumbing and fire protection plans for all structures, which drawings shall have been prepared by an architect or engineer licensed by the State of New York and in conformance with the code requirements of the CNY.	CHPE will comply	Does not apply to Segment 12
23(c)	a review of the sound emissions characteristics of the high voltage transformers selected for final project design, including typical and maximum noise levels generated at associated operating levels; and a tonal analysis based on one-third octave bands to determine the potential for tonal sound generation, including pure tones.	CHPE will comply	Does not apply to Segment 12
23(d)	an exterior lighting plan based on illumination requirements for worker safety, which limits off-site glare.	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
24	In developing the site plan for the Converter Station, Certificate Holders shall consult with New York State Department of Public Service (DPS) Staff and the CNY, and share preliminary drawings of foundations, elevations, renderings, stormwater control, and noise control measures, as they become available. Not later than 30 days prior to the date by which Certificate Holders expects to file the EM&CP segment for the Converter Station, they shall file with the same parties a preliminary site plan of sufficient detail to address relevant requirements of this Certificate and the EM&CP Guidelines, for their review and comment.	CHPE will comply	Does not apply to Segment 12
25	Prior to commercial operation of the Converter Station, the Certificate Holders shall obtain from CNY a certificate of occupancy covering the Converter Station. A copy shall be provided to the Secretary.	CHPE will comply	Does not apply to Segment 12
26	The Converter Station shall have a 345 kV underground Gas Insulated Line connection to the Astoria Annex GIS Substation installed in duct banks.	CHPE will comply	Does not apply to Segment 12
D. Special Conditions Regarding Co-located Infrastructure and Related Matters		**CHPE Response**	**EM&CP Section/Appendix**
27	The Certificate Holders shall engineer, construct, and install the Facility so as to make it fully compatible with the continued operation and maintenance of co-located infrastructure (CI), as herein defined, and affected railroads, railways, highways, roads, streets, or avenues. CI shall consist of electric, gas, telecommunication, water, wastewater, sewer, and steam infrastructure and appurtenant facilities and associated equipment, whether above ground, below ground, or submerged that:	CHPE will comply	Section 13 & Appendix C, P, Q, R
27(a)	are located within the Construction Zone approved in the EM&CP for the Facility or a proposed Construction Zone as provided for in Certificate Condition 28(d); and	CHPE will comply	Section 13

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
27(b)	are either owned by a state agency or municipality or a subdivision thereof or owned or operated for public utility purposes by a regulated electric, gas, telecommunication, water, wastewater, sewer, or steam service provider;	CHPE will comply	Section 13
27(c)	but do not include railroads, railways, highways, roads, streets, or avenues.	CHPE will comply	Section 12 and 13
28	In order to protect CI, Certificate Holders shall:	CHPE will comply	Section 13
28(a)	within 60 days of Commission issuance of a Certificate, consult with the owners and/or operators of all known electric, gas, telecommunication, water, wastewater, sewer, and steam infrastructure and appurtenant facilities and associated equipment, whether above ground, below ground or submerged, other than railroads, railways, highways, roads, streets and avenues, located either: (i) within the Allowed Deviation Zone, (ii) within three hundred (300) feet of any location outside the Allowed Deviation Zone where Certificate Holders intends to undertake any pre-construction activities; or (iii) sufficiently close to areas of anticipated pre-construction activities such that Good Utility Practice, as defined in Condition 20 of this Certificate, requires discussion of the impacts of such pre-construction activities between Certificate Holders and the owners and/or operators of such facilities (Potential CI). Such consultations shall include discussion of the likely routing of the Facility and the measures that will be employed by Certificate Holders to protect CI, including the studies required by the exercise of Good Utility Practice regarding the manner in which the Facility will be designed and installed wherever they are expected to cross CI or are expected to come in such proximity to CI that Good Utility Practice would require a specific design to be developed. All agreements and requirements resulting from this consultation shall be reflected in the proposal prescribed in subsection (d) of this Condition and the notice prescribed in subsection (e) of this Condition; and	CHPE will comply	Section 3.3, 13, and Appendix R

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
28(b)	within 60 days of Commission issuance of a Certificate, begin the process of consulting with the owners and/or operators of Potential CI to develop a construction schedule for the Facility that, among other things, coordinates system outage requirements, if any, and avoids conflicts with the internal construction programs of each affected owner and/or operator. This consultation shall continue throughout each phase and portion of the construction of the Facility that affects any CI or Potential CI, as applicable. As a part of this consultation, the Certificate Holders will identify to a reasonable degree of certainty the appropriate representative of the party, whether owner or operator, having primary care, custody, and control of a particular segment of Potential CI or CI (each such a representative being a Designated Representative). All agreements and requirements resulting from this consultation shall be reflected in the proposal prescribed in subsection (d) of this Condition and the notice prescribed in subsection (e) of this Condition and in the Certificate Holders' EM&CP; and	CHPE will comply	Section 3.3 and 13; Appendix R
28(c)	comply with all procedures identified by the Designated Representative(s) of the owners and/or operators of such CI or Potential CI, including, without limitation, application procedures and compliance with requirements for obtaining relevant rights, permission, permits, or authorization, whenever the Certificate Holders seeks to undertake any studies, surveys, testing, sampling, preliminary engineering, pre-construction, construction, operation, maintenance, or repair activities that involve CI or Potential CI, except in cases where such actions must be taken on an expedited basis to protect the public or to ensure reliable operation of the Facility, whereupon Certificate Holders shall provide such designated representatives with such notice and obtain such approvals as is reasonable under the circumstances, and except where such procedures are subject to the Commission's jurisdiction and the Commission or its designee finds such procedures to be unreasonable or unduly restrictive. Notwithstanding the foregoing, the Certificate Holders shall not be required to comply with the requirements of subsection (c) of this Condition for the transport or	CHPE will comply	Section 13

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	travel over or under CI or Potential CI by the Certificate Holders and their agents, employees, and contractors where such CI or Potential CI is located in, over, or under public waterways, roads, streets, highways, or railroad ROW, unless such transportation would be subject to special approval by state and/or local authorities due to the size or weight of load(s) transported; and		
28(d)	provide to the owner(s) and operator(s) of Potential CI or CI, at least 180 days prior to the filing of the relevant Segment EM&CP, a proposal for the location and design of the Facility (including a proposed Construction Zone) and the methods of construction to be employed with respect to all locations involving CI (Proposal). The Certificate Holders' proposal must include all studies, calculations, tests, results, explanations, protocols, drawings, proposed construction schedules, and documents developed through the consultations described in subsections (a) and (b) of this Condition, other documentation identified in Condition 162, and any other information that supports the proposal. To the extent that any such Proposal addresses CI that was not previously identified as Potential CI, the Certificate Holders shall conduct the consultations described in subsections (a) and (b) of this Condition 28 with the Designated Representative(s) of the owner(s) or operator(s) of such CI and shall perform all other activities required by such paragraphs with respect to such CI in as reasonably expeditious a manner as possible and shall provide any resulting studies, calculations, tests, results, explanations, protocols, drawings, proposed construction schedules, and documents to the appropriate Designated Representative in a timely fashion; and	CHPE will comply	Sections 3.3 and 13; Appendix P, Q, R

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
28(e)	advise owner(s) and operator(s) of CI at least 30 days prior to commencing any planned repair, construction, operation, or maintenance activity relating to the Facility affecting or occurring in the vicinity of such owner's or operator's CI, unless such actions must be taken in less than thirty (30) days to protect the public or to ensure reliable operation of the Facility, whereupon Certificate Holders shall provide such notice as is reasonable under the circumstances; provided that, in any event, "vicinity" with respect to CI used to transmit or distribute natural gas shall mean all areas within 200 feet thereof and with respect to all other CI shall mean all areas within 100 feet thereof; and	CHPE will comply	Section 3.3 (for all construction activities), Maintenance and Emergency Action Plan in Appendix F – Compliance Assurance Plan; see also Section 13
28(f)	immediately upon knowledge or discovery of any damage to or adverse effect on any CI or Potential CI resulting from any studies, surveys, testing, sampling, preliminary engineering, pre-construction activities, construction, operation, maintenance, or repair of the Facility, report to the owners and operators of the affected CI or Potential CI the nature and existence of such damage or effect and other known facts relating to the cause thereof; and	CHPE will comply	Section 3.3
28(g)	notify the owners or operators of CI or Potential CI as soon as possible in the event of any situation involving imminent risk to health, safety, property, or the environment requiring the Certificate Holders to cross such CI or Potential CI or to use any associated property to address the emergency. Such notice shall not be required for the transport or travel over or under CI or Potential CI by the Certificate Holders or their agents, employees, or contractors where such CI or Potential CI is located in, over, or under public waterways, roads, streets, highways, or railroad ROW unless such transportation would be subject to special approval by state and/or local authorities due to the size or weight of load(s) transported; and	CHPE will comply	Section 3.3, Section 13, Appendix F – Compliance Assurance Plan

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
28(h)	include within any Project Segment EM&CP filing relating to the Astoria-Rainey Cable a study demonstrating that the proposed installation of the Astoria-Rainey Cable will have not have a negative impact on the continued operation of any Parallel CI. A draft of that study will be included in the materials that Certificate Holders is required to provide to the owner or operator of such CI pursuant to Certificate Condition 28(d) and will be subject to review and comment as provided therein. For purposes of this subsection, Parallel CI means electric transmission facilities that are located in the same public ROW and are generally parallel to the Astoria-Rainey Cable.	CHPE will comply	Does not apply to Segment 12
29	Reimbursement of Owners or Operators of CI and/or Potential CI for Certain Expenses:	CHPE will comply	Section 13
29(a)	Subject to the provisions of subsections (b) and (c) of this Condition, the Certificate Holders shall reimburse owners and/or operators of Potential CI or CI for the reasonable costs they incur in the following activities: 1. consulting with Certificate Holders as described in Certificate Conditions 28 (a) and (b). 2. reviewing pre-construction activities, designs, construction methods, maintenance and repair protocols, and means of gaining access to Potential CI or CI proposed by Certificate Holders. 3. reviewing studies and design proposals described by Condition 28(d) and the EM&CP filings described in Certificate Condition 162. 4. conducting or preparing such additional studies and designs as may be agreed to by Certificate Holders or approved by the Commission pursuant to Condition 29(a)(3). 5. coordinating with, and monitoring the activities of, the Certificate Holders during pre-construction activities, construction, maintenance and repair of the Facility. 6. conducting maintenance and repair work on CI property or facilities, but only to the extent of increases in such costs that result from the presence of the Facility. 7. repairing damage to Potential CI or CI or associated property caused by Certificate Holders or their representatives in connection with any studies, surveys, testing, sampling, preliminary engineering, pre-construction activities, construction, operation, maintenance or repair of the Facility. 8. scheduling and implementing electric system	CHPE will comply	Section 13

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	outages required by any studies, surveys, testing, sampling, preliminary engineering, pre-construction activities, construction, operation, maintenance, or repair of the Facility.		
29(b)	For the purposes of this Certificate Condition 29, cost shall be deemed to be reasonable if in the case of each separate review of a study or design proposal described in subsection (a)(3) of this Certificate Condition, the total cost to be borne by the Certificate Holders is $5,000 or less.	CHPE will comply	Section 13
29(c)	Certificate Holders' cost responsibility is limited as follows: a Potential CI or CI owner or operator who intends to incur costs as described in subsection (a) of this Certificate Condition 29 for which reimbursement will be sought for activities other than reviewing a study or design proposal described in subsection (a)(3) of this Certificate Condition 29, or for reviewing such a study or design proposal but in an amount greater than $5,000, must provide Certificate Holders with a written description of the scope of the planned studies or activities and a good faith estimate of the expected costs, except where such studies or activities are undertaken in a situation involving unscheduled electric outages or an imminent risk to health, safety, property, or the environment, in which case Certificate Holders' reimbursement obligations shall be limited to reasonably incurred costs. Within 60 days of the expenditure by the owners and/or operators of affected Potential CI or CI of any funds which are eligible for reimbursement by the Certificate Holders under this Certificate, the Potential CI or CI owner or operator shall present Certificate Holders with a final invoice for the actual costs incurred, but not to exceed 25% over the good faith estimate unless approved by Certificate Holders in advance in writing or, in the case of a dispute between the Certificate Holders and the Potential CI or CI owners or operators, by the Commission. Certificate Holders shall pay the authorized invoice amount within 30 days of receipt.	CHPE will comply	Section 13

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
29(d)	Disputes concerning the Certificate Holders' cost reimbursement responsibility shall be brought to the Commission for resolution. The time required to resolve any dispute arising under this Certificate Condition 29 shall not be counted for the purpose of any limitation on the time available for commencement or completion of construction of the Facility.	CHPE will comply	Section 13
E. Public Health and Safety		**CHPE Response**	**EM&CP Section/Appendix**
30	The Certificate Holders shall design, engineer, and construct the Facility such that, to the extent applicable, their operation shall comply with the interim electrostatic field standard established by the Commission in Opinion No. 78-13 (issued on June 19, 1978 in Cases 26529 and 26559) and the limit for magnetic fields set in the Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities (issued on September 11, 1990, in Cases 26529 and 26559) or with any standard that has superseded these standards at the time of consideration by the Commission of the EM&CP or a particular Segment EM&CP.	CHPE will comply	Section 4.2 (as to design, engineering, and construction consistent with standards); with regard to the EMF calculations for the Facility, see Exhibits B, C and D and Appendix A and B to the Certificate Holders' January 29, 2021, *Petition for an Amendment to Certificate of Environmental Compatibility and Public Need* (DMM Item 819)

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
31	Construction work occurring inside the boundaries of the CNY and outside the walls of buildings whose exterior walls and roof are substantially complete shall take place between 7 a.m. and 6 p.m. as required by Section 24-222 of the CNY City Administrative Code. For certain construction phases and activities, additional work hours may be necessary. Nothing herein shall preclude the Certificate Holders from making necessary arrangements for the extension of additional work hours with appropriate authorities of the CNY. Noise mitigation procedures shall follow those set forth in the approved EM&CP and shall not be less stringent than the citywide Construction Noise Mitigation Procedures provided by the CNY. DPS Staff shall be notified at least 24 hours in advance if planned weekend, evening, or holiday construction becomes necessary. This condition is not intended to prohibit nighttime construction reasonably necessary to comply with restrictions on daytime construction on or along roadways or public access areas or to require the cessation of construction activities that require a continuous work effort once started. Furthermore, construction vehicles used in CNY will be outfitted with smart back up alarms.	CHPE will comply	Does not apply to Segment 12
32	Deliveries occurring inside the boundaries of the CNY and related to construction activities shall take place between 7 a.m. and 6 p.m., except that, to the extent required to accommodate oversized delivery pursuant to a New York City Department of Transportation permit, the Certificate Holders shall be exempt from restrictions limiting delivery to 7 a.m. to 6 p.m. This condition is not intended to prohibit nighttime deliveries reasonably necessary to facilitate compliance with restrictions on daytime construction in or along roadways or public access areas or to require the cessation of construction activities that require a continuous work effort once started.	CHPE will comply	Does not apply to Segment 12
33	The Certificate Holders shall provide timely information to adjacent property owners and/or their tenants regarding planned construction activities and schedules. The Certificate Holders shall notify these persons of construction work within 100 feet of	CHPE will comply	Section 3.3

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	their property at least two weeks prior to the commencement of construction in these areas and provide copies of all correspondence to the DPS Staff.		
34	The Certificate Holders shall keep local fire department and emergency management teams apprised of on-site chemicals and waste and shall also advise owners and operators of CI as to on-site chemicals and waste stored within 100 feet of their CI. In the case of CI located within the CNY, the Certificate Holders shall advise CI owners and operators of on-site chemicals and waste stored within 300 feet of such facilities. All chemicals shall be secured in a locked and controlled area(s).	CHPE will comply	Section 3.3
35	The Certificate Holders shall notify DPS Staff and the New York State Department of Environmental Conservation (NYSDEC) immediately of any petroleum product spills. The Certificate Holders shall also notify owners and operators of CI of any petroleum product spills within 100 feet of their CI, provided however that in the case of CI located within CNY, the Certificate Holders shall advise CI owners and operators of petroleum product spills within 300 feet of such facilities	CHPE will comply	Section 3.3
36	The Certificate Holders shall comply with the requirements for the protection of underground facilities set forth in 16 New York Codes, Rules, and Regulations (NYCRR) Part 753, entitled "Protection of Underground Facilities."	CHPE will comply	Section 13.3
37	Parking for construction workers shall be in designated areas that do not interfere with normal traffic, cause a safety hazard, or interfere with existing land uses, including CI.	CHPE will comply	Section 4.10; Appendix C
38	Direct disturbance to properties shall be avoided by accessing the overland Construction Zone from existing roadways or approved access roads where feasible. The Certificate Holders, in undertaking the Facility, shall not violate the property rights of individual landowners and shall not commit trespass upon their lands. Before the Certificate Holders attempts to enter private property that they do not have the legal right to enter, they shall first obtain the permission of the landowner and shall abide by all conditions on such permission that the landowner may impose. If the Certificate	CHPE will comply	Section 4.7; see also Appendix C

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	Holders relies on a document as evidence of their easement or other right to access land owned in fee by an individual landowner, they shall provide a copy of such document to the landowner upon his or her request.		
39	For each location where the Facility involves construction across or within the ROW limits of a road, street, highway or public thoroughfare, the Certificate Holders shall implement a Maintenance and Protection of Traffic (MPT) plan that identifies procedures to be used to maintain traffic and provide a safe construction zone for those activities within the roadway ROW. The Certificate Holders shall also prepare MPT plans for each location where construction vehicles will access the Construction Zone from a local roadway. The MPT plans shall address temporary signage, lane closures, placement of temporary barriers, and traffic diversion.	CHPE will comply	Section 12.1 and Appendix C
39(a)	All signage utilized shall comply with the New York State Department of Transportation (NYSDOT) Manual of Uniform Traffic Control Devices (Manual No. 7155) and, within State highway ROW, a highway work permit issued by NYSDOT. Placement of signs shall be determined in consultation with the jurisdictional agency. At a minimum, signs shall be placed at the following distances: (1) Signs announcing construction at 500 feet and 1,000 feet; (2) Signs depicting workers at 300 feet; and (3) Where blasting is to take place within 50 feet of a road, a blastwarning sign at 1,000 feet.	CHPE will comply	Section 12.1 Appendix C
39(b)	Flagmen shall be present at all times when equipment is crossing or entering any road, when equipment is being loaded or unloaded, and when two-lane traffic has been reduced to one lane. All flagging operations shall comply with 17 NYCRR Part 131.	CHPE will comply	Section 12.1 Appendix C

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
40	To the extent required in connection with the delivery of oversized components, the Certificate Holders or their suppliers shall obtain any necessary permits from applicable state agencies and provide copies of such permits to the Secretary.	CHPE will comply	Section 5.4 and Section 3.3
F. Notices and Public Complaints		**CHPE Response**	**EM&CP Section/Appendix**
41	The Certificate Holders shall make available to the public a toll-free or local phone number of an agent or employee who will receive complaints, if any, during the construction of the Facility. In addition, the phone number of the Secretary and the phone number of the Commission's Environmental Compliance Section shall be provided. A log shall be maintained that lists at least the date of any complaint, identity and contact information for the complaining party, the date of the Certificate Holders' response, and a description of the outcome. Phone logs shall be made available to DPS Staff upon request. The Certificate Holders shall report to DPS Staff every complaint that cannot be resolved after reasonable attempts to do so. Any such report shall be made within three business days after receipt of the complaint.	CHPE will comply	Section 3.3 and Appendix I
42	No less than two weeks before commencing site preparation, the Certificate Holders shall: (1) provide notice to local officials and emergency personnel in the area where they will be working on the Facility; and (2) provide notice to the owners of property identified in CC 33 herein; and (3) provide such notice for dissemination to local media and display in public places (such as general stores, post offices, community centers, and conspicuous community bulletin boards); and (4) in the event that the site preparation is delayed after notice is given, additional notice as set forth above shall be provided before site preparation is resumed. The notice shall be written in language reasonably understandable to the average person and shall contain: (1) a map and a description of the Construction Zone in the local area; and (2) the	CHPE will comply. A copy of these notices will be filed with the Secretary under separate cover.	Section 3.3

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	anticipated date for start of construction in the local area; and (3) the name, address, and local or toll-free telephone number of an employee or agent of the Certificate Holders who will receive complaints, if any, during the construction of the Facility; and (4) a statement that the Facility, as applicable, is under the jurisdiction of the Commission, which is responsible for enforcing compliance with environmental and construction conditions and which may be contacted at an address and telephone number to be provided in the notice. Upon distribution, a copy of such notice shall be filed with the Secretary.		
43	The Certificate Holders shall provide the Engineering, Procurement, and Construction Contractor retained to undertake construction of the Facility and their other construction Contractors (Contractors or EPC Contractors) with complete copies of this Certificate and any and all permits, certificates, and approvals required to initiate and/or complete construction of the Facility, including, without limitation, approved Segment EM&CPs and governmental approvals issued pursuant to § 401 and § 404 of the Federal Clean Water Act, and § 10 of the Federal Rivers and Harbors Act. To the extent that the listed documents are available before contracts for construction services are executed, such copies shall be provided to the Contractors prior to the execution of such contracts.	CHPE will comply	Section 3.1
44	The Certificate Holders shall notify all Contractors that the Commission may seek to recover penalties for violation this Certificate and other orders issued in this proceeding, not only from the Certificate Holders, but also from their Contractors, and that Contractors also may be liable for other fines, penalties, and environmental damage.	CHPE will comply	Section 3.1
45	No later than three days after completion of the transaction(s) pursuant to which the costs of construction of the Facility are funded (Closing), the Certificate Holders shall notify the Secretary of the date of such Closing.	CHPE has complied (see DMM Item 905, filed November 3, 2022).	No further discussion provided.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
46	The Certificate Holders shall inform the Secretary and NYSDEC at least five days before commencing site preparation for the Facility.	CHPE will comply	Section 3.3
47	The Certificate Holders shall provide DPS Staff, NYSDOT, and NYSDEC with bi-weekly status reports summarizing construction and indicating construction activities and locations scheduled for the next month.	CHPE will comply	Section 3.3
48	Within 10 days of the completion of final restoration activities, the Certificate Holders shall notify the Secretary that all restoration has been completed in compliance with this Certificate and the Order(s) approving the EM&CP.	CHPE will comply	Section 3.3
49	Within 60 days of completing construction of the HVDC Transmission System, the Certificate Holders shall consult with the New York State Office of General Services (OGS) Bureau of Land Management regarding specifications for providing as-built information and mapping of the submerged portions of the HVDC Transmission System in conformance with the requirements of the OGS Bureau and 9 NYCRR Part 271. Within 60 days of that consultation, the Certificate Holders shall provide to the OGS as-built information and mapping complying with its specifications (including shapefile information compatible with ArcView® GIS software) and shall file with the Secretary copies of the as-built information and mapping and proof of filing with the OGS.	CHPE will comply	Section 3.3
50	No later than three days after the date on which the Facility commences commercial operation (CO) of the Facility, the Certificate Holders shall notify NYSDOT, NYSDEC, and the Secretary of the date of such commencement.	CHPE will comply	Section 3.3
51	The Certificate Holders shall promptly notify DPS Staff and NYSDEC if a New York State-listed species of special concern is observed to be present in the Facility area.	CHPE will comply	Section 3.3 and 9.3; Appendix F

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
52	The Certificate Holders shall promptly notify DPS Staff, NYSDEC and the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) (if applicable) if any threatened or endangered wildlife species under 6 NYCRR Part 182 (TE species) or any rare, threatened or endangered plant species under 6 NYCRR Part 193 (RTE plants) are observed to be present in the Facility area so as to determine the appropriate measures to be taken to avoid or minimize impacts to such species. If necessary to avoid or minimize impacts to such species or as directed by DPS Staff, the Certificate Holders shall stabilize the area and cease construction or ground-disturbing activities in the Facility area until DPS Staff have determined that appropriate protective measures have been implemented.	CHPE will comply	Section 3.3 and 9.3; Appendix F
G. Environmental Supervision		**CHPE Response**	**EM&CP Section/Appendix**
53(a)	The Certificate Holders shall employ at least six inspectors on the HVDC Transmission System (or at least five inspectors if the Certificate Holders elects to use the same individual as both environmental inspector (Environmental Inspector) and agricultural inspector (Agricultural Inspector) as follows: (i) an Environmental Inspector employed full-time on the HVDC Transmission System; (ii) a Construction Inspector employed full-time on the HVDC Transmission System during construction of overland portions of the HVDC Transmission System, including construction of the Converter Station (Construction Inspector); (iii) an aquatic inspector employed full-time on the HVDC Transmission System (Aquatic Inspector); (iv) an Agricultural Inspector; (v) a safety inspector employed full-time on the HVDC Transmission System (Safety Inspector); and (vi) a part-time quality assurance inspector who will inspect the work site from time to time (Quality Control and Quality Assurance Inspector).	CHPE will comply	Section 3.1; Appendix F

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
53(b)	The Certificate Holders shall employ the following inspectors in connection with the Astoria-Rainey Cable: (i) an Environmental Inspector; (ii) a Construction Inspector; (iii) a Safety Inspector; and (iv) a Quality Control and Quality Assurance Inspector.	CHPE will comply	Does not apply to Segment 12
53(c)	During periods of relative inactivity on the Facility, the number of inspectors and the extent of their presence at the Facility construction site may be temporarily decreased commensurate with the decline in activity levels; likewise, during periods of relatively high activity on the Facility, the number of inspectors and the extent of their presence at the Project site may be temporarily increased commensurate with the increase in activity levels.	CHPE will comply	Section 3.1
53(d)	The Certificate Holders shall provide DPS Staff a weekly schedule of the Environmental Inspector and the Construction Inspector and their cell phone numbers.	CHPE will comply	Section 3.1
53(e)	The Environmental Inspector and Construction Inspector shall be equipped with sufficient documentation, transportation, and communication equipment to effectively monitor each Contractors' compliance with the provision of every Order issued in this proceeding and applicable sections of the PSL, New York State Environmental Conservation Law (ECL), the Water Quality Certification (WQC) issued in connection with the Facility pursuant to section 401 of the Federal Clean Water Act and the approved EM&CP.	CHPE will comply	Section 3.1
53(f)	The Agricultural Inspector shall be available to provide site-specific agricultural information as necessary for development of the proposed EM&CP through field review, as well as to have direct contact with affected farm operators, County Soil and Water Conservation Districts, and the NYSDAM. The Agricultural Inspector shall maintain regular contact with the Environmental Inspector and the Construction Inspector throughout the construction phase. The Agricultural Inspector shall also maintain regular contact with the affected farmers and County Soil and Water Conservation Districts concerning farm resources and management matters pertinent to the agricultural operations and the site-specific implementation of the approved EM&CP.	CHPE will comply	Section 3.1

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
53(g)	The names and qualifications of the Environmental Inspector and the Construction Inspector shall be submitted to DPS Staff and NYSDEC at least two weeks prior to the start of construction.	CHPE will comply	Section 3.3
53(h)	The Environmental Inspector's qualifications shall satisfy those of the Qualified Inspector pursuant to the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-10-001)(SPDES General Permit).	CHPE will comply	Section 3.1
53(i)	The Certificate Holders' employees, Contractors, and subcontractors shall be properly trained in the construction, operation, and maintenance of the Facility.	CHPE will comply	Section 3.1
54	The authority granted to the Certificate Holders in this Certificate and any subsequent Order(s) in this proceeding is subject to the following conditions necessary to ensure compliance with such Order(s):	CHPE will comply	Section 3.4
54(a)	The Certificate Holders shall regard DPS Staff representatives (authorized pursuant to PSL § 8) as the Commission's designated representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate or may violate the terms of this Condition, the WQC, or any other Order in this proceeding, either the Certificate Holders' Environmental Inspector or DPS Staff may issue a stop work order for that location or activity.	CHPE will comply	Section 3.4
54(b)	A stop work order issued by DPS Staff shall expire 24 hours after issuance unless confirmed by a single Commissioner. If a stop work order is confirmed, the Certificate Holders may seek reconsideration from the confirming Commissioner or the whole Commission. If the emergency prompting the issuance of a stop work order is resolved to the satisfaction of the Commissioner or the Commission, the stop work order will be lifted. If the emergency has not been satisfactorily resolved, the stop work order will remain in effect.	CHPE will comply	Section 3.4
54(c)	Stop Work Authority will be exercised sparingly and with due regard to potential environmental impact, economic costs involved, possible impact on construction activities, and whether an applicable statute or regulation is or is claimed to be	CHPE will comply	Section 3.4

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	violated. Before exercising such authority, DPS Staff will consult (wherever practicable) with the Environmental Inspector. Within reasonable time constraints, all attempts will be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter will be brought immediately to the attention of the Certificate Holders' construction manager and the Director of the DPS Office of Energy Efficiency and the Environment. If DPS Staff issues a stop work order, neither the Certificate Holders nor the Contractor will be prevented from undertaking any safety-related activities that they deem necessary and appropriate under the circumstances. The issuance of a stop work order or the implementation of measures as described below may be directed at the sole discretion of the DPS Staff during these discussions.		
54(d)	Exercise of Stop Work Authority: If DPS Staff or the Environmental Inspector discovers a specific activity that represents a significant environmental threat that is or immediately may become a violation of this Condition, the WQC, or any other Order in this proceeding, and on-site construction personnel refuse to take appropriate action after being advised of the threat, DPS Staff and/or the Environmental Inspector may direct the field crews to stop the specific potentially harmful activity immediately. If the direction to stop work is issued by DPS Staff and Certificate Holders' responsible personnel are not on site, the DPS Staff will immediately thereafter inform the Construction Inspector and/or the Environmental Inspector of the action taken. The stop work order will be lifted by the DPS Staff when the situation prompting its issuance has been resolved.	CHPE will comply	Section 3.4
54(e)	DPS Staff's Implementation of Specific Measures to Protect the Public and the Environment: If DPS Staff determines that a significant threat exists such that protection of the public or the environment at a particular location requires the immediate implementation of specific measures, the DPS Staff may, in the absence of the Environmental Inspector and the Construction Inspector, or in the presence of such personnel who, after consultation with the DPS Staff, refuse to take appropriate	CHPE will comply	Section 3.4

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	action, direct the Certificate Holders or their Contractors to implement the corrective measures identified in the approved EM&CP. The field crews shall comply with the DPS Staff's directive immediately. DPS Staff will immediately thereafter inform the Certificate Holders' Construction Inspector and/or Environmental Inspector of the action taken.		
54(f)	DPS Staff or the Environmental Inspector will promptly notify the appropriate NYSDEC representative of any activity that is a significant environmental threat to a state-regulated wetland or its adjacent area, a protected stream or other waterbody, a TE species, or a State- or Federally- identified hazardous waste site or that may become a violation of this Condition, WQC, or any other Order issued in this proceeding pursuant to subsection (d) of this Certificate Condition 54.	CHPE will comply	Section 3.4
55	The Certificate Holders shall organize and conduct site-compliance audit inspections for DPS Staff as needed, but not less frequently than once per month during the site preparation, construction, and restoration phases of the Facility and at least annually for two years after the COD.	CHPE will comply	Section 3.2
55(a)	The monthly inspections shall include a review of the status of compliance with all conditions contained in this Certificate, the WQC, and any other Order issued in this proceeding, and with other legal requirements and commitments, as well as a field review of the construction site, if necessary. The inspections may also include: (1) review of all complaints received, and their proposed or actual resolutions; and (2) review of any significant comments, concerns, or suggestions made by the public, local governments, or other agencies; and (3) review of the status of the Facility in relation to the overall schedule established prior to the commencement of construction; and (4) other items the Certificate Holders or DPS Staff consider appropriate.	CHPE will comply	Section 3.2.3

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
55(b)	The Certificate Holders shall provide a written record of the results of the inspection, including resolution of issues and additional measures to be taken, to agencies involved in the inspection audit.	CHPE will comply	Section 3.2.3
56	Nothing herein shall be deemed to limit the right of any jurisdictional agency to enter and inspect the Facility to assess compliance with any permit issued by such agency or any applicable substantive statute or regulation under such agency's jurisdiction; provided, however, that such inspection shall, to the extent possible, be coordinated with the DPS Staff (authorized pursuant to PSL § 8).	CHPE will comply	Section 3.1
57	Nothing in this Certificate shall restrict NYSDOT's authority over Certificate Holders' use of state highways, including without limitation NYSDOT's authority to place inspectors on site to monitor and observe the Certificate Holders' activities on state highways and/or to request the presence of state or local police to assure the safety of freeway travelers at such times and for such periods as NYSDOT deems appropriate.	CHPE will comply	Section 3.1
H. Overland Installation		**CHPE Response**	**EM&CP Section/Appendix**
58	At least two weeks prior to the start of overland construction, the Certificate Holders shall hold a pre-construction meeting to which they shall invite DPS Staff, NYSDOT, and NYSDEC. The agenda, location, and attendee list for this meeting shall be agreed upon between DPS Staff and the Certificate Holders. The Certificate Holders shall supply draft minutes from this meeting to all attendees. The attendees may offer corrections or comments, and thereafter the Certificate Holders shall issue the finalized meeting minutes to all attendees. If, for any reason, the Contractors retained by the Certificate Holders to construct the Facility cannot finish the construction of such facilities, and one or more new construction contractors are needed, there shall be another pre-construction meeting with the same format as outlined above.	CHPE will comply	Section 3.2

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
59	The Certificate Holders shall confine construction to the Construction Zone and approved additional work areas as detailed in the approved EM&CP. A detailed construction schedule and location timeline shall be provided to DPS Staff prior to construction.	CHPE will comply	Section 1
60	The Certificate Holders shall identify encroachments within the Construction Zone and contact individual property owners or occupants to address and seek to rectify such potential encroachments on a case-by-case basis. The Certificate Holders shall report to DPS Staff the result of efforts to address and rectify encroachments in the Construction Zone periodically, but in no event less than quarterly.	CHPE will comply	Section 4.7
61	The Facility may not be located beneath existing buildings, footings, or foundations, except as authorized in the EM&CP, and all excavations shall be in accordance with all applicable standards and specifications, including: (a) the Building Code of New York State, including Section 1803 and other relevant sections; and (b) the Occupational Safety and Health Administration (OSHA) Technical Manual (OTM), including Section V: Chapter 2 and other relevant sections; and (c) OSHA Regulations, including Part Number 1926, Standard Number 1926.651, and other applicable provisions.	CHPE will comply	Section 4.2
62	Except as authorized in any Segment EM&CP, the Certificate Holders shall not construct or allow their Contractors to construct any new, or improve any existing access roads for the construction, operation, or maintenance of the Facility.	CHPE will comply	Section 4.10
63	Before construction begins on any Segment, the boundaries of the Construction Zone shall be delineated in the field. Also, the Certificate Holders shall stake and flag all access roads and extra workroom areas to be used in constructing that Segment.	CHPE will comply	Section 4
64	The Certificate Holders shall adopt appropriate measures to minimize fugitive dust and airborne debris from construction activity and details of measures to be implemented shall be described in the proposed Segment EM&CP. If contamination in the ground is detected during overland construction and such contamination is of the kind that will lead to volatilization or off-gassing of such contamination or	CHPE will comply	Section 6.3.2 and Appendix K - SPCC

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	chemical constituents thereof, the Certificate Holders shall contact the New York State Department of Health (NYSDOH), NYSDEC, and DPS Staff prior to further disturbance. Additionally, the Certificate Holders shall conform to practices and procedures described in the DER10/Technical Guidance for Site Investigation and Remediation and the NYSDOH Generic Community Air Monitoring Plan ("CAMP"), to the extent applicable. Nothing in this Certificate shall have the effect of diminishing, enlarging, or altering in any way the obligations of any party that may be triggered in the event a spill of petroleum or a release of hazardous substances to the environment ("Reportable Event") is detected within the Construction Zone by the Certificate Holders and/or their contractors and other representatives during overland construction of the Facility, including, without limitation, any obligation the Certificate Holders may have to report such Reportable Event to the NYSDEC Oil and Hazardous Materials Spills Hotline (800-518-457-7362).		
65	Disposal of trees and woody material:	CHPE will comply	Section 8.4
65(a)	The Certificate Holders shall negotiate in good faith with each landowner the purchase of rights to all logs over 6 inches in diameter at the small end and 8 feet or longer (merchantable logs) to be cleared from the Construction Zone. Certificate Holders shall not leave any permanent slash piles or log piles along passenger railroad routes or public highways. The Certificate Holders' removal of the merchantable logs resulting from clearing the Construction Zone shall be based on factors such as the attributes of the site, outcome of landowner negotiations, and attributes of the logs, and the Certificate Holders shall explain these factors in detail in the proposed EM&CP.	CHPE will comply	Section 8.4
65(b)	The Certificate Holders shall comply with the provisions of 6 NYCRR Part 192, Forest Insect and Disease Control.	CHPE will comply	Section 8.4, 9.4, and Appendix N

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
65(c)	The Certificate Holders shall prepare a plan for removal, reuse, recycling, and disposal of all woody material. Logs and woody material that cannot be reused or sold shall be either chipped on site, stacked along the edge of the Final Layout Area (as defined at CC 139), hauled to a NYSDEC approved landfill or other suitable off-site location, or buried on the Final Layout Area with landowner agreement. The Certificate Holders shall not leave any logs or other woody material in any designated floodway or other flood hazard area.	CHPE will comply	Section 8
66	All trees over 2 inches in diameter at breast height (dbh) or shrubs over 4 feet in height damaged or destroyed by activities during construction, operation, or maintenance, regardless of where located, shall be replaced within the following year by the Certificate Holders with the equivalent type of trees or shrubs except if: (a) other arrangements are specified in the approved EM&CP; or (b) equivalent type replacement trees or shrubs would interfere with the proper clearing, construction, operation, or maintenance of the Facility or would be inconsistent with State-invasive species policy; or (c) replacement would be contrary to sound ROW management practices, or to any approved long-range ROW management plan applicable to the Facility or adjoining ROW; or (d) the owner of land where the damaged or destroyed trees or shrubs were located (or other recorded easement or license Holders' with the right to control replacement) declines replacement.	CHPE will comply	Section 14.2

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
67	The Certificate Holders shall provide detailed soil erosion and sediment control plans in a Stormwater Pollution Prevention Plan (SWPPP), which shall be included with the first Segment EM&CP associated with the overland route of the Facility. Soil and sediment control measures shall be implemented early in the construction process and be installed prior to, and maintained in acceptable condition for the duration from any clearing or earthmoving operations through to the permanent stabilization of the soil. Erosion and sediment control devices shall be installed in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (SSESC), the approved EM&CP Plan and Profile drawings, permit conditions, regulatory approvals, and as otherwise necessary or directed by the Environmental Inspector to prevent adverse impacts to environmentally sensitive areas. The SWPPP shall include a schedule for necessary inspections at all control measure locations. The SWPPP shall be available at the construction site and available to the public upon five days written notice.	CHPE will comply	Section 3.3, 6.3 and SWPPP (Appendix G)
68	The Certificate Holders shall coordinate with DPS Staff and the NYSDOT regarding all plans and work to be performed in state-owned ROWs under the NYSDOT's supervision and management. Prior to filing any Segment EM&CP involving any such state-owned ROW, the Certificate Holders shall provide DPS Staff and NYSDOT Staff with a preliminary design marked to avoid conflict with potential transportation projects that NYSDOT Staff may seek to undertake in the future and shall offer to consult with NYSDOT Staff concerning any comments it may offer and shall use reasonable efforts to accommodate any NYSDOT concerns.	CHPE will comply	Section 3.3 and 12.1; also see Appendix A.
69(a)	In preparing the proposed EM&CP, the Certificate Holders shall consult with each transportation department or agency having jurisdiction over any roads, related structures, and components that will be crossed by the Facility or used for direct access to the Construction Zone. If the access road takes direct access from, or lies within the limits of, such roads, the Certificate Holders shall notify each relevant transportation department or agency of the approximate date when work will begin.	CHPE will comply	Section 12.1; Appendix A

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
69(b)	Infrastructure subject to the requirements of Condition 69(a) include: movable bridges over the Harlem River and their associated apparatus, including any cables, chains or other apparatus allowing for their operation; and a planned pedestrian and bicycle pathway and associated infrastructure, including landscaping, lighting, rail crossings, fences, railroad gates, and stormwater retention facilities, and associated subsurface components, to be constructed under and in the vicinity of the Hells Gate Bridge in the Bronx, whether constructed or designed at the time of the EM&CP development. The procedures and protections outlined in CCs 27 through 29 shall apply to the movable bridges and other apparatus, and, if they are in place at the time of construction of the Facility, the aforementioned infrastructure associated with the pedestrian and bicycle pathway.	CHPE will comply	Does not apply to Segment 12
70	Construction access to the Construction Zone at controlled-access highways shall be provided from off-highway locations.	CHPE will comply	Does not apply to Segment 12.
71	The Certificate Holders shall minimize the impact of construction of the Facility on traffic circulation. Traffic control personnel and safety signage shall be employed to facilitate safe and adequate traffic flow when secondary roadways are affected by construction.	CHPE will comply	Section 12.1 and Appendix C
72	The Certificate Holders shall consult periodically with state and municipal highway transportation agencies about traffic conditions near the site of the Facility and shall notify each such transportation agency of the approximate date work will begin in its jurisdiction and Construction Zone access points that connect with the highways in that jurisdiction.	CHPE will comply	Sections 3.3 and 12.1
73	The Certificate Holders shall be responsible for checking all culverts and assuring that they are not crushed or blocked during construction and restoration of the Facility and, if a culvert is blocked or crushed, taking immediate steps to replace or repair the culvert in accordance with applicable state or local standards.	CHPE will comply	Section 13.4 and 14.2

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
74	Disturbed areas, ruts, and rills shall be restored to original grades and conditions with permanent revegetation and erosion controls appropriate for those locations. Disturbed pavement, curbs, and sidewalks shall be restored to their original pre-construction condition or improved.	CHPE will comply	Section 13.4 an d14.2
I. Agricultural Lands		**CHPE Response**	**EM&CP Section/Appendix**
75	The Certificate Holders shall design the Facility to the extent possible to avoid crop fields or other active agricultural land.	CHPE will comply	Section 7.1
76	During the acquisition of rights to use lands comprising the Construction Zone, the Certificate Holders shall ask the owners of such lands that appear to be either undeveloped or used as active agricultural land whether such lands are presently being used for agricultural purposes and, if so, whether such lands are being operated, in whole or in part, by third parties. During the preparation of the EM&CP, the Certificate Holders shall use this information, along with any additional information received during consultation with the NYSDAM, to identify land within the Construction Zone reasonably believed to be active agricultural land. The Certificate Holders shall provide the owners and identified operators of such land with a telephone number to facilitate direct contact with the Certificate Holders and the Agricultural Inspector(s).	CHPE will comply	Section 7.1, Appendices A and B
77	Where construction entrances are required from public roadways to the Construction Zone across agricultural fields, temporary access shall use matting or road installation. The use of topsoil stripping for construction access, as opposed to matting, shall only be allowed with approval from DPS Staff in consultation with the NYSDAM. For matting, the mats shall be layered where necessary to provide a level access surface. For road installation and topsoil stripping, an underlayment of durable, geotextile fabric shall be placed over the exposed subsoil surface prior to the use of temporary gravel access fill material. Complete removal of the construction entrance upon completion of the Facility and restoration of the affected site is required prior to	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	topsoil replacement. Segments of farm roads utilized for access shall be improved as necessary following consultation with the farm operator and the NYSDAM prior to use, subject to the Commission's ongoing jurisdiction.		
78	The Certificate Holders shall provide a monitoring and remediation period of two years following completion of Construction Zone restoration in active agricultural areas. The Certificate Holders shall retain the services of the Agricultural Inspector through this period. The monitoring and remediation phase shall be used to identify any remaining agricultural impacts associated with construction of the Facility that need mitigation and to implement the follow-up restoration. During the monitoring and remediation period, on site monitoring shall be conducted at least three times during each growing season and shall include a comparison of growth and yield for crops within and outside the Construction Zone. When subsequent crop productivity within the Construction Zone is less than that of the adjacent unaffected agricultural land, the Agricultural Inspector, in conjunction with the Certificate Holders and in consultation with other appropriate organizations including the NYSDAM, shall help to determine the appropriate rehabilitation measures for the Certificate Holders to implement (soil decompaction, topsoil replacement, etc.). During the various stages of construction of the Facility, all affected farm operators shall be periodically apprised of the duration of remediation by the Agricultural Inspector. Because conditions that require remediation may not be noticeable at or shortly after the completion of construction, the signing of a release form prior to the end of the remediation period shall not obviate the Certificate Holders' responsibility to fully redress all impacts caused by construction of the Facility. After completion of the specific remediation period, the Certificate Holders shall continue to respond to the requests of the farmland owner/operators to correct adverse impacts to agricultural resources caused by construction of the Facility.	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
79	The Agricultural Inspector shall work with farm operators during the planning phase to develop a plan to delay pasturing of livestock in the Construction Zone, work areas, access roads, or staging areas following construction until pasture areas are adequately revegetated. The Certificate Holders shall be responsible for maintaining temporary fencing on the Construction Zone, work areas, access roads, or staging areas until the Agricultural Inspector determines that the vegetation in the Construction Zone is established and able to accommodate grazing. At such time, the Certificate Holders shall be responsible for removal of the fences.	CHPE will comply	Does not apply to Segment 12
80	On affected farmland, restoration practices shall be postponed until favorable (workable, relatively dry) topsoil/subsoil conditions exist. Restoration shall not be conducted while soils are in a wet or plastic state. Stockpiled topsoil shall not be re-graded until plasticity, as determined by the Atterberg field test, is significantly reduced. No Facility restoration activities shall occur in agricultural fields in the months of October through May unless DPS Staff has determined after consultation with Ag & Mkts that favorable soil moisture conditions exist. The Certificate Holders shall monitor and advise Ag & Mkts and DPS Staff regarding tentative restoration planning.	CHPE will comply	Does not apply to Segment 12
J. Herbicide Use		**CHPE Response**	**EM&CP Section/Appendix**
81	The application of herbicides shall be made under the direct supervision of a NYSDEC Certified Applicator (Applicator) who shall own or be employed by a NYSDEC registered business. The supervising certified Applicator shall be familiar with and understand the Conditions of this Certificate, the approved EM&CP, and any other pertinent orders issued in this proceeding and shall be present in the field to ensure	CHPE will comply	There is no planned herbicide use during construction.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	compliance with provisions in such documents for targeting species and for proper application of authorized herbicides.		
82	All herbicides used shall have valid registrations under applicable state and federal laws and regulations.	CHPE will comply	There is no planned herbicide use during construction.
83	Application of herbicides shall conform to all label instructions and all applicable federal and state laws and regulations. Herbicides shall not be applied within 100 feet of any public water supply (reservoirs and wellheads), or any private well-head of which Certificate Holders has actual knowledge. Applicators shall reference maps that indicate treatment areas, and wetland and adjacent area boundaries, prior to treating. Applications required in seasonally flooded freshwater wetlands shall be undertaken during a dry season.	CHPE will comply	There is no planned herbicide use during construction.
84	The Certificate Holders shall notify DPS Staff and the appropriate NYSDEC Regional Natural Resource Supervisor(s) and Pesticide Control Specialist 14 days prior to the commencement of any herbicide application on the Facility.	CHPE will comply	There is no planned herbicide use during construction.
K. Building Code and Inspections - Converter Station and Related Buildings		**CHPE Response**	**EM&CP Section/Appendix**
85	Prior to the commencement of construction of the Converter Station and related buildings, the Certificate Holders shall first obtain review and written certification by the CNY Department of Buildings that the construction plans for the Converter Station are in compliance with the New York City Electrical Code (NYCEC), the New York City Fire Code (NYCFC), and Title 28 of the New York City Administrative Code, including the New York City Construction Codes (NYCCC). Within 10 days of receiving any written certification, the Certificate Holders shall file a copy of such certification with	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	the Secretary and shall serve a copy on the Director of the Office of Energy Efficiency and the Environment.		
86	During construction of the Converter Station and related buildings, the Certificate Holders shall obtain periodic inspections of the construction work by the CNY Department of Buildings for compliance with the NYCFC, NYCEC and NYCCC.	CHPE will comply	Does not apply to Segment 12
87	Prior to the use or occupancy of the Converter Station and related buildings, the Certificate Holders shall first obtain written certification by the CNY Department of Building that the construction was completed in compliance with the NYCFC, NYCEC, and the NYCCC. Within 10 days of receiving any written certification, the Certificate Holders shall file a copy of such certification with the Secretary and shall serve a copy on the Director of the Office of Energy Efficiency and the Environment	CHPE will comply	Does not apply to Segment 12
L. Overland Restoration		**CHPE Response**	**EM&CP Section/Appendix**
88	At the conclusion of all Facility construction, Construction Zone areas, work areas, access roads, and/or staging areas shall be thoroughly cleared of all debris such as wood, nuts, bolts, spikes, wire, pieces of steel, and other assorted items.	CHPE will comply	Section 14.1
89	The Certificate Holders shall, on completion of construction of the Facility:	CHPE will comply	Section 14.1
89(a)	provide an assessment of the need for landscape improvements, including vegetation planting, earthwork, or installed features to screen or landscape with respect to road crossings, residential areas, parks, highways, converter stations, and substations; and	CHPE will comply	Section 14.1
89(b)	prepare plans for any visual mitigation found necessary, considering removal, rearrangement, and supplementation of existing landscape improvements or plantings; and	CHPE will comply	Section 14.1
89(c)	consult with DPS Staff on the content and execution of their landscape improvement assessment, resultant landscaping plan specifications, and materials list; details shall include measures for controlling maintenance and third party or wildlife damage to any landscape or vegetation plantings; and	CHPE will comply	Section 14.1

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
89(d)	assure the reduction or elimination of net storm water runoff within or immediately adjacent to the Construction Zone and any contribution to sources of non-point pollution resulting from the finished condition; and	CHPE will comply	Appendix C and G
89(e)	present assessments and plans for DPS Staff review within one (1) year of the date the Facility is placed in service.	CHPE will comply	Sections 3.3 and 14.1
M. Overland Habitat Areas		**CHPE Response**	**EM&CP Section/Appendix**
90	The Certificate Holders shall incorporate the measures described in the Karner blue butterfly (*Lycaeides melissa samuelis*) *Impact Avoidance and Minimization Report* (Exhibit 109 to the Joint Proposal) into the EM&CP. Prior to the commencement of construction, the Certificate Holders shall arrange a "walk through" of the Construction Zone where lupine habitat has been identified for representatives of the DPS Staff, NYSDEC, the EPC Contractor, and others as deemed appropriate to discuss and review these measures including the location of the flagging of lupine and nectar patches of potential and occupied butterfly habitat. The flagging shall be maintained until construction has been completed and all disturbed areas have been restored to their final grade.	CHPE will comply	Does not apply to Segment 12
91	Within six months after the commencement of commercial operations of the Facility, the Certificate Holders shall provide a ROW maintenance plan for the Facility ROW from Route Mile 145, south of Scout Road in the Town of Wilton, New York to Route Mile 180, north of County Line Road in the Town of Rotterdam, New York. This plan shall include but not be limited to methods of maintenance, access routes to the ROW, seasonal construction windows, and the education of all company employees and contractors regarding all measures to avoid occupied habitat associated with Karner blue butterfly and frosted elfin butterfly. The plan shall also provide requirements for notification of the DPS Staff and NYSDEC of any planned maintenance or repair work within, or in the vicinity of occupied habitat that requires excavation or ground disturbance.	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
N. Underwater Cable Installation		**CHPE Response**	**EM&CP Section/Appendix**
92	All the terms and conditions of the WQC are incorporated by reference into this Certificate as though fully set out herein. Any changes to the WQC shall be governed by the provisions of Condition 158 of this Certificate.	CHPE will comply	Does not apply to Segment 12
93	Construction within navigable waters and pre-installation route clearing activities (prelay grapnel run and associated obstruction and debris removal) shall occur within the construction time frames set forth in Table 1. After consultation with DPS Staff, the New York State Department of State (NYSDOS), and NYSDEC, the Certificate Holders may seek an appropriate modification of the time frames, either in the proposed EM&CP or subject to the provisions of Condition 158 of this Certificate.	CHPE will comply	Does not apply to Segment 12
94	Commencement of in-river work within 1 mile south of the designated Significant Coastal Fish and Wildlife Habitats (SCFWHs) at Haverstraw Bay shall occur during the high, or flood, tide condition in order to avoid and/or minimize impacts from resuspended sediments to the SCFWH habitat of Haverstraw Bay.	CHPE will comply	Does not apply to Segment 12
95	The Certificate Holders shall use installation techniques for underwater cable installation activities that are appropriate for the prevailing substrate conditions.	CHPE will comply	Does not apply to Segment 12
95(a)	Cable installation in the Hudson, Harlem, and East Rivers shall be designed and installed to meet the following criteria: (i) Where the cables shall be located within the limits of the maintained Federal Navigation Channels (a) in the Harlem, Hudson, and East Rivers, the Certificate Holders shall install the cables to a depth of at least 15 feet below the federally-authorized depth of the Federal Navigation Channel and (b)	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	in the Harlem River, the Certificate Holders shall install the cables to those elevations below the federally-authorized depth of such channel that have been specified by the USACE in Permit NAN-2009-0189 and by the New York State Department of State in its determination of March 3, 2014 made pursuant to the federal Coastal Zone Management Act; (ii) and where the cables shall be located outside the limits of the maintained Federal Navigation Channels in such rivers, the Certificate Holders shall install the cables to the maximum depth achievable that would allow each pole of the bi-pole to be buried in a single trench using a jet-plow, which is expected to be at least six (6) feet below the sediment water interface or, if sand waves are present, the trough of said waves, or as authorized by DPS Staff, NYSDEC, and NYSDOS as discussed in condition 95(a)(iii), below the existing riverbed outside maintained Federal Navigation Channels, except where utility lines or other infrastructure are crossed or where geologic or topographic features prevent burial at such depth. (iii) No changes in the installation technology or burial depth shall be allowed without a written statement from NYSDOS stating that the deviation would not result in coastal effects that differ significantly from the coastal effects reviewed by NYSDOS in Certificate Holders' original federal coastal consistency certification (Coastal Consistency Certification). In the event that NYSDOS determines that such deviation would result in coastal effects that differ significantly from those reviewed in the Coastal Consistency Certification, the Certificate Holders shall seek a written concurrence from NYSDOS for any such project changes that would require an amendment to the Certificate Holders' Coastal Consistency Certification. Nothing in this Certificate shall be construed to limit or expand any rights Certificate Holders may have to seek administrative or judicial review of any action or inaction by NYSDOS relating to any such deviation. [as Amended by Amendment 1 (March 20, 2020)].		

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
95(b)	Cable installation in Lake Champlain shall be designed and installed to meet the following criteria: (i) in locations where the water depth is less than 150 feet, the target burial depth is 3 to 4 feet below the sediment surface, except where the cables cross other utility lines or other infrastructure or where geologic or bathymetric features prevent burial at such depth, and adequate measures for cable and infrastructure protection are provided; (ii) in locations where water depth is 150 feet or greater, the target burial depth is 3 to 4 feet below the sediment surface, however the cables may be buried at shallower depths or laid on the lake bed where Certificate Holders provides a report prepared by a recognized authoritative technical consultant demonstrating and concluding that public health and safety can be appropriately protected without such burial, and the proposed installation method is approved by the Commission in the Segment EM&CP. (iii) Where the cables shall be located in the portion of Lake Champlain south of Crown Point (Route Mile 73), the Certificate Holders will rely on the shear plow installation method or, when reliance on such method is infeasible, an alternative method that avoids environmental impacts to a substantially equivalent degree. Where cables shall be located in the portion of Lake Champlain north of Crown Point, the Certificate Holders shall rely on a jet-plow or shear plow, or, in deeper water, either a self-propelled remotely operated vehicle (ROV) that shall bury the cables using water jetting after the initial surface lay of the cables from the vessel.	CHPE will comply	Does not apply to Segment 12
95(c)	Utility and other infrastructure crossings shall be executed consistent with site-specific design measures for each such crossing as specified in the approved EM&CP.	CHPE will comply	Does not apply to Segment 12
96	In the event that the target depth of cover (consistent with the requirements of Condition 95) has not been substantially achieved in an area due to geologic or topographic features and not due to limitations associated with a utility crossing, following the post-installation inspection provided for in Condition 161, the Certificate Holders shall report the actual depth of cover, and propose a plan, with a reasonable schedule, consistent with Good Utility Practice whose definition is	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	provided in Condition 20, for achieving an adequate burial depth or protection level given the location to NYSDEC, NYSDOS and DPS Staff for review and comment.		
97	As long as the Certificate Holders complies with the requirements of Condition 96, failure to achieve the depth of cover consistent with the requirements of Condition 95 shall not be a basis for an order to cease installation of the remaining cable sections, an order not to energize, or an order to cease operation. An order not to energize or to cease operation will be issued only after affording the Certificate Holders an opportunity to show cause why such order should not be issued.	CHPE will comply	Does not apply to Segment 12
98	The Certificate Holders shall employ HDD and dredging to install the proposed underwater cables from the proposed cable landfall locations to avoid disturbance to near shore sediments. The exit pit of each HDD borehole shall be installed within temporary dredged cofferdams or into a steel casing rise pipe. The walls of each temporary cofferdam shall extend above mean high water during dredging to contain suspended sediments associated with dredging activities and hence limit the dispersion of the suspended sediments to the interior footprint of the temporary cofferdam.	CHPE will comply	Does not apply to Segment 12
99	As part of the planning process for dredging, consultations with NYSDEC and USACE shall occur, at which time the specific practices to be employed shall be discussed. All cofferdams and any other dredged area shall be backfilled with clean material. The dredging practices and procedures to be utilized by the Certificate Holders shall be specified in the EM&CP and shall include:	CHPE will comply	Does not apply to Segment 12
99(a)	A closed (i.e., sealed) environmental (clamshell) bucket with sealing gaskets or an overlapping sealed design at the jaws and seals or flaps positioned at locations of vent openings, approved by the Commission, shall be used to minimize sediment suspension at the dredging site for fine grained unconsolidated (silty) sediments and for dredging across or within Federal Navigation Channels. Seals or flaps designed or installed at the jaws and locations of vent openings must tightly cover these openings while the bucket is lifted through the water column and into the barge, and the closed	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	environmental (clamshell) bucket dredge shall be equipped with sensors to ensure complete closure of the bucket before lifting through the water.		
99(b)	Dredging Practices: The following practices shall be applied to all activities to ensure that large amounts of sediment are not released into the water column: (1) Hoist speed shall be limited so that the bucket is raised through the water column at a rate of 2 feet per second or less. The bucket shall be lifted in a continuous motion through the water column and into the barge; (2) The dredge shall be operated to control the rate of the descent and to maximize the depth of penetration without overfilling the bucket; (3) Washing of the gunwales of the dredge scow shall be avoided except to the extent necessary to ensure the safety of workers; and (4) The bucket shall be lowered to the level of the barge gunwales prior to release of the load and the dredged material shall be placed deliberately and in a controlled manner; (5) Operations shall be suspended until all necessary repairs or replacements are made when a significant loss of water and visible sediments from the bucket are observed; and (6) Dredged material shall not be side cast or returned to the water.	CHPE will comply	Does not apply to Segment 12
99(c)	Barge overflow is prohibited.	CHPE will comply	Does not apply to Segment 12
99(d)	Barge/Scow Type: Barges or scows shall be of solid hull construction or be sealed.	CHPE will comply	Does not apply to Segment 12
99(e)	Dredging Monitoring: An on-board Aquatic Inspector(s) shall be present at all times during dredging operations.	CHPE will comply	Does not apply to Segment 12
99(f)	Dredging Windows: Dredging shall occur within the underwater construction windows identified in Table 1 of Condition 93.	CHPE will comply	Does not apply to Segment 12
99(g)	Decanting Operations: Decanting of barges shall be approved by DPS Staff in consultation with NYSDEC prior to implementation. Barges may not be decanted before 24 hours of settlement within the scow.	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
99(h)	Only barges in good operating condition shall be used. Deck barges shall not be used, unless modified to allow no barge overflow and as approved by the Aquatic Inspector and DPS Staff in Consultation with NYSDEC.	CHPE will comply	Does not apply to Segment 12
99(i)	The Aquatic Inspector shall inspect all dredging equipment prior to use and shall perform periodic inspections of all such equipment no less than once per week. The contractor shall demonstrate to the Aquatic Inspector that the bucket dredge operator has sufficient control over the bucket depth in the water and bucket closure.	CHPE will comply	Does not apply to Segment 12
99(j)	All sediments excavated during cofferdam construction and transition activities at the landfall location must be disposed of at a state-approved upland disposal site. All contaminated sediments excavated during placement in the navigation channel shall be disposed of in a state-approved upland disposal site.	CHPE will comply	Does not apply to Segment 12
99(k)	During dredging operations, the Certificate Holders shall provide weekly reports on progress to date, document compliance with Certificate requirements, and such other information as determined necessary based on consultation with DPS Staff, NYSDEC, and NYSDOS.	CHPE will comply	Does not apply to Segment 12
99(l)	All cofferdams and any other dredged area shall be backfilled using imported clean material, as needed, to restore the stream, lake, or riverbed to pre-construction contours. This work shall be completed in accordance with the relevant approved Segment EM&CP.	CHPE will comply	Does not apply to Segment 12
99(m)	In no instance shall excavated contaminated sediment be placed back into a waterbody.	CHPE will comply	Does not apply to Segment 12
100	Underwater activities shall be undertaken in a manner that minimizes the potential for interference with navigation.	CHPE will comply	Does not apply to Segment 12
101	The Certificate Holders shall coordinate with NYSDOT on cable construction and maintenance activities within Lake Champlain that may affect construction, operation, maintenance, and inspection of the Crown Point Bridge in Lake Champlain.	CHPE will comply	Does not apply to Segment 12
O. Water Supply Intakes		**CHPE Response**	**EM&CP Section/Appendix**

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
102	The Certificate Holders shall review the pre-installation marine sediment survey to determine if the location of any public water supply (PWS) structure along the HVDC Transmission System route can be identified.	CHPE will comply	Does not apply to Segment 12
103	The Certificate Holders shall provide notice that the EM&CP is available for review to operators of PWS facilities located within 1 mile of the in-water facility. The notice shall include, in plain language: (i) details about the planned work; (ii) hours and duration of activities; (iii) provisions for protection of facilities, if applicable; (iv) identification of locations where additional information and copies of the EM&CP are available; (v) contact information for Certificate Holders' personnel, including a toll-free number; and (vi) instructions on how comments regarding construction plans and mitigation measures may be filed with the Secretary, indicating appropriate deadlines for commenting and contact information. Proof of notice shall be provided to the Secretary.	CHPE will comply	Does not apply to Segment 12
104	The Certificate Holders shall notify operators of PWS facilities of construction work within 1 mile of their intake structure(s) at least 30 days prior to the commencement of any underwater work (including but not limited to grapnel, pre-construction, and construction activities) in these areas or within the period requested by the systems operators during the consultation process detailed in CC 150. Such notice shall be in the form of a written letter as well as any other method identified during the consultation process detailed in CC 150. The Certificate Holders shall provide copies of all written correspondence to DPS Staff.	CHPE will comply	Does not apply to Segment 12
105	Operational Control: The schedule of grapnel/debris removal and all phases of construction shall be coordinated in consultation with each PWS facility. Construction and pre-construction operations within 1 mile of an intake shall be performed at night or another scheduled time when systems are not operating to the extent reasonably possible.	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
106	PWS Sampling during Grapnel/Debris Removal and Construction Operations: The Certificate Holders shall establish a fund that provides for each of the PWS facilities identified by the NYSDOH as being within 1 mile of the underwater cable facility to enable completion of the following testing, with payment for this work being based on the mechanism established during the consultation provided for by CC 150:	CHPE will comply	Does not apply to Segment 12
106(a)	One pre-construction raw water sample collected no more than 12 hours prior to in-water operations occurring in proximity to the intake structure. Samples collected shall be analyzed for total metal concentrations with United States Environmental Protection Agency (EPA) Method 200.8. Raw water samples collected from PWS facilities located along the Hudson River shall also be analyzed for polychlorinated biphenyls (PCBs) with EPA Method 508A. All pre-construction raw water samples collected from the PWS facilities should be reported using a 24-hour turnaround.	CHPE will comply	Does not apply to Segment 12
106(b)	Two sets of post-construction raw water and finished water (post-treatment) samples from the PWS facility. The first set shall be collected immediately following operations occurring in proximity to the intake structure and the second set shall be collected approximately 12 hours after conclusion of operations.	CHPE will comply	Does not apply to Segment 12
106(c)	Post-construction raw water samples from all PWS facilities shall be analyzed for total metal concentrations with EPA Method 200.8. Raw water samples collected from PWS facilities located along the Hudson River shall also be analyzed for PCBs with EPA Method 508A. All post-construction raw water samples collected from the PWS facilities shall be reported using a 24-hour turnaround. Finished water samples shall be held at the laboratory.	CHPE will comply	Does not apply to Segment 12
106(d)	If raw water sample results suggest any significant water quality impacts associated with any pre-construction or construction operations, the finished water samples shall be analyzed: (a) for total metal concentrations with EPA Method 200.8 and, (b) if collected from PWS facilities located along the Hudson River, for PCBs with EPA Method 508A. All finished water samples submitted for analysis shall be reported	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	using a 24-hour turnaround. The decision to analyze the finished water samples shall be made by DPS Staff in consultation with the NYSDOH.		
106(e)	If analysis of finished water sample results indicates that there has been a maximum contaminant level (MCL) violation caused by the installation activities, the Certificate Holders shall employ the mitigation measures prescribed in accordance with Condition 14(c) of the WQC in all locations where cable installation operations are within 1 mile of a water intake structure. If the Certificate Holders proposes to employ mitigation measures not otherwise provided for in accordance with CC 14(c) of the WQC, they must first consult with the DPS Staff, NYSDEC, and the Aquatic Inspector. In the event that DPS Staff determines that the mitigation techniques are unable to mitigate the MCL violation(s), underwater cable installation shall be suspended, and the Certificate Holders shall consult with DPS Staff, NYSDOH, and NYSDEC regarding alternative cable installation techniques and propose such changes to the approved EM&CP in accordance with Condition 158 as may be necessary.	CHPE will comply	Does not apply to Segment 12
106(f)	The Certificate Holders shall provide copies of all laboratory data reports for samples collected from each PWS facility located along the Hudson River to NYSDOH and DPS Staff.	CHPE will comply	Does not apply to Segment 12
P. Cultural Resources		**CHPE Response**	**EM&CP Section/Appendix**
107	The Certificate Holders shall: (a) avoid creating adverse impacts on heritage resource sites, archaeological sites, historic structures, and underwater cultural resources in the vicinity of the Facility by implementing location, design, vegetation management, resource protection, and construction scheduling measures as shall be specified in the approved EM&CP; and (b) provide cultural and heritage resource impact mitigation measures as specified in the approved EM&CP or facility management and restoration plan(s).	CHPE will comply	Section 11

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
108	The Certificate Holders shall refrain from undertaking construction in areas where archaeological surveys have not been completed and until such time as the appropriate authorities, including New York State Office of Parks Recreation & Historic Preservation (OPRHP) and DPS Staff, have reviewed the results of any additional historic properties and archaeological surveys that are required. These archaeological surveys may be segmented in conjunction with the preparation of the EM&CP to permit the review, approval, and commencement of any circuit or converter station improvements prior to review and approval for the remaining portions of the Facility.	CHPE will comply	Section 11
109	The Certificate Holders shall develop a Cultural Resources Management Plan (CRMP) as described below. The CRMP shall be developed in consultation with the OPRHP Field Services Bureau, Indian tribes, the Advisory Council on Historic Preservation (Council), the U.S. National Park Service, DPS Agency Preservation Officer, and other stakeholders (as appropriate). The CRMP shall provide for the identification, evaluation, and management of historic properties within the Area of Potential Effects (APE) of the Facility. The CRMP shall also outline the processes for resolving adverse effects on historic properties within the APE and determining the appropriate treatment, avoidance, or mitigation of any effects of the Facility on these resources.	CHPE will comply	Section 11and Appendix O
110	Should archaeological materials be encountered during construction, the Certificate Holders shall stabilize the area and cease all construction activities in the immediate vicinity of the find and protect the site from further damage. Within 24 hours of such discovery, the Certificate Holders shall notify and seek to consult with DPS Staff and OPRHP Field Services Bureau to determine the best course of action. No ground-disturbing activities shall be permitted in the vicinity of the archaeological materials until such time as the significance of the resource has been evaluated and the need for and scope of impact mitigation have been determined.	CHPE will comply	Section 3.3, Section 11and Appendix O

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
111	Should human remains or evidence of human burials be encountered during the conduct of archaeological data recovery fieldwork or during construction, all work in the vicinity of the find shall be halted immediately and the site shall be protected from further disturbance. Within 24 hours of any such discovery, the Certificate Holders shall notify the DPS Staff and OPRHP Field Services Bureau. Treatment and disposition of any human remains that may be discovered shall be managed in a manner consistent with the Native American Graves Protection and Repatriation Act (NAGPRA); the Council's Policy Statement Regarding Treatment of Burial Sites, Human Remains, any Funerary Objects (February 2007); and OPRHP's Human Remains Discovery Protocol. All archaeological or remains-related encounters and their handling shall be further reported in the status reports summarizing construction activities and reviewed in the site-compliance audit inspections.	CHPE will comply	Section 3.3, Section 11and Appendix O
112	The Certificate Holders shall have a continuing obligation during the life of the Facility to respond promptly to complaints of negative archaeological impacts and to consult with OPRHP, the Council, Indian tribes, and other appropriate parties identified in the CRMP to resolve adverse effects on historic properties and determine the appropriate avoidance, treatment, or mitigation measures.	CHPE will comply	Section 11and Appendix O
Q. Waterbodies and Regulated Wetlands		**CHPE Response**	**EM&CP Section/Appendix**
113	The Certificate Holders shall minimize disruption to regulated wetlands during the construction, operation, and maintenance activities of the Facility.	CHPE will comply	Section 9.1 and Appendix M
113(a)	Regulated wetland locations shall be delineated in the field and indicated on the proposed EM&CP drawings for the Construction Zone and any access roads. Such delineations shall be delivered for review to DPS Staff, NYSDOS, and NYSDEC and, for wetlands within the Adirondack Park, to the Adirondack Park Agency (APA), at least 30 days prior to the filing of the proposed EM&CP.	CHPE will comply	Section 3.3, 9.1 and Appendices A and M

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
113(b)	Any activities that may affect regulated wetlands shall be designed and controlled to minimize adverse impacts, giving due consideration to the environmental features and functions of the regulated wetlands and the 100-foot adjacent area associated with any state-regulated wetlands (adjacent area).	CHPE will comply	Section 9.1
113(c)	The Certificate Holders shall, to the maximum extent practicable, avoid direct impacts to regulated wetlands and construct access roads outside regulated wetlands and adjacent areas. Any direct impacts that are not avoided shall be minimized and appropriately mitigated.	CHPE will comply	Section 9.1
113(d)	Construction through regulated wetlands or adjacent areas shall be done with tracked equipment or on temporary mats or geotextile/gravel access roads and shall be restricted to access roads and work areas set forth on the approved EM&CP drawings, provided that the Certificate Holders' use of geotextile and gravel for access roads shall not contravene the requirements set forth in CC 77 of this Certificate.	CHPE will comply	Section 9.1
113(e)	Clearing of existing vegetation in wetlands or in or near waterbodies shall be limited to that material necessary to allow completion of construction activities and to allow for reasonable access for long-term maintenance to reduce the amount of activity and disturbance to the wetland and adjacent area.	CHPE will comply	Section 8.2
113(f)	Equipment or machinery shall not be washed in any regulated wetland or adjacent area, and runoff resulting from washing operations shall not be permitted to directly enter any regulated wetland or protected stream or waterbody.	CHPE will comply	Section 5.5, Section 9.1
113(g)	Excavated material shall be stockpiled outside regulated wetland areas and all excess material shall be disposed of in approved overland locations.	CHPE will comply	Section 4.4, Section 9.1
114	The Certificate Holders shall minimize disruption to streams and waterbodies during construction, operation, and maintenance of the Facility. Measures to protect such streams and waterbodies from runoff and sedimentation during construction (other than installation of underwater cables in navigable waters) shall include:	CHPE will comply	Section 9.1

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
114(a)	The development of an inventory that includes for each Segment: (i) a listing of waterbodies within the Construction Zone, including associated stream width, NYSDEC classification, proposed crossing method, and any potential construction schedule window developed during the preparation of the proposed EM&CP; (ii) a spreadsheet that contains the GPS coordinates (latitude and longitude) of each waterbody; (iii) a digital photograph of each waterbody, cross-referenced to its GPS coordinates; and (iv) a wetland delineation shapefile. This inventory shall be delivered for review to DPS Staff, NYSDOS, and NYSDEC and, for waterbodies within the Adirondack Park, to APA, at least 30 days prior to the filing of the proposed EM&CP;	CHPE has complied. Documentation showing the inventory was delivered to NYSDPS, NYSDOS and NSDEC staffs 30 days prior to this filing is included in Appendix A.	Section 3.3, 9.1, and Appendix A
114(b)	Limitation of construction vehicle access across streams and waterbodies to existing bridges and culverts and to temporary crossings installed in accordance with the provisions set forth in the approved EM&CP;	CHPE will comply	Section 9.1
114(c)	Construction of equipment crossings to allow for unrestricted flow and to prevent soil from entering streams and waterbodies. Temporary crossings shall be designed and constructed to withstand the two-year flood event at a minimum;	CHPE will comply	Section 9.1
114(d)	Except where an access path is necessary, a 15-foot-wide buffer zone shall be maintained at all waterbody crossings along any railroad ROW;	CHPE will comply	Section 9.1
114(e)	Prohibition of vehicular access where alternative access can be provided;	CHPE will comply	Section 4.8, 9.1
114(f)	Restriction of equipment and materials (including fill, construction materials, or debris) from being deposited, placed, or stored in any waterbody;	CHPE will comply	Section 5.4, 5.5, 9.1 and Appendix F
114(g)	In general, and to the maximum extent practicable, refueling of equipment, storage mixing, or handling of open containers of pesticides, chemicals labeled "toxic," or petroleum products, shall not be conducted within one hundred (100) feet of a stream or waterbody or wetland. Requirements for refueling within 100 feet of wetlands or streams will be allowed under certain circumstances identified below, subject to the practices set forth in the approved EM&CP.	CHPE will comply with this section, as amended on December 15, 2022.	Sections 5.4, 5.5, 9.2, and Appendix K

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	(1) Refueling of hand equipment will be allowed within 100 feet of wetlands or streams when secondary containment is used. Secondary containment will be constructed of an impervious material capable of holding the hand equipment to be refueled and at least 110% of the fuel storage container capacity. Fuel tanks of hand-held equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Crews will have sufficient spill containment equipment on hand at the secondary containment location to provide prompt control and cleanup in the event of a release. (2) Refueling of equipment will be allowed within 100 feet of wetlands or streams when necessary to maintain continuous operations and where removing equipment from a sensitive area for refueling would increase adverse impacts to the sensitive area. Fuel tanks of such equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Absorbent pads or portable basins will be deployed under the refueling operation. In addition, the fuel nozzle will be wrapped in an absorbent pad and the nozzle will be placed in a secondary containment vessel (e.g., bucket) when moving the nozzle from the fuel truck to the equipment to be refueled. All equipment operating within 100 feet of a wetland or stream will have sufficient spill containment equipment on board to provide prompt control and cleanup in the event of a release. (3) Field personnel and Contractors shall be trained in spill response procedures, including the deployment and maintenance of spill response materials;		
114(h)	Employment of precautions, when not feasible to move the affected vehicle or equipment from an environmentally sensitive area to a suitable access area (i.e., pumping equipment), to prevent petroleum products or hazardous materials from being released into the environment. These precautions include (but are not limited to) deployment of portable basins or similar secondary containment devices, use of	CHPE will comply	Sections 5.5 and 9.1

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	ground covers (such as plastic tarpaulins), and precautionary placement of floating booms on nearby surface waterbodies;		
114(i)	Implementation of EM&CP procedures for erosion and sediment control (in accordance with the SWPPP to be included with the proposed EM&CP) early in the construction process and prior to the start of grading and excavation activities; such procedures shall be maintained throughout the construction period and in accordance with SSESC;	CHPE will comply	Sections 6.3, Appendices G and C
114(j)	Pumping of water from dewatering operations into a temporary straw bale or silt fence barrier or filter bag to settle suspended silt material prior to discharge. Direct discharge of sediment laden water to state- and/or federally- regulated wetlands and to streams and stormwater systems shall be avoided;	CHPE will comply	Section 9.1
114(k)	Runoff resulting from equipment or machinery washing operations shall be prevented from directly entering any State-regulated wetland or protected stream or waterbody;	CHPE will comply	Section 9.1
114(l)	Development and implementation of spill response and cleanup procedures to minimize and respond to any accidental spills of petroleum producing chemicals or hazardous liquids that occur during construction;	CHPE will comply	Appendix K
114(m)	A requirement that, during the performance of any HDD waterbody crossing, contractors monitor the use of inert biodegradable drilling solution and, in the event of a detected release of fluid, implement the procedures specified in the approved EM&CP. For any release occurring in a waterbody, the Certificate Holders shall immediately notify DPS Staff and NYSDEC of details of the release and the course of action they recommend taking;	CHPE will comply	Section 3.3 and Appendix J and K

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
114(n)	Monitoring of the status of each HDD waterbody crossing while construction activities are underway until the crossing has been completed and the stream and stream banks have been restored. In the event of any potential or actual failure of the crossing, the Certificate Holders shall have adequate staff and equipment available to take necessary steps to prevent or avoid adverse environmental impacts;	CHPE will comply	Section 9.1
114(o)	Completion of backfilling operations and of cleanup and restoration of the stream crossing, banks, and bank approaches (at least 50 feet adjacent to each bank) within 24 hours. If needed, stream banks shall be re-established to original grade immediately after stream bank work is completed. The banks shall then be permanently stabilized by seeding with native grasses, mulching, and, if needed, planting native shrub seedlings	CHPE will comply	Section 9.1
115	The Certificate Holders shall notify DPS Staff and NYSDEC at least 5 days prior to construction involving protected stream crossings.	CHPE will comply	Section 3.3 and 6.3
116	NYSDEC field representatives will notify the DPS Staff representative and the Certificate Holders' appropriate representative and, for wetlands within the Adirondack Park, APA of any activities that violate or may violate either the terms of this Certificate or the ECL. DPS Staff, NYSDEC field representatives, and, for wetlands within the Adirondack Park, the APA will consult in assessing site conditions and determining whether a recommendation should be made to DPS Staff to exercise its stop work authority or, alternatively, whether the Certificate Holders should be directed to take action to minimize further impacts to streams and regulated wetlands as appropriate.	CHPE will comply	Section 3.4
117	The Certificate Holders shall establish and implement a program to monitor the success of wetland and stream restoration upon completion of construction and restoration activities. The success of wetland revegetation shall be monitored and recorded annually for the first 2 years (or as required by any applicable permit) after construction, or longer, until wetland revegetation is successful. Wetland revegetation will be considered successful when the vegetative cover is at least 80 percent of the	CHPE will comply	Section 9.1; Section 14

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	type, density, and distribution of the vegetation in adjacent wetland areas that were not disturbed by construction. If revegetation is not successful at the end of two years, the Certificate Holders shall develop and implement (in consultation with a professional wetland ecologist) a plan to actively revegetate the wetland with native wetland herbaceous plant species.		
118	If DPS Staff, in consultation with NYSDEC, determines that restoration of damage to wetlands caused by use of temporary road mats has not been adequate, the Certificate Holders shall prepare a mitigation plan for impacts arising from the use of temporary road mats. Such plan shall provide for compensatory mitigation in the form of a proposed project to address the loss of wetland functions, such as vegetation plantings or a project to address invasive species in wetlands.	CHPE will comply	Section 9.1
R. Transmission System Reliability		**CHPE Response**	**EM&CP Section/Appendix**
119	This section of this Certificate deals with the interconnection of the Facility to the New York State Bulk Power System (NYSBPS) and with certain aspects of the operation of the Facility while interconnected with the NYSBPS. Some of these matters may also be subject to regulation by FERC under the FPA. Nothing contained in this section shall be construed as limiting or waiving Certificate Holders rights under the FPA in any way. If Certificate Holders petition a tribunal of competent jurisdiction to determine whether any of the conditions and/or requirements established within this Transmission System Reliability section are regulated within the scope of FERC's exclusive jurisdiction under the FPA, Certificate Holders will provide a copy of such petition to DPS Staff within three days of filing. If determined by such tribunal to be within FERC's exclusive jurisdiction, Certificate Holders' compliance with FERC's requirements applicable to such matters (including without limitation any requirements established in any tariff or service agreement accepted for filing by	CHPE will comply	General Requirement

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	FERC) shall be regarded as full and complete compliance with any such conditions and/or requirements established in this section.		
120	The Certificate Holders is authorized to construct and agree to design, engineer, and construct the HVDC Transmission Facility's Attachment Facilities (as defined in the Open Access Transmission Tariff (OATT) of the NYISO, as provided in the Optional Interconnection Study (OI) and System Reliability Impact Study (SRIS) approved by NYISO, NYISO's Transmission Planning and Advisory Subcommittee (TPAS), and NYISO's Operating Committee, the applicable NYISO Class Year Annual Transmission Reliability Assessment Study (ATRAS), and the Facility's Interconnection Agreement with the applicable parties, which may include the NYPA, ConEdison and NYISO (the IA). The Certificate Holders shall utilize Good Utility Practice as described in CC 20, in the design, engineering, and construction of the HVDC Transmission System's Attachment Facilities.	CHPE will comply	General Requirement; Does not apply to Segment 12; will be addressed in other filings/processes, as appropriate.
121	The Certificate Holders shall connect the HVDC Transmission System to the 345 kV Astoria bus owned by NYPA at 345 kV, as shown in Appendix B. Certificate Holders shall connect the Astoria-Rainey Cable to the 345 kV Astoria bus owned by the NYPA and to the 345 kV Rainey bus owned by ConEdison as shown in Appendix B.	CHPE will comply	General Requirement; Does not apply to Segment 12; will be addressed in other filings/processes, as appropriate.
122	The Certificate Holders shall work with the NYPA and ConEdison, and any successor Transmission Owner(s) (TOs) (as defined in the NYISO agreement) to ensure that the Facility has a power system relay protection and appropriate communication capabilities to ensure that operation of the electric transmission system is adequate under NPCC Bulk Power Protection Criteria, and meets the protection requirements at all times of the NERC, NPCC, NYSRC, NYISO, ConEdison, and NYPA and any successor organizations. The Certificate Holders shall ensure that their power system relay protection and communication capabilities comply with applicable NPCC criteria	CHPE will comply	General Requirement; Does not apply to Segment 12; will be addressed in other filings/processes, as appropriate.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	and shall be responsible for the costs to verify that their relay protection system is in compliance with applicable NERC, NPCC, NYISO, NYSRC, Con Edison and NYPA criteria.		
123	The following requirements apply: (a) The Certificate Holders shall be responsible for the Facility's share of the cost of System Upgrade Facilities (as that term is defined in the OATT) as determined by NYISO in accordance with its FERC approved tariffs, rules, and procedures; (b) The Certificate Holders shall be responsible for the cost of interconnection facilities as they are defined in Attachment S of the OATT, and to the extent set forth in the IA; (c) Payments from the Certificate Holders to NYPA and/or Con Edison of the amounts contemplated in this Certificate Condition shall be made in accordance with the terms of the IA; (d) The Certificate Holders shall maintain the Facility in accordance with the approved tariffs and applicable rules and protocols of NYPA, ConEdison, NYISO, NYSRC, NPCC, NERC, and NAERO, and successor organizations; (e) The Certificate Holders shall obey operational orders and dispatch instructions issued by NYISO or its agent or successor pursuant to applicable tariffs, manuals, rules, protocols, and other relevant documents applicable to the Facility. If the NYISO System Operator encounters communication difficulties, the Certificate Holders shall obey dispatch instructions issued by the Con Edison Energy Control Center, or its successor(s), pursuant to applicable tariffs, manuals, rules, protocols, and other relevant documents applicable to the Facility in order to maintain reliability of the transmission system.	CHPE will comply	General Requirement; Does not apply to Segment 12; will be addressed in other filings/processes, as appropriate.
124	The Certificate Holders shall fully comply with the applicable reliability criteria of NYPA, the Commission, ConEdison, NYISO, NPCC, NYSRC, NERC, NAERO and their successors. If the Facility fails to meet such reliability criteria at any time, the Certificate Holders shall notify NYISO immediately, in accordance with NYISO requirements, and shall simultaneously provide the Commission, NYPA and Con Edison with a copy of the NYISO notice.	CHPE will comply	General Requirement; Does not apply to Segment 12; will be addressed in other filings/processes, as appropriate.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
125	The Certificate Holders shall file a copy of the following documents with the Secretary and provide any updates to the documents throughout the life of the Facility:	CHPE will comply	Section 3.3
125(a)	all facilities agreements with ConEdison, NYPA, and successor Transmission Owners (as defined in the NYISO agreement);	CHPE will comply	Section 3.3
125(b)	any documents submitted to the NYSRC, including but not limited to, any updates issued by the NYSRC;	CHPE will comply	Section 3.3
125(c)	the SRIS or any OIS or the Systems Impact Study (SIS) approved by the NYISO Operating Committee, and the Final Class Year Facilities Study. Should the Certificate Holders apply in the future to NYISO for additional Capacity Resource Interconnection Service (CRIS) rights for the Facility, they shall file with the Commission copies of all documents submitted to NYISO, provided however that in the case of documents containing confidential information of the NYISO, Certificate Holders shall not be obligated to file any materials that NYISO refuses to authorize Certificate Holders to file. Certificate Holders shall file such documents with the Commission, even if they choose not to fund construction of the System Deliverability Upgrades (as that term is defined in the OATT) required to obtain such additional CRIS rights;	CHPE will comply	Section 3.3
125(d)	the Relay Coordination Study (which shall be filed not later than six months prior to the projected date for circuit energization or testing and commissioning activities of the Facility, and shall be performed in concert with Con Edison and NYPA, and the results of which shall be provided to Con Edison and NYPA);	CHPE will comply	Section 3.3
125(e)	a copy of the IA(s) and all updates thereto throughout the life of the Facility	CHPE will comply	Section 3.3
125(f)	a copy of the facilities design studies, including all associated drawings and support documentation and a copy of the manufacturer's "terminal facilities design characteristics" of the equipment installed (including test and design data); updates thereto throughout the life of the Facility; and	CHPE will comply	Section 3.3

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
125(g)	if any equipment or control system with different characteristics is to be installed, the Certificate Holders shall provide that information to the Commission, NYPA and Con Edison before any such change is made at least three months in advance so that it can be reviewed prior to installation (throughout the life of the Facility).	CHPE will comply	Section 3.3
126	Within five business days of any failure of equipment causing a reduction of more than 10% percent in the capability of the Facility to transmit electric power, the Certificate Holders shall promptly provide to DPS Staff, NYPA, and Con Edison copies of all notices, filings, and other substantive written communications with NYISO as to such reduction, any plans for making repairs to remedy the reduction, and a proposed schedule for any such repairs. The Certificate Holders shall provide monthly reports to DPS Staff, Con Edison, and NYPA on the progress of any repairs until completed. The report shall contain, when available, copies of applicable drawings, descriptions of the equipment involved, a description of the incident, and a discussion of how future occurrences will be avoided. The Certificate Holders shall work cooperatively with NYPA, ConEdison, and NYISO to avoid any future occurrences. If such equipment failure is not completely repaired within nine months of its occurrence, the Certificate Holders shall provide a detailed report to the Secretary within nine months and two weeks after the equipment failure, setting forth the progress on the repairs and indicating whether the repairs will be completed within three months. If the repairs will not be completed within three months, the Certificate Holders shall explain the circumstances contributing to the delay and demonstrate why the repairs should continue to proceed.	CHPE will comply	Section 3.3
127	The Certificate Holders shall include in the Facilities Study for the HVDC Transmission System prepared by NYISO, and request that NYISO identify, the additional facilities required for the Certificate Holders to provide Black Start service, as well as the cost of those facilities. If the Certificate Holders subsequently decide to participate in the NYISO's Black Start program, they shall demonstrate annually that the Facility can be black started. The Certificate Holders shall schedule with the NYISO, Con Edison, and	CHPE will comply	General Requirement; Does not apply to Segment 12 ; will be addressed in other

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	NYPA the black start test and demonstrate black start procedures. If the black start test fails, the Certificate Holders shall produce a report describing the test, detailing the cause (including copies of diagrams, photos, details of the test, and illustrations of the fail test) and what actions or changes are being made to the black start procedures. A copy of the report shall be submitted to ConEdison, NYPA, the Commission, and the NYISO. The Certificate Holders will provide the opportunity for DPS Staff to observe the black start testing and to attend all meetings related to Black Start. The Certificate Holders shall effectuate a successful black start annually to qualify for the Black Start program.		filings/processes, as appropriate.
128	The Certificate Holders shall coordinate with NYPA and Con Edison system planning and system protection engineers to evaluate the characteristics of the transmission system before purchasing any system protection and control equipment related to the electrical interconnection of the Facility to NYPA's and Con Edison's transmission facilities. This discussion is designed to ensure that the equipment purchased will be able to withstand most system abnormalities.	CHPE will comply	General Requirement; Does not apply to Segment 12; will be addressed in other filings/processes, as appropriate.
129	The technical considerations of interconnecting the Facility to the NYPA's and ConEdison's transmission facilities shall be documented by the Certificate Holders and provided to Staff of the Bulk Power Systems Section of DPS, Con Edison, and NYPA prior to the installation of transmission equipment. Updates to the technical information shall be furnished as available throughout the life of the Facility.	CHPE will comply	General Requirement; Does not apply to Segment 12; will be addressed in other filings/processes, as appropriate.
130	The Certificate Holders shall work with NYPA and Con Edison engineers and safety personnel on testing and energizing equipment and develop a start-up testing protocol providing a detailed description of the steps that they will take to limit system impacts prior to and during testing of the Facility. Such protocol shall be provided to NYISO, Con Edison, and NYPA for review and comment and, following	CHPE will comply	General Requirement; Does not apply to Segment 12; will be addressed in other

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	the review and comment phase, a copy of such protocol shall be provided to Staff of the Bulk Electric System Section of the DPS. The Certificate Holders shall comply with this protocol once established, unless NYISO provides written authorization to Certificate Holders to deviate from that protocol. The Certificate Holders shall make a good faith effort to notify DPS Staff of meetings related to the electrical interconnection of the Facility to NYPA's or Con Edison's transmission system, as applicable, and provide the opportunity for Staff to attend those meetings. The Certificate Holders shall provide a copy of the testing protocol to Staff of the Bulk Electric Systems Section of DPS.		filings/processes, as appropriate.
131	The Certificate Holders shall make modifications to the Facility if it is found by the NYISO or the Commission to cause reliability problems to the New York State Transmission System. If the NYPA, ConEdison, or the NYISO bring concerns to the Commission, the Certificate Holders shall be obligated to respond to those concerns. The Certificate Holders shall prepare a report within 45 days of notification by DPS Staff that DPS Staff has determined that a reliability problem exists.	CHPE will comply	Section 3.3
132	No less than 60 days prior to the Facility's anticipated COD, the Certificate Holders shall file with the Secretary, Operation and Maintenance Plan(s) for the Facility's Interconnection Facilities. The plan(s) shall be updated yearly and a copy of the updated plan(s) shall be filed with the Secretary; the plan(s) and updates shall be provided to Con Edison and NYPA.	CHPE will comply	Section 3.3
133	The Certificate Holders shall file with the Secretary, no less than 60 days prior to delivery of test energy from the Facility to the Astoria Annex Substation and the Rainey Substation, a report regarding the measures taken to achieve the 1,550 MW deliverability commitment established in Condition 15(a) hereof, as well as copies of all studies, drawings, and backup documentation that support all such measures. The Certificate Holders shall provide a draft of such report to Con Edison for its review and comment at least 30 days prior to the filing of such report. The measures for achieving the 1,550 MW deliverability commitment specified by the Certificate	CHPE will comply	General Requirement; Does not apply to Segment 12; will be addressed in other filings/processes, as appropriate.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	Holders in that report shall not include a Special Protection System (SPS) or other operational measures subject to individual approval by NYISO, the New York State Reliability Council or other applicable reliability authorities, unless Con Edison informs the Certificate Holders, no more than 25 days after receiving Certificate Holders' draft report, that as a result of changed circumstances since the execution of the Stipulation in Commission Case 10-T-0139 on June 26, 2012, it disputes Certificate Holders' conclusion that they can achieve 1,550 MW of energy deliverability out of the Astoria Annex Substation and into Con Edison's transmission system. In the event that Con Edison takes the position that Certificate Holders cannot meet the 1,550 MW energy deliverability commitment using such facilities, nothing in this Certificate shall limit Certificate Holders' right to propose to meet this deliverability commitment by using an SPS, other operational measures or any other measures, or the right of any party, including Con Edison, to object to the use of such measures. In such circumstances, the Certificate Holders shall include with their report all documentation for the design of any such SPS, other operational measures or other measures, with a complete description of all components and logic diagrams. Prior to delivery of test energy to the Astoria Annex Substation, the Certificate Holders shall provide documentation to DPS Staff that any such measures to be used by the Facility have received all required approvals from all applicable authorities, including without limitation NYISO and NPCC.		
134	In the event the HVDC Transmission System trips offline (other than as a result of any operational measures), the Certificate Holders shall notify DPS Staff, within 1 hour of the incident. Following the incident, the Certificate Holders shall notify DPS Staff, NYPA, and Con Edison of the cause of the trip, and what actions, if any, the Certificate Holders is taking to rectify the cause. The Certificate Holders shall call and report to the Staff of the Bulk Electric Systems Section of the DPS within 6 hours of any transmission related incident that affects the operation of the Facility. The Certificate Holders shall submit a report on any such incident within seven days to the Bulk	CHPE will comply	Section 3.3

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	Electric System Staff, ConEdison, and NYPA. The report shall contain, when available, copies of applicable drawings, descriptions of the equipment involved, a description of the incident and a discussion of how future occurrences will be prevented. The Certificate Holders shall work cooperatively with ConEdison, NYPA, NYISO, NPCC, NYSRC, NERC, and DPS Staff to prevent any future occurrences.		
135	If there is a failure of one of the Facility's cables, the Certificate Holders shall report, within one day of determining the location of the fault, to Bulk Electric System Section of DPS Staff, ConEdison, and NYPA as well as the likely location of and schedule for repairs. Any changes in the schedule shall be reported to DPS Staff, ConEdison, and NYPA.	CHPE will comply	Section 3.3
136	The Certificate Holders shall provide the Bulk Electric System Section of DPS with a copy of their emergency procedures and contacts, and an updated copy shall be provided with documentation of any modifications	CHPE will comply	Section 3.3
137	The Certificate Holders shall report any theft of materials related to the Facility with a value in excess of $10,000 to the DPS Representative within one business day of the time when the theft comes to the attention of the Certificate Holders. The Certificate Holders shall provide the DPS Representative with a list of the stolen items to the extent known and a copy of any police report.	CHPE will comply	Section 3.3
S. Mapping, Land Acquisition, and As-built Drawings for the Facility		**CHPE Response**	**EM&CP Section/Appendix**
138	Each Segment EM&CP shall include a detailed map or maps showing (a) the boundaries of the Construction Zone associated with the work to be performed in connection with such Segment, including access routes, laydown and storage areas, sampling locations, and other relevant places, and (b) the anticipated ultimate location and the anticipated boundary of the Facility ROW and, (c) in the case of overland ROW, areas associated therewith, as follows: (i) areas within which periodic vegetative management may be necessary in order to prevent significant intrusion of	CHPE will comply	Appendix C

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	tree roots into the Facility ROW, (ii) areas within which future ground alteration, structural construction, or other permanent installations by others generally should be precluded in order to protect the Facility and ensure appropriate access thereto for the purposes of repair and maintenance, and, (iii) areas offering (a) continuous longitudinal access along and (b) intermittent linking access from public roads and highways or established railroad access routes to the Facility ROW.		
139	Following final completion of construction of a particular Segment, the Certificate Holders shall prepare and provide to the DPS the as-built design drawings, which shall include a detailed map or maps showing: (a) the boundary of the permanent Facility ROW and areas that will be subject to periodic vegetation management (Final Layout Area), (b) the location of the Facility as installed (As-built Design Drawings). All As-built Design Drawings provided to DPS pursuant to this condition shall include shapefile information compatible with ArcView® GIS Software, and (c) With respect to As-built Design Drawings that relate to installation of the Project on lands owned or controlled by the Canadian Pacific Railway, such As-built Design Drawings shall be provided to DPS staff within 90 days of the completion of construction and shall conform with Section 5.5.5 of the American Railway Engineering and Maintenance-of-Way Association (AREMA) Manual for Railway Engineering, taking into account the fact that such standard is specifically addressed to fiber optic infrastructure. With respect to As-built Design Drawings that relate to installation of the HVDC Transmission System on lands owned or controlled by the CSX Transportation, such As-built Design Drawings shall be provided to DPS staff within 90 days of the completion of construction and shall conform to an appropriate standard that is substantially equivalent in terms of detail to the AREMA standard referenced, and (d) With respect to As-built Design Drawings that relate to submerged portions of the HVDC Transmission System, such As-build Design Drawings shall indicate areas in which the cables are laid in deep waters without cover and areas in which the cables	CHPE will comply	Section 3.3

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	are laid on the bottom but covered, in which case(s) the type of cover (i.e., natural bed material, rip-rap or concrete mattress cover) shall also be described.		
140	Except as may be detailed, justified, and approved by the Department of Public Service pursuant to the EM&CP process, each edge of the permanent overland Facility ROW shall be no closer than (a) when located entirely within lands owned or controlled by a railroad company or a public highway, 6 feet to the outer surface of the nearest installed cable and (b), in all other areas, 8 feet to the outer surface of the nearest installed cable. [as amended in Amendment 1 (March 20, 2020)].	CHPE will comply	Section 1.2 and Appendix C
141	The Certificate Holders shall acquire control of all lands within the overland Final Layout Area by fee, easement, or other appropriate interest and shall perfect, in accordance with New York State law relating to the official recordation of instruments related to land and other possessory interests, their rights to use and occupy such lands for the life of the Facility, as appropriate.	CHPE will comply	Section 4.7

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
142	For each Segment EM&CP that involves municipal lands with respect to which the Certificate Holders cannot acquire control by fee or easement, the Certificate Holders shall provide to the Commission an instrument or instruments confirming that the affected municipality has consented to the use of such lands and shall in any and all events comply with PSL § 68 with respect to exercise of rights conferred pursuant to such consents.	CHPE will comply	Section 4.7
143	For all rights concerning property comprising the Facility ROW, the Construction Zone, off-rights-of-way access, storage or staging areas, or the like, to be acquired, the Certificate Holders shall cause an examination of title (title search) to be conducted in the same manner as would be conducted by a reputable title insurance company to identify all of-record owners, mortgagees, lien holders, lease holders, or others with an interest in such property rights to be acquired. The Certificate Holders shall serve written notice(s) of the EM&CP filing on each such person identified, and on any person owning the land underlying an affected easement or leasehold interest of record. Such notice would include, at a minimum, the procedures and deadlines for submitting comments.	CHPE will comply	Section 3.3, 4.7
144	The Certificate Holders shall not commence any proceedings under the New York State Eminent Domain Procedure Law (EDPL) to acquire any part of the Facility ROW areas temporarily needed areas within the Construction Zone, or off-ROW access until the Commission has approved the relevant Segment EM&CP. To calculate the three-year period for acquisition of property pursuant to the EDPL, the date of Commission approval of a Segment EM&CP covering the affected parcel shall be regarded as the date on which this Article VII proceeding was completed. The Certificate Holders retains all rights afforded them by the New York Transportation Corporations Law and the EDPL.	CHPE will comply	General Requirement Eminent Domain not required in Segment 12
T. Environmental Management and Construction Plan		**CHPE Response**	**EM&CP Section/Appendix**

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
145	Except where the provisions of this Certificate require otherwise, the environmental protection measures contained in the Joint Proposal and the Certificate Holders' Article VII Application, the WQC, the approved EM&CP Guidelines, and the approved BMPs shall be incorporated into the proposed EM&CP and applied during construction, operation, and maintenance of the Facility. Applicable Conditions of this Certificate, approved EM&CP, and orders approving the EM&CP and any Segment EM&CP shall be included in any design, construction, ownership, or maintenance contracts associated with the Facility.	CHPE will comply	Section 1.1
146	The Certificate Holders shall provide, as a part of the proposed EM&CP, a final design plan that conforms with the design of the Facility set forth in this Certificate, applicable federal, state, and local requirements (including, but not limited to, applicable regulations administered by or in connection with the OSHA, NYSDEC, OPRHP, Ag & Mkts, the APA, the Commission, NYSDOT, the Bureau of Alcohol, Tobacco and Firearms, the New York State Department of Labor, and hazardous materials, chemical and waste-storage use and handling regulations).	CHPE will comply	Appendix C
147	The proposed EM&CP shall identify details of nearby electric, gas, telecommunication, water, wastewater, steam, sewer, and related facilities (whether underground, aboveground or underwater) and Measures to protect the integrity, operation, and maintenance of those facilities shall be presented in the EM&CP for each Segment, which shall explain the safety procedures that will be implemented during construction of the Facility	CHPE will comply	Section 13 and Appendices C and R
148	With respect to each Segment EM&CP filed with the Commission and prior to the filing of the same, the Certificate Holders shall: (a) conduct a pre-installation survey that will document the location and condition of CI within the Construction Zone that is the subject of the Segment EM&CP and identify the parties owning and operating such CI and the agencies exercising regulatory jurisdiction over the same; (b) include the results of such survey as a part of such filing; (c) provide a detailed plan setting forth the measures that will be taken by the Certificate Holders to avoid damage to	CHPE will comply	Section 13 and Appendices C and R

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	CI documented in connection with the filing and explaining how any reasonably foreseeable contingency will be met.		
149	The Certificate Holders shall identify black cherry trees located in the Construction Zone near active livestock use areas during the development of each proposed Segment EM&CP. During the clearing phase, such vegetation shall be disposed of in a manner that prevents access by livestock.	CHPE will comply	Section 8
150	In preparing the proposed EM&CP, the Certificate Holders shall consult with the NYSDOH to identify all PWS systems within one mile of the HVDC Transmission System facilities. The Certificate Holders shall consult with the operators or other representatives of each system to obtain information on the location of intake structures, plant operations, raw water quality parameters of concern including turbidity, and appropriate notification procedures. The results of that consultation shall be reported in the proposed EM&CP. The Certificate Holders shall include in their proposed EM&CP justification for any cable installation proposed to occur within 500 feet of a PWS intake and a description of alternative cable installation methods or modified methods (i.e., reduced speed and pressure) of trenching for cable installation in such areas as determined necessary based on information obtained from the PWS.	CHPE will comply	Does not apply to Segment 12.
151	The Certificate Holders shall file copies of the proposed EM&CP as directed by the Secretary, and serve five hard copies and two copies on CD-ROMS on DPS Staff, two copies on the Staff of the NYSDEC in the Central Office in Albany, one copy on each Regional Office of NYSDEC where the Facility is located, one copy on the Commissioner of OPRHP, one copy on staff of the Palisades Interstate Park Commission (if the Segment EM&CP relates to construction that may take place in	CHPE will comply	See cover materials, affidavits of service, and Appendix B.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	Rockland County), one copy on the Staff of NYSDAM, one copy on NYSDOT in the Central Office in Albany and one copy on each municipality and Regional Office of NYSDOT where the relevant portion of the Facility is located (if requested by such municipality or NYSDOT), one copy on NYSDOS, one copy on any other New York State agency (and its relevant regional offices) that requests the document, and one copy on active parties on the service list who request the document (in the case of a municipality, such service shall be directed to the chief executive officer thereof). Service upon state agencies shall be in the same manner and at the same time as filing with the Secretary. The Certificate Holders also shall place electronic or hard copies for inspection by the public on an internet website and in at least one public library or other convenient location in each municipality in which the construction authorized in that portion of the EM&CP will take place. Contemporaneously with the filing and service of the proposed EM&CP, the Certificate Holders shall provide notice, in the manner specified below, that the proposed EM&CP has been filed.		
152	The Certificate Holders shall serve written notice(s) of the filing of the proposed EM&CP or Segment EM&CP on all parties to this proceeding, as well as the relevant railroads and CI owners whose facilities, properties, and/or structures within the geographic scope of that portion of the EM&CP that may be impacted, including but not limited to tracks and devices, and shall attach a copy of the notice so served to each copy of the proposed EM&CP or Segment EM&CP. Further, the Certificate Holders shall publish the notice(s) in a newspaper or newspapers of general circulation in the vicinity of the Segment(s) to which the EM&CP relates.	CHPE will comply	Section 3.3 and Appendix B

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
153	The Certificate Holders shall provide notice that the EM&CP is available for review to the chief executive officer of each affected municipality and to residents, businesses, and building, structure, and facility owners and, to the extent known, operators of the same when such land uses are located within 100 feet of the HDD staging areas, off-ROW construction access roads, and the overland components of the Facility. The notice shall include, in plain language: (i) details about the planned work locations; (ii) hours and duration of activities; (iii) provisions for protection of properties, if applicable; (iv) provisions for maintenance and protection of pedestrian and vehicle access to buildings and properties; (v) identification of locations where additional information and copies of the EM&CP are available; (vi) contact information for Certificate Holders personnel, including a toll-free number; and (vii) instructions on how comments regarding construction plans and mitigation measures may be filed with the Secretary, indicating appropriate deadlines for commenting and contact information. The Certificate Holders shall also provide a hard copy synopsis of any approved Segment EM&CP for residents owning property located within 100 feet of the Construction Zone as delineated therein. Such synopsis shall include a hard copy page(s) from the approved Segment EM&CP that may have relevance to the resident's property. Proof of notice to residents, businesses, and building and structure owners shall be provided to the Secretary.	CHPE will comply	Section 3.3 and Appendix B
154(a)	The Certificate Holders shall provide notice to residents, businesses, and building, structure, and facility (including underground, aboveground and underwater facilities) owners and operators within 100 feet of any HDD staging area or trenching activity with an offer to inspect foundations before, during, and after construction. The notice provided shall include the following provisions: (i) an offer to inspect building, facility, and structure foundations before, during, and after construction; (ii) an explanation of the benefits of such inspections and what documentation will be provided to building or facility or structure owners and operators; and (iii) proof of notice to residents, businesses, and building, facility, and structure owners and operators shall	CHPE will comply	Section 3.3, 4.1; and Appendix B

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	be provided to the Secretary. Proof of notice shall accompany filing of the proposed EM&CP.		
154(b)	Inspections of building foundations conducted for residents, businesses, and building, facility, or structure owners or operators, or for which Certificate Holders reimburses such costs expended by any such individuals for this purpose, shall (i) provide each building, facility, or structure owner or, to the extent known, operator with documented conditions at each significant stage of construction; (ii) include photographs of any existing and post-construction damage and document measurements of foundation crack lengths during each inspection phase; (iii) provide each building, facility, and structure owner/operator a report detailing foundation condition findings; and (iv) provide a copy of each prepared report to DPS Staff within 30 days of completion.	CHPE will comply	Section 3.3, 4.1
154(c)	HDD site preparation or trench excavation work shall not commence until all building, facility, and structure owners and operators provided with notice under subpart (b) above have accepted or declined inspection offers, or a response has not been received within two weeks from service.	CHPE will comply	Section 4.1
155(a)	The written notice(s) and the newspaper notice(s) of filing the proposed EM&CP or Segment EM&CP shall contain, at a minimum, the following: (1) a statement that the proposed EM&CP has been filed; (2) a general description of the Facility and the proposed EM&CP; (3) with respect to the written notice(s) for identified persons with a record interest in property to be acquired or significantly disturbed by construction, a specific description of the ROW of the Facility, as applicable, temporarily needed areas within the Construction Zone, or off ROW access to be acquired; (4) a listing of	CHPE will comply	Section 3.3 and Appendix B

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	the locations where the proposed EM&CP is available for public inspection; (5) a statement that any person desiring additional information about a specific geographical location or specific subject may request it from the Certificate Holders; (6) the name, address, and telephone numbers of an appropriate Certificate Holders representative; (7) the address of the Secretary; and (8) a statement that any person may be heard by the Commission on any matter or objection regarding the proposed EM&CP by filing written comments with the Secretary and the Certificate Holders within 30 days of the date the proposed EM&CP was filed with the Commission (or within 30 days of the date of the newspaper notice, whichever is later).		
155(b)	A certificate of service indicating upon whom all EM&CP notices and documents were served and a copy of the written notice shall be filed with the Secretary at the time the proposed EM&CP is filed, and shall be a condition precedent to approval of the EM&CP.	CHPE will comply	Section 3.3 See cover materials, affidavits of service to be filed as soon as available.
156(a)	For the overland portions of the Facility, construction outside the Allowed Deviation Zone, to the minimum extent necessary, as detailed and justified in an EM&CP submittal, shall be allowed for appropriate environmental or engineering reasons, except where a conflict with a specific provision of this Certificate would be created.	CHPE will comply	Section 1.3 and Appendix E
156(b)(1)	For the HVDC Transmission System installed in Lake Champlain and the Hudson River, the Allowed Deviation Zone shall be anywhere within those bodies of water where the water depth exceeds 20 feet at mean low water, and where installed in the Harlem and East Rivers the Allowed Deviation Zone for the HVDC Transmission System shall be anywhere where the water depth exceeds 10 feet at mean low water, provided however that: (1) Where the HVDC Transmission System Centerline enters any of the Exclusion Zones identified on the maps contained in Appendix B to the Joint Proposal, the Allowed Deviation Zone shall be limited to 150 feet on either side of the Facility Centerline. The Certificate Holders' rights to enter into such Exclusion Zones are as	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	follows: Prior to installation in these areas, the Certificate Holders shall provide in the EM&CP an analysis as to whether there are any reasonable and feasible underwater alternatives outside of the Exclusion Zones that would allow for burial at the target depth of 6 feet. No deviation in the Centerline may cause the HVDC Transmission System to enter into any of the Exclusion Zones identified in that Appendix B without (a) the Certificate Holders providing in the EM&CP an analysis that there are no other reasonable and feasible alternatives that would allow for achieving the target burial depth of 6 feet and (b) the written consent of NYSDEC. In the event the Certificate Holders is unable to agree on a change to the Centerline governed by this subpart, the Certificate Holders shall be free to file an application for an amendment to this Certificate setting out their proposed new Centerline and the environmental and engineering considerations underlying that proposal;		
156(b)(2, 3,&4)	(2) No deviation of over 150 feet in the Centerline may cause the HVDC Transmission System to come within 160 feet of any instance of "Lake Champlain Maritime Museum ("LCMM")/CHPE Marine Route Survey Cultural Resources" identified in Appendix B to the Joint Proposal without (a) the Certificate Holders providing in the EM&CP an analysis that there are no other reasonable and feasible alternatives; and (b) the written consent of the New York State Historic Preservation Office (NYSHPO). In the event that the Certificate Holders and NYSHPO are unable to agree on a change to the Centerline governed by this subpart, the Certificate Holders shall be free to file an application for an amendment to this Certificate setting out their proposed new Centerline and the environmental and engineering considerations underlying that proposal; and (3) No deviation of more than 150 feet in the Centerline may cause the Facility to be located or relocated within any Significant Coastal Fish & Wildlife Habitat identified in the NYS Coastal Management Program without: a. the Certificate Holders providing in the EM&CP an analysis that there are no other reasonable and feasible alternatives that would allow for achieving the target depth of cover of 6 feet; b. the written consent of NYSDEC. In the event that the Certificate Holders and	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	NYSDEC are unable to agree to a change in the Centerline governed by this subpart, the Certificate Holders shall be free to file an application for an amendment to this Certificate setting out their proposed new Centerline and the environmental and engineering considerations underlying that proposal; c. a written statement from NYSDOS stating that the deviation would not result in coastal effects that differ significantly from the coastal effects reviewed by NYSDOS in Certificate Holders' original federal Coastal Consistency Certification. In the event that NYSDOS determines that such deviation would result in coastal effects that differ significantly from those reviewed in the Coastal Consistency Certification, the Certificate Holders shall seek a written concurrence from NYSDOS for any such project changes that would require an amendment to the Certificate Holders' Coastal Consistency Certification. Nothing in this Certificate shall be construed to limit or expand any rights Certificate Holders may have to seek administrative or judicial review of any action or inaction by NYSDOS relating to any such deviation; and (4) No significant increase in adverse effects to CI or other infrastructure results from proposed facility relocation.		
157	All deviations from the design depth, height, and location of facilities or structures shall be presented in the proposed EM&CP for approval. An explanation for the proposed deviations shall be provided, with supporting documentation. Deviations shall be allowed for appropriate environmental or engineering reasons without modification to this Certificate, except where a conflict with a specific provision of this Certificate would be created. If a deviation is proposed after approval of the EM&CP, the procedures contained in CC 158 of this Certificate shall apply.	CHPE will comply	Section 1.3 and Appendix E
158	The EM&CP approved by the Commission may incorporate modifications from the EM&CP proposed by the Certificate Holders. No change to the approved EM&CP may thereafter be made except in accordance with the following procedures:	CHPE will comply	Section 3.2.6 and Appendix E
158(a)	For a proposed change that: (i) would involve a site listed or eligible for listing on the New York State or National Register of Historic Places, the Certificate Holders shall	CHPE will comply	Section 3.2.6

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	give at least two weeks prior notice to the Field Service Bureau of OPRHP; (ii) would involve any state-regulated wetland or protected stream or water body, the Certificate Holders shall give at least two weeks prior notice to NYSDEC, and, if within the Adirondack Park, to APA; (iii) would affect the occupied habitat of a TE species, the Certificate Holders shall give at least two weeks prior notice to NYSDEC and to the USFWS or NMFS (where applicable) prior to providing notice to DPS staff of the proposed change; (iv) would affect the individual or habitat supporting RTE plants, the Certificate Holders shall give at least two weeks prior notice to NYSDEC and DPS; (v) would involve agricultural land, the Certificate Holders shall give at least two weeks prior notice to NYSDAM; (vi) would involve the herbicides planned for use (including mixed proportions, additives or method of application), the Certificate Holders shall give at least 30 days prior notice to NYSDEC; (vii) would affect land or water owned or controlled by CNY, the Certificate Holders shall give at least two weeks prior notice to CNY.		
158(b)	The Certificate Holders shall report any proposed changes to the EM&CP to DPS Staff. DPS Staff will refer to the Commission for approval any proposed changes that cause a substantial increase in environmental impact, after consultation with NYSDEC, any proposed changes that relate to contested issues decided during the proceeding, and any proposed changes affecting State highways (but need not do so if the report indicates NYSDOT's agreement to such proposed changes). DPS Staff is authorized to approve all other proposed changes, in accordance with the procedure outlined herein, and will submit reports of such changes to the Secretary or the Secretary's designee, which reports will be posted on the Commission's website under this case number.	CHPE will comply	Section 3.2.6

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
158(c)	Upon being advised that DPS Staff will refer a proposed change to the Commission, the Certificate Holders shall notify all active parties that have requested to be so notified, as well as property owners or lessees whose property is affected by the proposed change. The notice shall: (i) describe the original conditions and the requested change; (ii) provide documents supporting the request; and (iii) state that persons may comment by writing to the Commission within 21 days of the notification date.	CHPE will comply	Section 3.2.6
158(d)	The Certificate Holders shall not execute any proposed change until they receive written approval from the Commission (if Commission approval is required pursuant to subparagraph (a) of this paragraph) or oral or written approval from DPS Staff (in the case of a change that Staff has authority to approve) except in emergency situations threatening personal injury, property damage, or severe adverse environmental impact, or as specified in the EM&CP. When the Certificate Holders has obtained oral approval from DPS Staff for a change, DPS Staff will confirm such approval in writing within 10 business days.	CHPE will comply	Section 3.2.6
159	The EM&CP and, as and when appropriate, a Segment EM&CP and any proposal to modify the EM&CP or a Segment EM&CP shall address, but not be limited to, the following information:	CHPE will comply	All sections and appendices of the EM&CP
159(a)	details of work site dimensions; construction ROW and off-ROW access needs and locations; locations and descriptions of work scheduled or planned by others in the vicinity of the construction identified after consulting relevant federal, state, and city agencies; and measures to protect adjacent facilities, structures and vegetation;	CHPE will comply	Section 12, 13 Appendix C
159(b)	documentation of methods to meet the requirements of this Certificate and incorporation of appropriate engineering standards, regarding existing road, bridge, and culvert conditions;	CHPE will comply	Section 12, Section 13, Appendices C and R

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
159(c)	location of the utility, water, steam, sewer, and wastewater crossings and other nearby utility facilities, including CI facilities, and methods for protecting the cable and other facilities, including CI facilities, at those crossings and nearby locations; the plan shall include detailed construction techniques, methods, and equipment descriptions for the protection of existing utilities including, but not limited to, how damage to existing utilities will be avoided and how any contingency will be met in case damage does occur, and for coordination with utilities and public service providers;	CHPE will comply	Section 12, 13, and Appendices C and R
159(d)	detailed construction schedule and coordination plans, including those in connection with other utility owners and operators with respect to any work on the Facility for which coordination is required by this Certificate or other related agreement(s), including construction calendar;	CHPE will comply	Section 1.1 and 13
159(e)	each construction activity as discussed in CC 58;	CHPE will comply	Section 3.2
159(f)	a comprehensive plan to identify encroachments within the Construction Zone as discussed in CC 60;	CHPE will comply	Section 4.7
159(g)	an HDD work packet providing planning, installation controls, and site measures that will be taken in accordance with good engineering practices; including relevant information and deliverables described in Section 8.1 of the BMPs;	CHPE will comply	Appendix J
159(h)	Jet-plow and shear plow techniques and adjustments, including details related to crossing existing underwater facilities and infrastructure;	CHPE will comply	Does not apply to Segment 12
159(i)	a work plan for dredging activities including specific practices to be used during dredging, dredged materials management plans, and proof of the ability to provide proper disposal;	CHPE will comply	Does not apply to Segment 12
159(j)	drawings and specifications of any closed environmental bucket or other dredging equipment, including specifications demonstrating that appropriate design considerations are incorporated in equipment selected for deployment;	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
159(k)	a pre-installation and post-energizing sediment sampling and monitoring plan, which plan will be subject to review and comment by NYSDEC and NYSDOS and will adhere to the following specifications: the plan will correspond to Attachment 2 of this Certificate, Benthic and Sediment Monitoring Scope of Study. The plan submitted to DPS Staff for approval shall include the results of the consultation with NYSDEC and NYSDOS;	CHPE will comply	Does not apply to Segment 12
159(l)	details of cable pulling and splicing plans that include locations of any spare conduits that will be installed;	CHPE will comply	Appendix C
159(m)	Nighttime construction provisions, including lighting and noise control, and mitigation measures, including conditions when nighttime construction will be undertaken;	CHPE will comply	Section 10
159(n)	public road traffic control and public safety and the MPT plans as discussed in Condition 39;	CHPE will comply	Appendix C
159(o)	details regarding street work, including provisions for minimizing the duration and extent of open excavation, traffic disruptions, and work within and adjoining public streets and public street ROW;	CHPE will comply	Appendix C
159(p)	public safety control provisions including practices for work near residential and publicly accessible sites; fencing around open work areas, and provisions for through traffic, and alternative access;	CHPE will comply	Appendix C
159(q)	designated parking areas and equipment storage and staging locations;	CHPE will comply	Section 4.10, 5.4 and 5.5, Appendix C
159(r)	details for drainage line repair procedure and drawings in the event of a crushed or severed drain lines;	CHPE will comply	Does not apply to Segment 12
159(s)	provision for submission of a certification by a professional engineer licensed by the State of New York stating that, if constructed in accordance with the final design plans, the Facility shall, to the extent applicable, comply with the interim electrostatic field standard established by the Commission in Opinion No. 78-13 (issued on June 19, 1978 in Cases 26529 and 26559) and the limit for magnetic fields set in the	CHPE will comply	Appendix C (for professional engineer's certification); with regard to the EMF

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities (issued on September 11, 1990, in Cases 26529 and 26559) or with any standard test that has superseded these standards at the time of consideration by the Commission of the EM&CP or a particular Segment EM&CP;		calculations for the Facility, see Exhibits B, C and D and Appendix A and B to the Certificate Holders' January 29, 2021 *Petition for an Amendment to Certificate of Environmental Compatibility and Public Need* (DMM Item 819)
159(t)	a work plan for reducing magnetic fields, which will include documentation of the calculation of anticipated average magnetic field levels, overland and underwater with the Facility in operation;	CHPE will comply	See Exhibits B, C and D and Appendix A and B to the Certificate Holders' January 29, 2021, *Petition for an Amendment to Certificate of Environmental Compatibility and Public Need* (DMM Item 819)

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
159(u)	impact avoidance and/or minimization measures for regulated wetlands, streams, and other environmental resources including any maps and plan drawings of streams, regulated wetlands, and sensitive habitat crossing locations, site-specific stream-crossing techniques for the construction of the Facility and for the construction of any access roads to be used for such construction, and selective vegetation-clearing techniques in areas near streams or regulated wetlands;	CHPE will comply	Section 9
159(v)	measures consistent with this Certificate, the Joint Proposal, the BMPs, and the EM&CP Guidelines to avoid and/or minimize impacts to TE species and RTE plants and their occupied habitat;	Segment 12 is not located within this resource.	Section 9.3
159(w)	work plan for measures to be taken for protection of vegetation and visual resources of the Lakes to Locks Passage Scenic Byway (State Highway 22);	CHPE will comply	Does not apply to Segment 12.
159(x)	a notice of intent to exercise authority under the SPDES General Permit for construction activities;	CHPE will comply	Appendix G
159(y)	details of erosion control plans, including grading and filling at the overland Construction Zone, Converter Station, and substation, so as to provide for the control of discharges incidental to the construction of the Facility, including to stormwater, groundwater, and surface waters, and meet applicable water quality standards;	CHPE will comply	Appendix G and C
159(z)	methods to avoid the effects of sediment on nearby facilities and infrastructure, including avoidance techniques with respect to the clogging of outfalls and diffusers;	CHPE will comply	Appendix G and C
159(aa)	spoil control plans for excavations, including for any materials proposed for use as backfill in the underwater or overland route, identification of its source and the evaluation of its suitability;	CHPE will comply	Appendix C
159(bb)	a blasting plan that includes the information described in the BMPs;	CHPE will comply	Does not apply to Segment 12
159(cc)	work plan for storage of all petroleum products and hazardous chemicals which may be used during, or in connection with, the construction, operation, or maintenance of the Facility, fuel and fluids spill prevention and control plans;	CHPE will comply	Section 5.6 and Appendix K SPCC

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
159(dd)	work plans for responding to and remediating the effects of any spill of petroleum products or hazardous substances that occurs during construction of the Facility on land or in the water in accordance with applicable federal and state laws, regulations, and guidance, which shall include proposed methods of handling spills of petroleum products and any chemicals that may be stored or utilized during the construction, operation, or maintenance of the Facility;	CHPE will comply	Section 5.6 and Appendix K SPCC
159(ee)	plans for pre- and post-installation bathymetry, sediment, benthic invertebrate, fish, temperature, and magnetic field surveys as described in Condition 163, and mitigation;	CHPE will comply	Does not apply to Segment 12
159(ff)	a plan for suspended sediment and water quality monitoring consistent with Attachment 1 of this Certificate, Suspended Sediment and Water Quality Plan Scope of Study, for jet and shear plow activities, as well as removal of large debris with an area greater than 900 square feet or longer than 30 feet in any direction;	CHPE will comply	Does not apply to Segment 12
159(gg)	invasive species control measures during construction;	CHPE will comply	Section 9.4 and Appendix N
159(hh)	appropriate measures as proposed in Karner blue butterfly (Lycaeides melissa samuelis) Impact Avoidance and Minimization Report attached to the Joint Proposal as Exhibit 109;	This resource is not located in Segment 12.	Does not apply to Segment 12
159(ii)	United States Coast Guard Notice(s) to Mariners during the occupation of any surface waters of the State of New York which may present a hazard or obstacle to safe navigation;	CHPE will comply	Does not apply to Segment 12
159(jj)	other mitigation measures as appropriate to demonstrate compliance with other permits and approvals;	CHPE will comply	Section 9.1, 9.2, 9.3, Appendix M and N
159(kk)	plans and specifications for site and pavement restoration, including pre-existing drainage systems;	CHPE will comply	Section 14.2 and Appendix C
159(ll)	noise mitigation plan for noise-sensitive sites showing the locations of residential areas and other noise-sensitive areas along the proposed ROW of the Facility and the	CHPE will comply	Section 10.1 and Appendix C

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	specific procedures to be followed to minimize noise impacts related to ROW clearing, facility construction, and operation for the Facility;		
159(mm)	mitigation measures that will be employed should significant concentrations of waterfowl be encountered during fall migration when construction is proposed near the following SCFWH: Germantown-Clermont Flats, The Flats, Roundout Creek, Esopus Meadows, Vanderburgh Cove and Shallows, Constitution March, and Iona Island Marsh;	CHPE will comply	Does not apply to Segment 12
159(nn)	plans for use of roadways for the delivery of oversized loads in the event that transportation of oversize loads by road is required. The Certificate Holders shall obtain any necessary governmental permits associated with transport of such oversized loads and provide copies of such permits to the Secretary;	CHPE will comply	Appendix C addresses the Plans. Any applicable permits will be submitted as issued.
159(oo)	a plan for responding to and remediating the effects of any spill of petroleum or any hazardous substances that occurs during the construction of the Facility, in accordance with applicable state and federal law and regulations. Such plan shall be developed in accordance with such applicable laws and regulations and relevant official guidance and shall include proposed methods of handling spills of petroleum products and any hazardous substances which may be stored or utilized during construction, operation, or maintenance of the Facility;	CHPE will comply	Appendix K
159(pp)	For excavations in proximity to buildings, walls, or other structures: (i) a description of the support system method for each such location where support is determined to be necessary; (ii) the rationale for each such location where it is determined that support systems are unnecessary; and (iii) support system designs for each location where it is determined that support is necessary; designs shall demonstrate approval by a registered professional engineer licensed in New York State.	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
159(qq)	For excavations that will be below the level of the base or footing of any foundation or retaining wall: (i) a list of all locations where excavation below the base or footing of any structure is considered necessary; (ii) a description of the support system method for each such location where support is determined to be necessary; (iii) the rationale for each such location where it is determined that support systems are unnecessary per OSHA Requirements 1926.651(i)(2)(ii), 1926.651(i)(2)(iii), and 1926.651(i)(2)(iv); and (iv) support system designs for each location where it is determined that support is necessary; designs shall demonstrate approval by a registered professional engineer licensed in New York State.	CHPE will comply	Does not apply to Segment 12
160	The Certificate Holders shall also include in the proposed EM&CP a Compliance Assurance Plan that includes but is not limited to: (a) The name(s) of the inspector(s) selected under Condition 53 and a statement of qualifications for each inspector demonstrating sufficient knowledge and experience in environmental and construction matters to complete the inspections and audits; (b) Provision for deployment of more than one of a particular type of inspector (or types of inspectors, when appropriate) in the event that two or more major construction operations are undertaken simultaneously in areas separated by ordinary highway driving of more than 3 hours, such that at least one inspector of a particular type shall be assigned to each such separated construction area; (c) A proposed checklist of matters to inspect for compliance, including the specific items or locations to be inspected, the inspection to be employed such as visual, auditory, testing by instrument, and acceptability criteria to be applied by the inspector(s); (d) A procedure setting forth how the Certificate Holders shall respond to and correct problems found by the inspector(s); (e) A procedure setting forth how the Certificate Holders shall respond to and correct problems identified by any utility owners or operators whose property has been damaged in any material way as a result of the construction, operation, or maintenance of the Facility; (f) A schedule for monthly environmental audits during construction and submission of audit checklists, together with a written explanation	CHPE will comply	Appendix F

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	of problem(s), signed by the independent inspectors and an authorized representative of the Certificate Holders, to DPS Staff and NYSDEC; and (g) A schedule for submission of annual environmental audits during the first two years of operation of the Facility to DPS Staff, NYSDEC, and specified state and municipal agencies.		
161	The Certificate Holders shall also include in the EM&CP: (a) An immediate post-installation inspection plan that shall include at a minimum: (i) the method for determining the actual cable location and actual burial depth of the cable upon completion of installation; (ii) standards to be used to determine what remedial actions are warranted consistent with Good Utility Practices (e.g., additional burial and/or protection efforts) in all locations where the cable burial depth is less than the applicable target burial depth; (iii) standards to be used to determine if any damage has been or will be caused to any pre-existing facility and/or infrastructure as a result of cable installation, operation, or maintenance, and remedial measures therefore; and (iv) the method and timing for undertaking such efforts; and (b) A maintenance and emergency action plan that shall include, at a minimum, (i) a schedule for periodic verifications, not to exceed three years for overland locations and five years for underwater locations, of the depth of burial of the cable and the standard to be used to determine, based upon inspection results, whether, and if so, what relocation, reburial, and/or added protection measures for the cable or pre-existing facilities or infrastructure are required; (ii) ROW vegetation maintenance plan; (iii) provisions for stabilizing erosion and resolving drainage problems; and (iv) control of access to the ROW and facility components.	CHPE will comply	Section 3.2, Appendix F
162	In order to protect CI described in CC 27, the Certificate Holders shall include in the EM&CP:	CHPE will comply	Section 12.0, 12.3, and Appendix R
162(a)	an interference study, conforming to industry standards and performed by an individual or individuals with suitable qualifications to conduct such study, with respect to each location at which the Facility crosses CI or comes into such proximity	CHPE will comply	Section 13.1,

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	to CI that an interference study is warranted by Good Utility Practices, and specifying any proposed mitigation measures;		
162(b)	a study to determine whether the Facility may have corrosive effects on any CI, conforming to industry standards and performed by individual(s) with suitable qualifications to conduct such study, and specifying any proposed mitigation measures;	CHPE will comply	Appendix P
162(c)	detailed cable ampacity and thermal calculations and documentation demonstrating that CI will not be adversely affected by the construction, operation, or maintenance of the Facility; such documentation shall include study results, calculations, and underlying assumptions used in the analysis and also to include, but not be limited to, cable specification, installation cross sections, thermal resistivity (tested or assumed) and, in the case of alternating current (AC) lines only, magnetic field studies;	CHPE will comply	Appendix Q
162(d)	detailed calculations and documentation demonstrating that CI will not be adversely affected by the weight and installation methodology of the Facility's cables; such calculations and documentation shall respond to and address study results and shall set forth the underlying assumptions used in the analysis and shall also include, but not be limited to, cable specification, installation cross sections, geotechnical data (tested or assumed), and proposed mechanical protection;	CHPE will comply	Section 13.1,
162(e)	in the event that a Segment EM&CP proposes that the HVDC Transmission System is to cross CI located on or below the beds of the Hudson, Harlem, or East Rivers or Lake Champlain (Submerged CI), any such Segment EM&CP shall include: (i) a technical and economic analysis and documentation (including supporting information) comparing the installation of the Facility both over and beneath such Submerged CI; (ii) a detailed explanation of Certificate Holders' plans for maintaining the existing mechanical protection of any Submerged CI during and after installation of the HVDC Transmission System's cables, including a discussion of the type and replacement of	CHPE will comply	Does not apply to Segment 12

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	thermal sands; (iii) a demonstration based on the final design of the HVDC Transmission System of the manner in which the owners or operators of such Submerged CI would have access to repair and/or maintain its Submerged CI; (iv) where requested by the Designated Representative of the owner(s) or operator(s) of such Submerged CI, Certificate Holders shall make reasonable efforts to ensure that the route of the HVDC Transmission System is designed to cross such Submerged CI at an angle which is as close to a right angle on the horizontal as is practicable having due regard to other route requirements; and		
162(f)	documentation showing that there will be no material interference with the ability of the owners and/or operators of any CI crossed by, or in proximity to, the Facility, to repair, operate, or maintain such CI as a result of the construction, operation, or maintenance of the Facility;	CHPE will comply	Section 13.1, Appendix R
162(g)	a full description of all measures that will be employed by Certificate Holders to protect all CI that may be affected by the construction, operation, or maintenance of the Facility, including, but not limited to, detailed construction techniques and methods, equipment descriptions, an explanation of how any contingency will be met in case damage does occur, and procedures for coordination with utilities and public service providers;	CHPE will comply	Section 13.1, 13.2, 13.3 and Appendix C
162(h)	protocols for performing repair and maintenance work on the Facility in proximity to CI;	CHPE will comply	Section 13, Appendix F and R
162(i)	documentation showing agreement by the owners and/or operators of affected CI with both Certificate Holders' construction schedule for operations in the vicinity of such CI and the measures described in the EM&CP documents relating to such CI or a description of those aspects of the proposal that are disputed, and a discussion of the positions taken by the Certificate Holders and the owners and/or operators of the CI;	CHPE will comply	Section 13, Appendix R

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
162(j)	documentation showing agreement by CNY that CI owned or operated by CNY, whether located within the boundaries of CNY or elsewhere, has been adequately identified and protected or a description of those aspects of Certificate Holders' proposal that are disputed and a discussion of the positions taken by the Certificate Holders and CNY; and	CHPE will comply	Does not apply to Segment 12
162(k)	A decommissioning plan setting forth steps to be taken in the event that the Facility is permanently de-energized.	CHPE will comply	Section 3.5
163	Within six months after issuance of this Certificate, the Certificate Holders shall submit to the DPS Staff for review, comment, and approval in consultation with NYSDEC and the NYSDOS, detailed Standard Operating Procedures (SOPs) for compliance monitoring studies to be conducted in the Hudson River. The SOPs shall be consistent with the Scopes of Study attached to this Certificate: § Benthic and Sediment Monitoring Scope of Study (Attachment 2 to this Certificate) § Bathymetry, Sediment Temperature and Magnetic Field Scope of Study (Attachment 3 this Certificate) § Atlantic Sturgeon Pre-Installation and Post-Energizing Hydrophone Scope of Study (Attachment 4 to this Certificate)	CHPE will comply	Does not apply to Segment 12
164	The approved SOPs required by Condition 163 shall be incorporated into the EM&CP or first Segment EM&CP that proposes to perform cable installation in the Hudson River and completion of the studies as defined by the approved SOPs shall be a requirement of this Certificate.	CHPE will comply	Does not apply to Segment 12; will be addressed in first segment EM&CP which proposes cable installation in the Hudson River
U. Environmental Trust		**TDI Response**	**EM&CP Section/Appendix**

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
165	The Certificate Holders shall establish the Hudson River and Lake Champlain Habitat Enhancement, Restoration, and Research/Habitat Improvement Project Trust ("the Trust") solely for the purposes of protecting, restoring, and improving aquatic habitats and fisheries resources in the Hudson River Estuary, the Harlem and East Rivers, Lake Champlain, and their tributaries, in order to minimize, mitigate, study, and/or compensate for the short-term adverse aquatic impacts and potential long-term aquatic impacts and risks to these water bodies from Facility construction and operation and for the administration of the Trust to the extent expressly authorized in these Certificate Condition.	CHPE has complied. See DMM Items 746, 750, 753, 848, and 879.	Does not apply to Segment 12; no further discussion provided.
165(a)	Certificate Holders shall file an agreement providing for the establishment of the Trust (the Trust Agreement) within 120 days after issuance of this Certificate. The trustee selected by Certificate Holders to oversee the Trust (the Trustee) shall be, or shall be associated with, a bank accredited by and doing business in the State of New York. Both the Trust Agreement and the selection of the Trustee shall be subject to review and approval by the Commission (in consultation with NYSDEC) and, if required, the New York State Comptroller, and Attorney General.	CHPE has complied. See DMM Item 879.	Not within the scope of the EM&CP.
165(b)	Within 30 days of the Closing, the Certificate Holders shall endow the Trust with an interest-bearing account established at the Trustee bank, with a first payment of $2.5 million. [Trust payment schedule revised by Amendment 6 (March 16, 2022), creating a new Table 2 for payments during Construction and Operations]	CHPE has complied.	Does not apply to Segment 12; is addressed in separate filings to the PSC.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
165(c)	Within 30 days of the Closing, Certificate Holders shall prepare and file with the Commission for its approval a written agreement to govern the administration and operation of the Trust (the Governance Agreement). The Governance Agreement shall: (i) provide that the funding commitments of the Certificate Holders will be fixed in accordance with Table 2 attached hereto and the terms stated in this condition, and that they will not be increased for any reason or decreased except as provided for in subsections (d)(vii) and (d)(ix) of this Certificate Condition; (ii) establish a Governance Committee consisting of: Certificate Holders; DPS Staff; NYSDEC; NYSDOS; CNY; APA; the New York State Council of Trout Unlimited; Riverkeeper, Inc.; and Scenic Hudson, Inc.; (iii) authorize the Governance Committee to meet prior to COD to perform the preliminary work required to implement the Trust, including consideration of whether to use a third-party administrator (the Administrator) to assist in the conduct of its business and for the administration of the Trust for tasks including but not limited to developing: (a) cash flow schedules for the Trust expenditures; (b) measures to track administrative costs; and (c) associated auditing and reporting tasks; (iv) permit the Governance Committee to retain an Administrator, if desired by the Governance Committee, and to compensate the Administrator (if any) from monies available in the Trust; (v) provide that members of the Governance Committee other than Certificate Holders will not be obligated to pay into the Trust and that no member of the Governance Committee, including Certificate Holders, shall be obligated to directly fund or perform any of the responsibilities of the Trustee, including compensation of the Trustee or the Administrator; (vi) obligate the Trust to indemnify and hold harmless all members of the Governance Committee, including Certificate Holders, from liability for any and all actions and/or inactions of the Trustee, the Administrator (if any), or any representative(s) of any of them; (vii) provide that the studies, projects and activities listed in Attachment 5 hereto totaling approximately $32.4 Million (the Priority Projects) satisfy the requirements of this Certificate Condition and shall be implemented by the Administrator (or by the	CHPE has complied.	Does not apply to Segment 12; is addressed by separate filings to the PSC.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	Trustee if no Administrator has been selected) pursuant to a schedule to be developed by the Governance Committee in order to meet the primary objectives of the Trust during its initial implementation phase. The Governance Committee, by a three quarters vote, may determine, on the basis of changed circumstances, that a Priority Project should not be implemented; and (viii) provide that the Governance Committee shall be empowered to approve all expenditures of the monies of the Trust, provided however that no more than 75% of the monies to be provided by Certificate Holders to the Trust in any year may be designated for such Priority Projects during the first 15 years of the Trust's existence or until the Priority Projects have been completed; and (ix) require the Administrator (or the Trustee if no Administrator has been selected) to maintain a clear written record identifying any criteria and justification for the decisions of the Governance Committee and for all expenditures by the Trust itself.		
165(d)(i)	The Governance Agreement shall further require that: the Governance Committee shall manage the Trust so that, over the life of the Facility, the monies of the Trust will be able to support additional studies, projects, or activities that may result from (a) the Priority Projects, (b) studies to be agreed to at a later time by the Governance Committee, or (c) information produced by the Governance Committee, consistent with the criteria set forth in this CC 165;	CHPE has complied.	Does not apply to Segment 12; is addressed by separate filings to the PSC.
165(d)(ii)	the Governance Committee shall manage the Trust so that money remains available for future projects that were not identified in this Certificate and, from time to time, project ideas shall be solicited from the Governance Committee's members, other Federal and State Agencies or municipalities, individuals, and organizations located along the route of the Facility, provided these ideas are consistent with the purposes of the Trust and approved by the Governance Committee;	CHPE will comply	Does not apply to Segment 12; is addressed by separate filings to the PSC.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
165(d)(iii)	projects and activities approved by the Governance Committee for funding shall not replace natural resource management programs funded by the General Fund of the State of New York or NYSDEC Environmental Programs, meet an obligation of the State of New York or any other party to this proceeding, or replace funding for the operation and maintenance of any project not previously funded by the Trust. The Governance Committee may, however, authorize the Administrator (or the Trustee if no Administrator has been selected) to use the monies of the Trust to carry out additional or new activities that are part of or are consistent with applicable State and Federal resource management and land use plans;	CHPE will comply	Does not apply to Segment 12; is addressed by separate filings to the PSC.
165(d)(iv)	studies, projects or activities to be financed by the Trust shall have a nexus to the Facility and shall include, but not be limited to: (a) habitat restoration, enhancement, or protection; (b) habitat research; (c) fish and wildlife species restoration, enhancement, or protection; (d) stewardship activities including additional or new activities, formally adopted by the Governance Committee, that are part of or are consistent with applicable State and Federal resource management and land use plans; (e) water quality improvement (excluding projects eligible for funding under the Clean Water State Revolving Fund); and (f) scientific or administrative support to ensure coordination of Trust projects with each other and externally funded research, restoration, and stewardship projects; delivery of final products; review of reports, data sets, and metadata; and placement of project results and data to insure public access in appropriate digital and hard copy media;	CHPE will comply	Does not apply to Segment 12; is addressed by separate filings to the PSC.
165(d)(v)	prior to funding any studies, projects or activities, the Governance Committee must find that such studies, projects or activities have been proven: (a) to make a contribution to the long-term protection and enhancement of fish and wildlife species and habitats in the Hudson River Estuary, the Harlem and East Rivers, and/or Lake Champlain and their tributaries; (b) to have a strong scientific foundation; (c) to achieve identified environmental goals; (d) to be consistent with applicable State and Federal natural resource management plans; (e) to address impacts associated with	CHPE will comply	Does not apply to Segment 12; is addressed by separate filings to the PSC.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
	the construction, operation, maintenance or security of the Facility; and, (f) to be feasible from an engineering perspective;		
165(d)(vi)	the Governance Committee shall give preference to projects that: (a) achieve multiple environmental goals; (b) involve multi-stakeholders collaboration; (c) feature matching funds; and/or, (d) are cost effective;	CHPE will comply	Does not apply to Segment 12; is addressed by separate filings to the PSC.
165(d)(vii)	the Administrator (or the Trustee if no Administrator has been selected) shall pay any administrative costs associated with the establishment and maintenance of the Trust from any accrued interest on monies of the Trust or, if adequate interest is not accrued, such administrative costs shall be borne by the Trust, provided however that the monies of the Trust shall not be used to compensate any party, including Certificate Holders, for participation in the Governance Committee or to reimburse any such party for any expenses incurred in such participation;	CHPE will comply	Does not apply to Segment 12; is addressed by separate filings to the PSC.
165(d)(viii)	Certificate Holders' obligation to make the payments into the Trust set out above and in Table 2 attached hereto shall terminate upon receipt by the Administrator (or the Trustee if no Administrator has been selected) of documentation from the NYISO or DPS stating that the Facility has ceased commercial operation. Should the Facility resume operations, the Certificate Holders shall resume the payments to the Trust on January 1st of the following year;	CHPE will comply	Does not apply to Segment 12; is addressed by separate filings to the PSC.
165(d)(ix)	if the Facility ceases permanent operation for any reason, payments owed to the Trust as of the date of the final termination and the balance of unused monies in the Trust, plus any accrued interest and minus any administrative cost, shall be retained in the Trust and administered by the Governance Committee until completely expended;	CHPE will comply	Does not apply to Segment 12; is addressed by separate filings to the PSC.

Table 2-1. Certificate Conditions		CHPE Response	EM&CP Section/ Appendix
165(d)(x)	the Trustee, Administrator (if any) and the Governance Committee shall all be prohibited from directly or indirectly bonding or pledging any funds to be provided by the Certificate Holders at any future date; and	CHPE will comply	Does not apply to Segment 12; is addressed by separate filings to the PSC.
165(d)(xi)	if any department, agency, authority, office or other instrumentality or subdivision of the State of New York shall claim ownership or control of the Trust or any of the funds paid into the Trust by Certificate Holders or any interest thereon, the Trustee shall immediately return all monies held in the name of the Trust to Certificate Holders.	CHPE will comply	Does not apply to Segment 12; is addressed by separate filings to the PSC.

3.0 ENVIRONMENTAL PERSONNEL AND PROJECT PROCEDURES

3.1 PROJECT PERSONNEL

During Project construction, multiple inspectors and monitors will be employed to ensure appropriate adherence to all applicable CCs, the procedures, plans, and specifications described in this EM&CP and other applicable federal, state and local laws, permits and approvals. The required qualifications and duties of each type of inspector are provided in the following sections. Figure 3-1 summarizes the high-level organizational chart. Figure 3-2 summarizes the construction personnel. While inspector positions are assigned either full- or part-time, the responsibilities and time commitments may fluctuate with the Project activity levels. The Certificate Holders and associated staff will ensure that the necessary inspectors' presence corresponds with the Project activity level (CC 53c). All Project personnel, including the Certificate Holders' employees, contractors, and subcontractors will be properly trained in the construction, operation, and maintenance of the Project (CC 53i). The necessary contact information for the inspectors is included in Appendix F Compliance Assurance Plan. Additional contact information for other onsite inspectors will be provided to NYSDPS and NYSDEC Staff at least two weeks prior to the start of Project construction (CC 53g).

In addition to the inspector's specific qualifications listed as described in the following subsections, the following attributes are required for all inspectors (BMP Document Section 2.0):

1. Possess good communication skills, both oral and written.
2. Be honest, fair, straightforward, sincere, and possess a strong sense of integrity.
3. Be able to communicate effectively with all parties: Certificate Holders' staff and fellow Project inspectors; construction/restoration contractors, foremen, equipment operators and laborers; agency inspectors, etc.
4. Be experienced with underground utilities.

Figure 3-1. High-Level Organization Chart

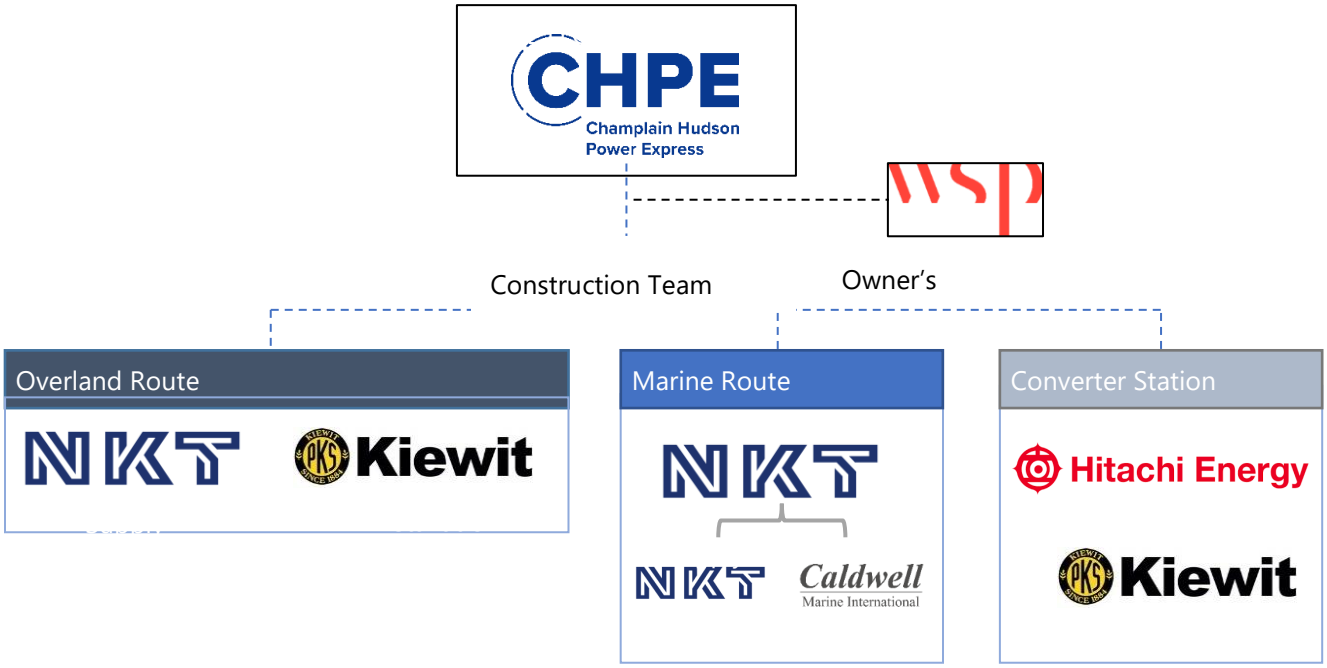
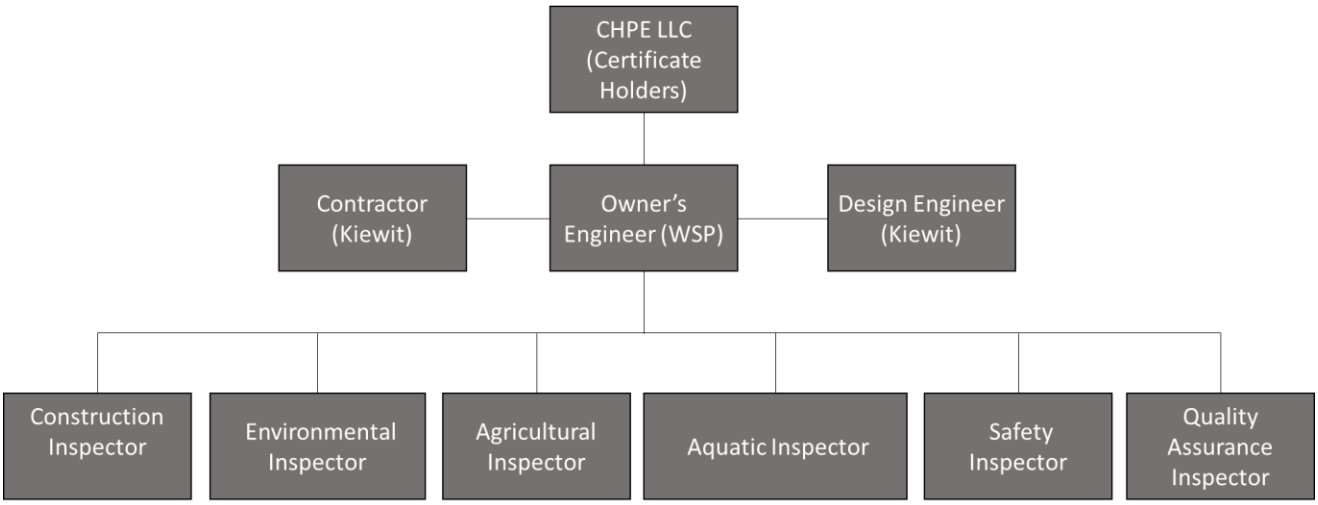


Figure 3-2. Construction Personnel Organization Chart



3.1.1 Contractors

All contractors hired by the Certificate Holders must comply with the Article VII Certificate Conditions. The Certificate Holders will provide the Engineering, Procurement, and Construction (EPC) Contractor(s) retained to undertake the construction of the Project with complete copies of the Certificate Conditions and all permits, certificates, and approvals required to initiate and/or complete construction of the Project. These documents include but are not limited to the approved Segment EM&CP and governmental approvals issued pursuant to § 401 and § 404 of the Federal Clean Water Act, and § 10 of the Federal Rivers and Harbors Act. To the extent that the listed documents are available before contracts for construction services are executed, such copies will be provided to the Contractors prior to the execution of such contracts (CC 43).

Additionally, the Certificate Holders will inform all Contractors that the PSC may seek to recover penalties for violation of the Certificate Conditions and other orders issued in this proceeding, not only from the Certificate Holders, but also from their Contractors, and that Contractors also may be liable for other fines, penalties, and environmental damage (CC 44).

Kiewit will serve as the EPC Contractor for the overland segments and will hire subcontractors as determined necessary to complete the construction of the Project.

3.1.2 Environmental Inspector

The Environmental Inspector(s) will be equipped with sufficient documentation, transportation, and communication equipment to effectively monitor all Contractors' compliance with the Certificate Conditions and applicable sections of, and approvals issued pursuant to the PSL, New York State Environmental Conservation Law (ECL), § 401 and § 404 of the Federal Clean Water Act, and the procedures outlined in this EM&CP (CC 53e).

At least one Environmental Inspector will be employed full-time during construction and restoration (CC 53a) on Segment 12 (see Appendix F for further detail). Additional Environmental Inspectors may be utilized as required to meet environmental inspection requirements set out in this EM&CP and any other relevant permit conditions. The lead Environmental Inspector will be responsible for determining when additional inspectors are needed to meet inspection requirements.

3.1.2.1 Responsibilities

The Environmental Inspector will have the following responsibilities (BMP Document, Section 2.1.1):

1. Monitor all construction activities including clearing, trenching, cable installation, installation and maintenance of temporary erosion controls, work involving wetlands, streams, agricultural lands,

avoidance, and minimization of impacts to threatened and endangered (TE) species and their occupied habitat, significant natural communities, and rare, threatened, and endangered (RTE) plants, restoration work, etc.

2. Provide DPS and NYSDEC, as well as Project team members, with weekly status reports summarizing construction activities from the week prior to the report and identifying construction activities and locations scheduled for the next two weeks.
3. Coordinate inspections of the Project by NYSDEC, NYSDAM, USACE, and other involved agencies as needed.
4. Monitor and manage all environmental protection requirements of this EM&CP and closely coordinate these requirements with the Construction Inspector and the Contractor(s).
5. Monitor Contractor compliance with the provisions of the Certificate and permits, applicable sections of the PSL, and the EM&CP.
6. Verify that the ROW and any access roads are marked prior to construction.
7. Identify, document, and oversee corrective actions as necessary to bring an activity back into compliance.
8. Install and maintain signs and flagging/marking the boundaries of sensitive resource areas (e.g., waterbodies and wetlands) or other areas where special requirements will be in effect, including trees marked for removal or protection.
9. Locate slope breakers, drivable berms, and water bars to ensure that they will not direct water into sensitive resources such as wetlands or waterbodies.
10. Direct the Construction Inspector when site conditions make it advisable to restrict construction activities in areas of sensitive environmental resources.
11. Ensure restoration of pre-construction contours, topsoil, and vegetation where applicable.
12. Determine the need for additional erosion and sediment controls other than those already required by the Certificate and this EM&CP and ensuring that these controls are properly installed to prevent sediment flow into wetlands, waterbodies, streams, or other sensitive environmental resources.
13. Inspect and ensure the maintenance of all temporary soil erosion and sedimentation controls in fulfillment of the requirements for a qualified inspector as defined in the SPDES Construction General Permit (GP-0-20-001) (CC 53h).
14. Ensure the repair of all ineffective erosion and sediment control devices within 24 hours of identification.
15. Keep records of compliance with the environmental conditions of the Certificate, the EM&CP, and other federal, state, or local agency requirements. The Environmental Inspector will have stop work authority over all aspects of the Project.
16. Identify areas that will be given special attention to ensure stabilization and restoration after the construction phase.

17. Be the point of contact (in coordination with the Safety Inspector) for all emergency response procedures such as oil spills, encountering hazardous wastes, etc.
18. Monitor all construction activities on, above, below or in the vicinity of state highways to assure that any work in the ROW of a state highway is performed in accordance with a highway work permit issued by New York State Department of Transportation (NYSDOT) and, as applicable, any use and occupancy permits, leases or other permits or agreements issued by, with or involving NYSDOT.
19. Monitor all construction activities in the vicinity of railroad tracks, equipment, or facilities to assure that any alteration of railroad-related improvements are made in accordance with requirements the railroad operating the tracks, equipment, or facility.
20. Direct informal and formal training of other company/sponsor staff (e.g., land men, craft inspector, Construction Inspector, Agricultural Inspector, etc.) and construction personnel in the proper use and application of the environmental ROW standards and case-specific orders of certification.

3.1.2.2 Qualifications

The Environmental Inspector must have the following qualifications (BMP Document, Section 2.1.2):

1. Sufficient knowledge and experience to manage the environmental compliance procedures described in this EM&CP.
2. A bachelor's degree in geology, soil science, natural resource science or management, forestry, or a related environmental discipline or a demonstrated equivalent knowledge, including courses in ecological sciences and experience in environmental construction inspection.
3. Necessary qualifications consistent with a "Qualified Inspector" pursuant to the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-10-001).

3.1.3 Construction Inspector

The Construction Inspector(s) will be equipped with sufficient documentation, transportation, and communication equipment to effectively monitor each Contractors' compliance with the Certificate Conditions and applicable sections of and approvals issued pursuant to the PSL, New York State ECL, § 401 and § 404 of the Federal Clean Water Act, and the procedures outlined in this EM&CP.

3.1.3.1 Responsibilities

The Construction Inspector will have the following responsibilities (BMP Document, Section 2.4.1):

1. Ensure that high standards of contract compliance are consistently maintained.

2. Work with the appropriate individuals to fully understand contract program needs and ensure that promised commitments are delivered on time and within budget.
3. Participate in construction conference calls and meetings to provide weekly updates and reports.
4. Assure that site personnel are properly directed, trained, licensed, and evaluated.
5. Monitor all construction activities on, above, below or in the vicinity of state highways to assure that any work in the ROW of a state highway is performed in accordance with a highway work permit issued by NYSDOT and, as applicable, any use and occupancy permits, leases or other permits or agreements issued by, with or involving NYSDOT.
6. Monitor all construction activities in the vicinity of railroad tracks, equipment, or facilities to assure that any alteration of railroad-related improvements are made in accordance with requirements, permits, leases the railroad operating the tracks, equipment, or facility.

3.1.3.2 Qualifications

The Construction Inspector must have the following qualifications (BMP Document, Section 2.4.2).:

1. An associate degree or higher in a construction-related discipline.
2. Five years of experience in construction of transmission facilities with an understanding of the applicable construction standards and work methods, construction field issues, prints specification sheets, schematics, one-line diagrams, instructional information to construct, maintain, troubleshoot cable installation and general aspects of converter station and substation construction.
3. Knowledge of federal, state, Occupational Safety and Health Administration ("OSHA"), local, and applicable environmental rules and regulations.
4. A thorough understanding of electrical principles and the hazards associated with electrical transmission work.
5. The ability to travel throughout the Project area and work extended hours and weekends in emergency situations, as needed.

3.1.4 Agricultural Inspector

An Agricultural Inspector is not required for Segment 12 of the Project as there will be no installation, construction, or impact in agricultural lands (BMP Document, Section 2.3).

3.1.5 Aquatic Inspector

An Aquatic Inspector is not required for the overland segments of the Project as there will be no aquatic installation, construction, or impact (BMP Document, Section 2.3).

3.1.6 Safety Inspector

One Safety Inspector will work full-time on Segment 12 and will be present for any higher risk procedures.

3.1.6.1 Responsibilities

The Safety Inspector will assume responsibility for the following duties (BMP Document, Section 2.5.1):

1. Assist in the establishment and implementation of regulatory compliance and incident- prevention activities regarding the safety and health of employees, contractor and subcontractor personnel, and the public.
2. Assist management and direct safety specialists in analyzing any serious incidents.
3. Advise management on problem solving or decision making to eliminate safety hazards and to develop incident-prevention and regulatory compliance programs to reduce incidents that may lead to personal injury or property damage.
4. Monitor all construction activities on, above, below or in the vicinity of state highways to assure that any work in the ROW of a state highway is performed in accordance with a highway work permit issued by the NYSDOT and, as applicable, any use and occupancy permits, leases or other permits or agreements issued by, with or involving NYSDOT.
5. Monitor all construction activities in the vicinity of railroad tracks, equipment, or facilities to assure that any alteration of railroad-related improvements are made in accordance with requirements the railroad operating the tracks, equipment, or facility.
6. Advise management on problem solving or decision making regarding the discovery of pre-existing onsite hazardous materials in coordination with the Environmental Inspector.

3.1.6.2 Qualifications

The Safety Inspector must have the following qualifications (BMP Document, Section 2.5.2).:

1. Hold bachelor's degree – preferably in Safety Management, a related science or engineering discipline.
2. Have 5 to 7 years of professional safety experience.
3. Have 5 to 7 years of experience in electric or gas operations or in a related industry, preferably in a supervisory or leadership role.
4. Be certified as a Safety Professional or Occupational Health Professional or another equivalent recognized credential.
5. Have knowledge of federal, state, and local safety and health laws and regulations.
6. Have knowledge of electric operations, experience with underground utilities is a plus.
7. Knowledge of industrial hygiene principles.

8. Have proven interpersonal skills coupled with the ability to lead in connection with various broad occupational safety and health principles in a constantly changing work environment.
9. Demonstrate an ability to manage multiple high-priority tasks and engage in complex problem-solving.
10. Demonstrate a high level of ethical behavior.
11. Have excellent judgment and decision-making skills
12. OSHA 40-hour HAZWOPER training or other applicable training regarding hazardous materials.

3.1.7 Quality Assurance Inspector

The Quality Assurance Inspector will conduct the Quality Control Audits described in the Compliance Assurance Plan in Appendix F. At least one Quality Control and Assurance Inspector will be employed on a part-time basis as needed for the Project.

3.1.7.1 Responsibilities

The Quality Assurance Inspector will have the following responsibilities (BMP Document, Section 2.6.1).:

1. Perform quality audits on transmission lines, converter stations and substations.
2. Verify that installation of the cable complies with construction specifications.
3. Write and publish reports detailing results of field construction audits.
4. Track non-conformances for work not meeting the required specifications.
5. Require submission of corrective and preventive action from the Certificate Holders for any non-conformance with the construction plans.
6. Maintain documentation in a systematic and orderly manner.
7. Identify areas where the quality of work can be improved.
8. Participate in conference calls and meetings.
9. Develop in-process quality statistical reporting forms and charts to support the Compliance Assurance Plan found in Appendix F.
10. Conduct audits of compliance with the Certificate, Orders, and legal requirements as required by the Certificate Conditions

3.1.7.2 Qualifications

The Quality Assurance Inspector will have the following qualifications (BMP Document, Section 2.6.2):

1. Hold a bachelor's degree and a minimum of three years of experience in a quality assurance role; or an equivalent combination of technical education and training and a minimum of eight years of experience in a quality assurance role.

2. Be able to undertake tasks with limited supervision and be highly motivated.
3. Demonstrate analytical skills with the ability to evaluate and produce routine reports.
4. Be able to collect, enter, analyze, track, and produce data.
5. Demonstrate organization and planning skills, with the ability to schedule and perform quality audits across internal and external functions.
6. Have the ability to solve complex issues.

   Be familiar with construction job sites that may be in harsh climates and terrain, and in controlled conditions that require the use of Personal Protection Equipment (PPE).

3.2 PROCEDURES

3.2.1 Other Inspection and Monitoring Personnel

The NYSDOT will have full authority over the Certificate Holders' use of state highways, including the authority to place NYSDOT inspectors on site to monitor and observe the Certificate Holders' activities on state highways and/or request the presence of state or local police to assure the safety of freeway highway travelers at such times and for such periods as the NYSDOT deems appropriate (CC 57).

As specified in the Certificate Conditions and pursuant to the PSL, the Certificate Holders and their associated Contractors will not limit the right of any jurisdictional agency (including railroad owners) to enter and inspect the Project to assess compliance with any permit issued by such agency or any applicable substantive statute or regulation under such agency's jurisdiction. Any such inspection should be coordinated with DPS staff to the greatest extent possible (CC 56).

3.2.2 Inspection & Coordination Requirements and Schedule

Table 3-1 identifies all the inspections required, as well as the person performing and/or coordinating the inspection and the frequency of said inspection. These items are further detailed in Section 3.2.3.

Table 3-1. Inspection and Coordination Requirements and Schedule

Inspection/Coordination Required	Person Performing Inspections/Coordination	Frequency of Inspections
Pre-construction Meeting	Certificate Holders invite DPS Staff, NYSDOT, NYSDEC, and other required stakeholders as identified in the Certificate.	Two weeks prior to start of overland construction
Foundation inspections to adjacent buildings and structures	Certificate Holders' hired inspectors/contractors.	Prior to construction at each location

Inspection/Coordination Required	Person Performing Inspections/Coordination	Frequency of Inspections
Site Compliance Audit Inspection	Certificate Holders organize and conduct site-compliance audit inspections for DPS Staff	Monthly during site preparation, construction, and restoration phases of the Project. Annually for first two years of operation.
SWPPP BMPs	Environmental Inspector	Weekly during soil disturbing activities
Ongoing Monitoring	Environmental Inspector and/or Agricultural Inspector	Monitoring of all construction activities and preparation of weekly reports
Post-installation Inspection	See Compliance Assurance Plan Appendix F	See Compliance Assurance Plan Appendix F
Notifications and coordination with CI Owners' Designated Representative(s) in accordance with CC 28(c)-(e)	Certificate Holders' hired Inspectors/Contractors.	At least 30 days prior to any construction or repair within vicinity of CI
Coordination meetings per contract agreements as applicable (i.e., weekly progress meetings, monthly progress meetings, monthly design review meetings, etc.)	Certificate Holders' hired Inspectors/Contractors.	Weekly, bi-weekly, or monthly as applicable.

3.2.3 Inspection/Coordination Additional Details

3.2.3.1 Pre-Construction Meeting

For the pre-construction meeting, the agenda, location, and attendee list will be agreed upon between DPS Staff and the Certificate Holders. The Certificate Holders will supply draft minutes from this meeting to all attendees. The attendees may offer corrections or comments, and thereafter the Certificate Holders will issue the finalized meeting minutes to all attendees. If, for any reason, the Contractors retained by the Certificate Holders to construct the Facility cannot finish the construction of such facilities, and one or more new construction contractors are needed, there will be another pre-construction meeting with the same format as outlined above (CC 58, 159e).

3.2.3.2 Site Compliance Audit Inspection

The Certificate Holders will organize and conduct site-compliance audit inspections for DPS Staff as needed, but not less frequently than once per month during the site preparation, construction, and restoration phases of the Project and at least annually for two years after the commencement of operation of the Project (CC 55). These inspections will be performed and include a review of the status of compliance with all

Certificate Conditions, the WQC, and with other legal requirements and commitments, as well as a field review of the construction site, if necessary. The inspections may also include the following:

1. Review all complaints received, and their proposed or actual resolutions
2. Review any significant comments, concerns, or suggestions made by the public, local governments, or other agencies
3. Review the status of the Project in relation to the overall schedule established prior to the commencement of construction
4. Perform other activities that Certificate Holders or DPS Staff consider appropriate. (CC 55a)

The Certificate Holders, with the help of the appropriate Inspectors and Project personnel, will provide a written record of the results of the inspection, including resolutions of issues, and additional measures to be taken, to agencies involved in the inspection audit. (CC 55b)

3.2.3.3 SWPPP Inspections

As specified in the Stormwater Pollution Prevention Plan (SWPPP) (Appendix G), the Certificate Holders, via the Environmental Inspector, will inspect the erosion and sediment control measures as identified in the SWPPP to ensure that they are being maintained in effective operating conditions at all times. When soil disturbance occurs, a site inspection will be conducted by the Environmental Inspector at least once every seven days. A copy of the "Stormwater Construction Site Inspection Reports" is included in Appendix G of the SWPPP (Appendix G of this EM&CP). Where soil disturbing activities temporarily cease (e.g., winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the Environmental Inspector can reduce inspections to once every 30 days.

The Environmental Inspector shall resume inspections when soil disturbing activities begin again. The Environmental Inspector shall notify the NYSDEC Regional Office's stormwater contact prior to any reduction in the frequency of site inspections. A final inspection will be performed by the Environmental Inspector where soil disturbing activities have not occurred or been resumed within two years from the start of soil disturbing activities. The final inspection will certify that all disturbed areas have achieved final stabilization, all temporary and permanent control measures have been removed, and post-construction stormwater management practices have been constructed in conformance with the SWPPP. The Environmental Inspector will monitor the amount of unstable soil and request a 5-acre waiver if it becomes necessary.

In locations where restoration is necessary or required, SWPPP inspections will be performed by the Environmental Inspector on a weekly basis until all disturbed areas have achieved the 80% revegetation required for final restoration. Following final restoration, erosion and sediment control measures will be

removed from the site and disposed of appropriately. Descriptions related to the restoration and cleanup are summarized in Section 14 of this EM&CP. All other inspection requirements and details related to stormwater pollution control measures are included in Section 6.0 Maintenance/Inspection Procedures of the SWPPP in Appendix G.

3.2.3.4 Construction Safety Policies and Procedures

Construction Safety Policies and Procedures are included in Appendix H.

3.2.3.5 Post-Installation Inspection

The procedures for the post-installation inspection plan are described in the Compliance Assurance Plan (Appendix F) (CC 161). The Certificate Holders will conduct an immediate post-installation inspection following the installation of the Segment.

3.2.4 Notifications

As described in Table 3-2, the Certificate Holders will provide notices to local municipalities and communities that are located along or within the vicinity of this Segment of the Project. This notice will be distributed by notifying those interested persons that this EM&CP has been submitted and is available for comment and, at the appropriate time, providing additional notices prior to construction. Newspaper and mailed notices of this EM&CP filing have been performed concurrent with the filing of this EM&CP, as shown in Appendix B.

"Interested persons" entitled to receive notice of this EM&CP filing fall into several different groups, each of which has been provided a notice of this filing—affidavits of publication and/or mailing/service will be provided to the Secretary under separate cover:

1. Newspapers (CCs 152 and 154): the notice will be published within one week of filing the EM&CP and will continue through the following week in local newspapers for the host municipalities (Towns of Stony Point, Clarkstown, and Villages of Haverstraw and West Haverstraw) in accordance with CCs 152 and 155. The text of the notice and the accompanying color map included in Appendix B will be published as display advertisements.
2. Parties to the Proceeding (CC 152): the notice was posted to the PSC's online DMM docketing system in Case 10-T-0139 for distribution to all Parties to the proceeding.
3. General Stakeholder Notice: this notice will be provided to landowners, residents and businesses within 100 feet of any HDD staging area, Facility access road, or overland Facility components in accordance with CC 153; the CEOs of each host municipality in this Segment (CC 153); and the

owners of Critical Infrastructure (CI) and railroads whose facilities, properties and/or structures fall within the geographic scope of this Segment (CC 152) (see Appendix B).

4. Structure Owners (CC 154): a Structure Owner notice letter will be provided to the owners of residences, buildings and other structures within 100 feet of trenching activity or HDD location providing general notice of the filing and offering to inspect foundations in accordance with CC 154 (see Appendix B).
5. Interest Holders (CC 143 and 155): This Segment includes a small number of private properties in which other persons may hold an interest, such as an easement, lease, lien, or other recorded title interest. An Interest Holder notice letter will be prepared and disseminated to this group to indicate that the Certificate Holders have obtained a temporary or permanent interest in the Facility site properties, in accordance with CC 143, if other interest holders are identified (see Appendix B).
6. Agricultural Consultation (CC 76): not applicable to this segment.

At the appropriate time, pre-construction notices will be displayed in public areas such as post offices and community centers as well as provided to local newspapers and news outlets (CC 42, 155a). The display of notices will be performed two weeks prior to the commencement of site preparation in the area of applicable jurisdiction. The notification to newspapers and news outlets will be performed prior to construction, as discussed further in Table 3-2. Section 12.1 describes the notifications to municipal transportation agencies and Section 13.1 describes the notifications to all infrastructure owners within the Segment.

A Public Involvement and Complaint Resolution Plan has been developed and is included in Appendix I. Further discussion of public involvement and notification procedures in advance of the construction phase, as well as the Certificate Holders' plans for addressing questions and complaints from the public during construction, are discussed in that Plan.

3.2.5 SPDES Notice of Intent

In accordance with the State Pollution Discharge Elimination System (SPDES) General Permit for Construction Activities (GP-0-20-001), the Certificate Holders will maintain copies of the Notice of Intent (NOI), NOI acknowledgment letter, SWPPP, and any inspection reports submitted in conjunction with this permit and records, or all data used to complete the NOI to be covered by this permit for a period of at least five years from the date that the site is finally stabilized. An MS4 is located within the boundaries of each municipality that Segment 12 runs through (Towns of Stony Point, Haverstraw, and Clarkstown). More detail regarding MS4 coordination is provided in Section 6.

3.2.6 Modifying the EM&CP

The Final EM&CP approved by the PSC may incorporate modifications from this proposed EM&CP by the Certificate Holders. No change to the approved EM&CP may thereafter be made except in accordance with the following procedures (CC 158):

For a proposed change that:

1. Would involve a site listed or eligible for listing on the New York State or National Register of Historic Places, the Certificate Holders will give at least two weeks prior notice to the Field Service Bureau of OPRHP.
2. Would involve any State-regulated wetland or protected stream or water body, the Certificate Holders will give at least two weeks prior notice to NYSDEC,
3. Would affect the occupied habitat of TE species, the Certificate Holders will give at least two weeks prior notice to NYSDEC and to the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) (where applicable) prior to providing notice to DPS Staff of the proposed change.
4. Would affect the individual or habitat supporting RTE plants, the Certificate Holders will give at least two weeks prior notice to NYSDEC and DPS.
5. Would involve agricultural land, the Certificate Holders will give at least two weeks prior notice to New York State Department of Agriculture and Markets (NYSDAM).
6. Would involve the herbicides planned for use (including mixed proportions, additives, or method of application), the Certificate Holders will give at least 30 days prior notice to NYSDEC.
7. Would affect land or water owned or controlled by CNY, the Certificate Holders will give at least two weeks prior notice to CNY (CC 158a).

The Certificate Holders will report any proposed changes to this EM&CP to NYSDPS Staff. DPS Staff will refer to the PSC for approval for any proposed changes that cause a substantial increase in environmental impact, after consultation with NYSDEC, any proposed changes that relate to contested issues decided during the proceeding, and any proposed changes affecting state highways (if the report has not indicated NYSDOT's agreement to such proposed changes). DPS Staff is authorized to approve all other proposed changes, in accordance with the procedure outlined herein, and will submit reports of such changes to the Secretary or the Secretary's designee. The reports will be posted on the PSC's website under the relevant case number (CC 158b). Upon being advised that DPS Staff will refer a proposed change to the PSC, the Certificate Holders will notify all active parties that have requested to be notified, as well as property owners or lessees whose property is affected by the proposed change. The notice will:

1. Describe the original conditions and the requested change;

2. Provide documents supporting the request; and
3. State that persons may comment by writing to the PSC within 21 days of the notification date (CC 158c).

The Certificate Holders will not execute any proposed change until they receive written approval from the PSC (if PSC approval is required) or oral or written approval from DPS Staff (in the case of a change that NYSDPS Staff has authority to approve) except in emergency situations threatening personal injury, property damage, or severe adverse environmental impact, or as specified in this EM&CP. When the Certificate Holders have obtained oral approval from DPS Staff for a change, DPS Staff will confirm such approval in writing within 10 business days (CC 158d).

3.3 REPORTING AND DOCUMENT MANAGEMENT

Several CCs identified in Table 2-1 explicitly address the timing requirements for Project notifications and reports. Table 3-2 summarizes these CCs based on if the notification is required before, during, or after construction, or at any point during those three periods. Not all notices are required for Segment 12, and some notices may be required after the entire Project has been constructed.

Table 3-2. Reporting and Notification Requirements and Schedule

Description	Submitted to	Approximate Due Date
BEFORE OR CONCURRENT WITH EM&CP FILING		
The Certificate Holders will provide a preliminary design marked to avoid conflict with potential transportation projects that NYSDOT Staff may seek to undertake in the future and will offer to consult with NYSDOT Staff concerning any comments it may offer and will use reasonable efforts to accommodate any NYSDOT concerns (CC 68).	DPS Staff and NYSDOT.	Prior to filing any Segment EM&CP involving any state-owned ROW. Pre-EM&CP coordination is described in Section 12, Table 12-1 and documented in Appendix A.
The Certificate Holders will file copies of the segment EM&CP as directed by the Secretary to the Commission to relevant jurisdictional agencies as described in CC 151.	Relevant jurisdictional agencies.	Upon filing the applicable Segment EM&CP. See Appendix B and EM&CP Segment cover material.
The Certificate Holders will provide newspaper notices and written notice(s) of the filing of the segment EM&CP on all parties such as relevant railroads, infrastructure owners whose facilities, properties, and/or structures within the geographic scope of the segment EM&CP may be	Relevant parties specified in CC 152.	Upon filing the applicable Segment EM&CP. See Section 3.2.4, Section 12, and Section 13 for

Description	Submitted to	Approximate Due Date
impacted. The notice(s) will contain the information specified in CC 152).		additional details; see Appendix B for copy of notice.
The Certificate Holders will provide newspaper notices and written notice(s) of the filing of the segment EM&CP on all parties such as residents, businesses, and building, structure, and facility (including underground, aboveground and underwater facilities) owners and operators within 100 feet of any HDD staging area or trenching activity with an offer to inspect foundations before, during, and after construction. The notice(s) will contain the information specified in CC 154.	Relevant parties specified in CC 154.	Upon filing the applicable Segment EM&CP. See Appendix B for copy of notice.
The Certificate Holders will provide written notice(s) to any person with an interest in the property underlying the Certificate Holders' easements/leaseholds, including underlying landowners, other easements holders as specified in CC 143 upon filing the applicable segment EM&CP.	Relevant parties specified in CC 143.	Upon filing the applicable Segment EM&CP. See Appendix B and Section
Provide to the owner(s) and operator(s) of all co-located infrastructure a proposal for the locations and design of the Project. The submission will contain all the information and conditions outlined in CC 28d.	Owners and operators of all co-located infrastructure	At least 180 days prior to the filing of the EM&CP. See Appendix R.
The Certificate Holders will provide written notice and newspaper notices of the filing of the applicable Segment EM&CP. (CC 152). The notice will contain the information outlined in CC 155a.	Local media within the vicinity of the segments to which the segment EM&CP relates.	Concurrent with the filing of the applicable Segment EM&CP. See Appendix B.
The Certificate Holders will notify that the EM&CP is available for review to the chief executive officer of each affected municipality and to residents, businesses, and building, structure, and facility owners and to the extent known, operators of the same when such land uses are located within 100 feet of the HDD staging areas, off-ROW construction access roads, and the overland components of the Project. The notice will meet the conditions outlined in CC 153. The Certificate Holders will also provide a hard copy synopsis of any approved Segment EM&CP for residents owning property located within 100 feet of the Construction Zone as delineated therein. The synopsis will meet the conditions outlined in CC 153. Proof of notice to residents, businesses, and building and structure owners will be provided to the Secretary.	Chief executive officer of each affected municipality. Residences, Businesses, and Building/ structure/ facility owners/ operators.	Concurrent with the filing of the Segment EM&CP. See Appendix B.

Description	Submitted to	Approximate Due Date
The Certificate Holders will begin consultations with CI owners within 60 days of Certificate (CC 28a, 28b) and provide proposed plans and methods of construction to CI Owners within 180 days of the filing of the relevant Segment EM&CP (CC 28d): "proposal for the location and design of the Facility (including a proposed Construction Zone) and the methods of construction to be employed with respect to all locations involving CI ("Proposal"). The Certificate Holders' proposal must include all studies, calculations, tests, results, explanations, protocols, drawings, proposed construction schedules, and documents developed throughout the consultations described in subsections (a) and (b) of this Condition, other documentation identified in Condition 162, and any other information that supports the proposal" (CC 28a, 28b, 162).	Owners and operators of all co-located infrastructure	Within 180 days of submission of Segment EM&CP. See discussions in Section 13 and Appendix R.
The Certificate Holders will provide CI interference studies as described in CCs 28 and 162, conforming to industry standards and performed by an individual or individuals with suitable qualifications to conduct such study, with respect to each location at which the Facility crosses CI or comes into such proximity to CI that an interference study is warranted by Good Utility Practices, and specifying any proposed mitigation measures (CC 28, 162).	Owners and operators of all co-located infrastructure, as applicable.	Upon filing the applicable Segment EM&CP. See discussions in Section 13 and Appendices P, Q and R.
The Certificate Holders will provide regulated wetland locations delineated in the field and indicated on the proposed EM&CP drawings for the Construction Zone and any access roads. Such delineations will be delivered for review to DPS Staff, NYSDOS, and NYSDEC and, for wetlands within the Adirondack Park, the APA (CC 113a).	DPS Staff, NYSDOS, NYSDEC, APA	At least 30 days prior to filing of the proposed EM&CP. Submitted on March 3, 2022; see Appendix M.
The Certificate Holders will develop an inventory that includes for each Segment: (i) a listing of waterbodies within the Construction Zone, including associated stream width, NYSDEC classification, proposed crossing method, and any potential construction schedule window developed during the preparation of the proposed EM&CP; (ii) a spreadsheet that contains the GPS coordinates (latitude and longitude) of each waterbody; (iii) a digital photograph of each waterbody, cross-referenced to its GPS coordinates; and (iv) a wetland delineation shape-file. This inventory will be delivered for review to DPS Staff, NYSDOS, and NYSDEC and, for waterbodies within the Adirondack Park, the APA (CC 114a).	DPS Staff NYSDOS, NYSDEC, APA	At least 30 days prior to filing of the proposed EM&CP. See Appendices A and M.
The Certificate Holders will provide municipal consents as applicable for each Segment with EM&CP filing.	Included in the EM&CP	Upon filing of the applicable Segment

Description	Submitted to	Approximate Due Date
		EM&CP. Included in Appendix A.
The Certificate Holders will provide detailed soil erosion and sediment control plans in a SWPPP, which will be included with the first Segment EM&CP associated with the overland route of the Facility. Soil and sediment control measures will be implemented early in the construction process and be installed prior to and maintained in acceptable condition for the duration from any clearing or earthmoving operations through to the permanent stabilization of the soil. The SWPPP will be available at the construction site and available to the public upon five days written notice (CC 67).	Included in the EM&CP	Concurrent with filing of Segment EM&CP. Included as Appendix F.
During the acquisition of rights to use lands comprising the Construction Zone, the Certificate Holders will ask the owners of such lands that appear to be either undeveloped or used as active agricultural land whether such lands are presently being used for agricultural purposes and, if so, whether such lands are being operated, in whole or in part, by third parties. During the preparation of the EM&CP, the Certificate Holders will use this information, along with any additional information received during consultation with Ag & Mkts, to identify land within the Construction Zone reasonably believed to be active agricultural land. The Certificate Holders will provide the owners and identified operators of such land with a telephone number to facilitate direct contact with the Certificate Holders and the Agricultural Inspector(s) (CC 76).	Included in the EM&CP	Prior to filing date of applicable Segment EM&CP. See Appendices A and B.
If Construction Zone access involves non-State Roads, the Certificate Holders will consult with each transportation department or agency having jurisdiction over any roads, related structures, and components that will be crossed by the Facility or used for direct access to the Construction Zone. If the access road takes direct access from, or lies within the limits of, such roads, the Certificate Holders will notify each relevant transportation department or agency of the approximate date when work will begin (CC 69).	Included in the EM&CP	Prior to filing date of applicable Segment EM&CP. Road use agreements to be completed with applicable municipalities prior to construction.
A certificate of service indicating upon whom all EM&CP notices and documents were served and a copy of the written notice will be filed by the Certificate Holders (CC 155b).	Secretary to the Commission.	Following each applicable Segment EM&CP filing.
BEFORE CONSTRUCTION		
All necessary permits and consents referred to in CC 16 that pertain to this EM&CP(CC 9).	Secretary to the Commission	Before commencing site preparation and

Description	Submitted to	Approximate Due Date
		any construction activities.
The Certificate Holders shall not commence work on any Segment until they shall have obtained all required interests in real estate, including interests in real estate to be used for access roads (whether obtained through a conveyance, consent, permit, or other approval) as are necessary and applicable for such Segment. Evidence of the obtaining of such interests shall be provided to the Secretary prior to commencement of the work. (CC 10)	Secretary to the Commission	Before commencement of construction.
The Certificate Holders will inform the Secretary and NYSDEC at least five days before commencing site preparation for the Project (CC 46).	Secretary to the Commission and NYSDEC.	At least five days before commencing site preparation.
The Certificate Holders will consult with each transportation department or agency having jurisdiction over any roads, related structures, and components that will be crossed by the Facility or used for direct access to the Construction Zone. If the access road takes direct access from, or lies within the limits of, such roads, the Certificate Holders will notify each relevant transportation department or agency of the approximate date when work will begin (CC 69a).	Transportation Department or Agency crossed by project.	When work begins; Pre-EM&CP coordination is described in Section 12, Table 12-3.
The Certificate Holders will provide notification prior to construction involving protected stream crossings (CC 115).	DPS Staff and NYSDEC.	At least five days.
The names and qualifications of the Environmental Inspector and Construction Inspector will be submitted to DPS Staff and NYSDEC (CC 53g).	DPS Staff and NYSDEC.	At least two weeks prior to the start of construction.
At least two weeks prior to the start of overland construction, the Certificate Holders shall hold a pre-construction meeting to which they shall invite DPS Staff, NYSDOT, and NYSDEC. The agenda, location, and attendee list for this meeting shall be agreed upon between DPS Staff and the Certificate Holders. The Certificate Holders shall supply draft minutes from this meeting to all attendees. The attendees may offer corrections or comments, and thereafter the Certificate Holders shall issue the finalized meeting minutes to all attendees. If, for any reason, the Contractors retained by the Certificate Holders to construct the Facility cannot finish the construction of such facilities, and one or more new Construction Contractors are needed, there shall be another pre-construction meeting with the same format as outlined above. (CC 58)	DPS Staff, NSDEC, NYSDOT	At least two weeks prior to the start of overland construction.
The Certificate Holders shall confine construction to the Construction Zone and approved additional work areas as detailed in the approved EM&CP. A detailed construction	DPS Staff	Prior to construction.

Description	Submitted to	Approximate Due Date
schedule and location timeline shall be provided to DPS Staff prior to construction (CC 59).		
The Certificate Holders will keep required parties apprised of on-site chemicals and waste stored within 100 feet of their CI or service area. In the case of CI located within the CNY, the Certificate Holders will advise CI owners and operators of on-site chemicals and waste stored within 300 feet of such facilities (CC 34).	Local Fire Departments, Emergency Management Teams, Owners and Operators of Co-Located Infrastructure; Local Fire Departments, Emergency Management Teams in CNY.	Prior to storage of chemicals.
The Certificate Holders will provide the owners and operators of identified agricultural lands with the contact information for the Agricultural Inspector(s) and the Certificate Holders (CC 76).	Agricultural landowners & Operators.	After approval of the EM&CP and prior to construction.
The Certificate Holders will provide notice to local officials and emergency personnel in the area where they will be working on the Project. The notice will meet the conditions outlined in CC 42.	Local officials and Emergency Personnel.	Two weeks prior to the commencement of site preparation in area of applicable jurisdiction.
The Certificate Holders will provide notice to local media for dissemination and display in public places (such as general stores, post offices, community centers, etc.). The notice will meet the conditions outlined in CC 42.	Media for public display.	Two weeks prior to the commencement of site preparation in area of applicable jurisdiction.
The Certificate Holders will notify the adjacent landowners and their tenants of construction work within 100 feet of their property at least two weeks prior to the commencement of construction in these areas and provide copies of all correspondence to the DPS Staff. The notice will meet the conditions outlined in CC 42 (CC 33, 42).	Adjacent landowners & Tenants with copies to DPS Staff	Two weeks prior to commencement of site preparation in area of landowner or tenant.
DURING CONSTRUCTION		
The Certificate Holders will make available to the public a toll-free or local phone number of an agent or employee who will receive complaints, if any, during the construction of the Project. In addition, the phone number of the Secretary and the phone number of the Commission's Environmental Compliance Section will be provided. A log will be maintained that lists at least the date of any complaint, identity and contact information for the complaining party, the date of the Certificate Holders'	DPS Staff as needed.	Upon commencement of construction. See Appendix I for current toll-free number, Public Involvement Plan and Compliant Resolution Plan.

Description	Submitted to	Approximate Due Date
response, and a description of the outcome. Phone logs will be made available to DPS Staff upon request. The Certificate Holders will report to DPS Staff every complaint that cannot be resolved after reasonable attempts to do so. Any such report will be made within three business days after receipt of the complaint (CC 41).		
The Certificate Holders will provide status reports summarizing construction and indicating construction activities and locations scheduled for the next month (CC 47).	DPS Staff, NYSDOT, and NYSDEC.	Bi-weekly.
The Certificate Holders shall identify encroachments within the Construction Zone and contact individual property owners or occupants to address and seek to rectify such potential encroachments on a case-by-case basis. The Certificate Holders shall report to DPS Staff the result of efforts to address and rectify encroachments in the Construction Zone periodically, but in no event less than quarterly (CC 60).	DPS Staff	At least Quarterly (or more often, as identified).
The Certificate Holders shall consult periodically with state and municipal highway transportation agencies about traffic conditions near the site of the Facility and shall notify each such transportation agency of the approximate date work will begin in its jurisdiction and Construction Zone access points that connect with the highways in that jurisdiction (CC 72).	State and Municipal highway agencies.	Periodically leading up to and during construction.
Should archaeological materials be encountered during construction, the Certificate Holders will notify and seek to consult with to determine the best course of action (CC 110) (see Cultural Resources Section 10 of the EM&CP)	DPS Staff and OPRHP Field Services Bureau.	Within 24-hours of discovery.
Should human remains or evidence of human burials be encountered during the conduct of archaeological data recovery fieldwork or during construction, the Certificate Holders will notify and consult on the appropriate course of action. All archaeological or remains-related encounters and their handling will be further reported in the status reports summarizing construction activities and reviewed in the site-compliance audit inspections (CC 111) (see Cultural Resources Section 10 of the EM&CP).	DPS Staff and OPRHP Field Services Bureau.	Within 24-hours of discovery.
The Certificate Holders will promptly notify if a New York State listed species of special concern is observed to be present in the Project area (CC 51).	DPS Staff and NYSDEC.	As soon as possible upon discovery.
The Certificate Holders will promptly notify if any threatened or endangered wildlife species under 6 NYCRR Part 182 ("TE species") or any rare, threatened, or endangered plant	DPS Staff, NYDEC, USFWS, NMFS.	As soon as possible upon discovery.

Description	Submitted to	Approximate Due Date
species under 6 NYCRR Part 193 ("RTE plants") are observed to be present in the Facility area so as to determine the appropriate measures to be taken to avoid or minimize impacts to such species. If necessary to avoid or minimize impacts to such species or as directed by DPS Staff, the Certificate Holders will stabilize the area and cease construction or ground disturbing activities in the Facility area until DPS Staff have determined that appropriate protective measures have been implemented (CC 52).		
For any release of drilling solution occurring in a waterbody, the Certificate Holders will provide notification of details of the release and the course of action they recommend taking (CC 114m).	DPS Staff and NYSDEC.	Immediately.
Immediate notification of any petroleum product spills (CC 35).	DPS, NYSDEC, owners and operators of any CI within 100 feet (or 300 ft in CNY).	Immediately upon discovery of a spill of petroleum products.
Notification prior to the commencement of any herbicide application on the Project (CC 84).	DPS Staff and the appropriate NYSDEC Regional Natural Resource Supervisor(s) and Pesticide Control Specialist.	Fourteen (14) days prior to the commencement of any herbicide application on the Project site.
Schedule of Inspectors and their contact information	DPS	Weekly
POST CONSTRUCTION		
The Certificate Holders shall file with the Secretary, a report regarding the measures taken to achieve the 1,550 MW deliverability commitment established in CC 15(a) hereof, as well as copies of all studies, drawings, and backup documentation that support all such measures (CC 133). The Certificate Holders shall provide a draft of such report to Consolidated Edison (Con Edison) for its review and comment at least thirty days prior to the filing of such report. The report shall include the information provided in CC 133.	Secretary of the Commission.	No less than sixty (60) days prior to delivery of test energy from the Facility to the Astoria Annex Substation and the Rainey Substation.
The Certificate Holders shall file an Operation and Maintenance Plan(s) for the Project's Interconnection Facilities. The Plan(s) shall be updated yearly, and a copy of the update plan(s) shall be filed with the Secretary, as well as submitted to Con Edison, and NYPA (CC 132).	Secretary of the Commission.	60 days prior to the anticipated date of commercial commencement of operation (COD)

Description	Submitted to	Approximate Due Date
Notification that all restoration has been completed in compliance with this Certificate and the Order(s) approving the EM&CP (CC 48).	Secretary of the Commission.	Within 10 days of the completion of final restoration activities.
Following final completion of construction of a particular Segment, the Certificate Holders shall prepare and provide to the DPS the as-built design drawings, which shall include a detailed map or maps containing all of the information specified in CC 139.	DPS	Within 90 days following the completion of construction.
The Certificate Holders shall provide a copy of their emergency procedures and contacts. If modifications are made an updated copy will be provided (CC 136).	Bulk Electric System Section of DPS Staff, Con Edison, and NYPA	Upon commencement of operation.
The Certificate Holders shall notify NYSDOT, NYSDEC, and the Secretary to the Commission of the date of commencement of commercial operation (CC 50).	NYSDOT, NYSDEC, and the Secretary to the Commission.	No later than three days after commercial operation.
The Certificate Holders will provide a long-range ROW maintenance plan for the Facility ROW for the areas specified in CC 91. This plan will contain all information outlined in CC 91.	Secretary of the Commission.	Within six months after commencement of commercial operation.
The Certificate Holders will notify NYSDOT, NYSDEC, and the Secretary to the Commission of the date of commencement of commercial operation (CC 50).	NYSDOT, NYSDEC, and the Secretary to the Commission.	three days after commercial operation.
The Certificate Holders will promptly provide to DPS Staff, NYPA, and Con Edison copies of all notices, filings, and other substantive written communications with NYISO as to such reduction, any plans for making repairs to remedy the reduction, and a proposed schedule for any such repairs.	DPS Staff, NYPA, Con Edison.	Within five business days of any failure of equipment causing a reduction of more than 10 percent in the capacity of the Project.
The Certificate Holders will provide monthly reports to DPS Staff, Con Edison, and NYPA on the progress of any repairs until completed. The monthly reports will contain the information specified in CC 126.	DPS Staff, NYPA, Con Edison.	Monthly until repairs are completed.

Description	Submitted to	Approximate Due Date
The Certificate Holders will work cooperatively with NYPA, Con Edison, and NYISO to avoid any future occurrences. If such equipment failure is not completely repaired within nine months of its occurrence, the Certificate Holders will provide a detailed report to the Secretary. The report will contain the information specified in CC 126.	Secretary to the Commission.	Within nine months and two weeks after equipment failure.
The Certificate Holders will report any failure of the Project's cables. The report will contain the information specified in CC 135.	Bulk Electric System Section of DPS Staff, Con Edison, and NYPA	Within one day of determining the location of failure in one of the Project's cables.
The Certificate Holders will provide a copy of their emergency procedures and contacts. If modifications are made, an updated copy will be provided (CC 136).	Bulk Electric System Section of DPS Staff, Con Edison, and NYPA	Upon commencement of operation.
The Certificate Holders will notify DPS Staff of any system trips incidents.	DPS Staff	If the HVDC transmission system trips offline (other than as a result of any Operational Measures).
Following the incident, the Certificate Holders will provide notice of the cause of the trip and what actions, if any, the Certificate Holders are taking to rectify the cause (CC 134).	DPS Staff, NYPA, Con Edison	
The Certificate Holders will call and report any transmission related incident that affects the operation of the Project. A subsequent report of the incident will be submitted. The report will contain the information specified in CC 134. The Certificate Holders will work cooperatively with Con Edison, NYPA, NYISO, NPCC, NYSRC, NERC, and DPS Staff to prevent any future occurrences (CC 134).	Call Bulk Electric System Section of DPS Staff. Submit report to Bulk Electric System Section of DPS Staff, Con Edison, and NYPA	Call within 6 hours of any incident. Submission of report within seven days of the incident.
Following final completion of construction of a particular Segment, the Certificate Holders will prepare and provide to the DPS the as-built design drawings, which will include a detailed map or maps containing all of the information specified in CC 139.	DPS	Within 90 days following the completion of construction.

Description	Submitted to	Approximate Due Date
Present CC 89's post-construction assessments and plans for DPS Staff review within one year of the date the Facility is placed in service.	DPS Staff	Within one year of COD.
Within 60 days of completing construction of the HVDC Transmission System, the Certificate Holders shall consult with the New York State Office of General Services (OGS) Bureau of Land Management regarding specifications for providing as-built information and mapping of the submerged portions of the HVDC Transmission System in conformance with the requirements of the OGS Bureau and 9 NYCRR Part 271. Within 60 days of that consultation, the Certificate Holders shall provide to the OGS as-built information and mapping complying with its specifications (including shapefile information compatible with ArcView® GIS software) and shall file with the Secretary copies of the as-built information and mapping and proof of filing with the OGS (CC 49)	OGS	Within 60 days of completing construction.
ANY PERIOD DURING PROJECT (PRIOR TO CONSTRUCTION, DURING CONSTRUCTION, POST CONSTRUCTION)		
The Certificate Holders shall not place transmission cable in any waterway, trench, conduits, or other location intended for permanent installation of the Facility prior to the issuance (i) by The approval by appropriate Canadian federal and/or provincial authorities of all permits and consents those approvals and permits necessary in order to allow for the construction of transmission facilities interconnecting with the bulk power system operated by TransÉnergie (or a successor to such organization) and extending to the New York border (CC 11a).	Secretary to the Commission	Within 15 days of receipt.
(ii) Approval from the United States Department of Energy of the Presidential Permit (pursuant to Executive Orders 10485 and 12038) (CC 11a).	Secretary to the Commission.	Within 15 days of receipt. Submitted October 15, 2014 (DMM Item 755)
Reports regarding the status of efforts to achieve certifications and approvals of upstream facilities in Canada (CC 11c).	Secretary to the Commission.	Every six months from the start of the Certificate of Conditions and until the certifications and

Description	Submitted to	Approximate Due Date
		approvals are obtained. Regular filings made starting August 16, 2013 (DMM Item 746).
In the event that Hydro Quebec-TransÉnergie is unable to achieve certification in Canada, the Certificate Holders will (i) notify the Secretary; and (ii) stop work in New York State and initiate stabilization of disturbed sites, and (iii) undertake restoration of any sites not previously restored, as set forth in the applicable EM&CP and relevant sections of this Certificate and the BMPs, including, without limitation, section 11 of the BMPs. (CC 11c).	Secretary to the Commission.	In the event that Hydro Quebec-TransÉnergie is unable to achieve certification in Canada.
The Certificate Holders will file a copy of all the documents specified in CC 125 (a-g) as they become available and throughout the life of the Facility, to the extent they are updated (CC 125).	Secretary to the Commission.	As available and when updated, throughout the life of Facility.
The Certificate Holders will notify the Secretary of the Commission of the date of closing which will occur after the completion of the transaction(s) pursuant to which the costs of construction of the Project are funded (CC 45).	Secretary of the Commission.	Within three (3) days after completion of the closing transaction.
Petition describing the action or determination made in connection with the permits and approvals referenced in the Certificate Conditions that is unreasonable or unreasonably delayed (CC 18b).	Commission and appropriate permitting authority	As needed.
A summary or statement notifying the Secretary in writing of all, or any portion of the Project's construction was not completed (CC 12).	Secretary to the Commission	As needed.
The Certificate Holders will provide copies of all necessary permits from applicable state agencies for the delivery of oversized construction materials and equipment (CC 40).	Secretary to the Commission	As needed.
The Certificate Holders shall make modifications to the Project if it is found by the NYISO or the Commission to cause reliability problems to the New York State Transmission System. If NYPA, Con Edison, or the NYISO bring concerns to the Commission, the Certificate Holders shall be obligated to respond to those concerns. The Certificate Holders shall prepare a report within 45 days of	DPS Staff	As needed within forty-five (45) days of notification by DPS Staff.

Description	Submitted to	Approximate Due Date
notification by DPS Staff that DPS Staff has determined that a reliability problem exists (CC 131).		
The Certificate Holders will report any theft of materials related to the Facility with a value in excess of ten thousand dollars ($10,000) to the DPS Representative. The notice will contain the information specified in CC 137.	DPS Staff	As needed within one (1) business day of the time when the theft comes to the attention of the Certificate Holders.
All proposed modifications to any of the Segment EM&CPs and subsequent notices and filings will follow the procedures described in Section 1.5.	DPS Staff	As needed.
The Certificate Holders will notify the owners or operators of co-located infrastructure that is impacted by the Project or has the potential to be impacted by the Project of any situation involving imminent risk to health, safety, property, or the environment that requires the Certificate Holders to cross any infrastructure or to use any associated property to address the emergency (CC 28g).	Owners and Operators of co-located infrastructure.	In the event of the emergency
The Certificate Holders will advise the owners or operators of co-located infrastructure of all construction activities that take place within the vicinity of co-located infrastructure. The vicinity will be defined as described in CC 28e.	Owners and Operators of co-located infrastructure.	At least thirty (30) days prior to commencing any construction activities
The Certificate Holders will notify the owners or operators of co-located infrastructure if any damage to or adverse effects to the co-located infrastructure resulting from any studies, surveys, testing, sampling, preliminary engineering, pre-construction activities, and construction (CC 28f).	Owners and Operators of co-located infrastructure.	Immediately upon knowledge or discovery of damage.
The Certificate Holders shall coordinate with NYPA and Con Edison system planning and system protection engineers to evaluate the characteristics of the transmission system before purchasing any system protection and control equipment related to the electrical interconnection of the Project to NYPA's and Con Edison's transmission facilities. This discussion is designed to ensure that the equipment purchased will be able to withstand most system abnormalities (CC 128).	NYPA and Con Edison system planning and system protection engineers.	Before purchasing any system protection and control equipment related to the electrical interconnection of the Project to NYPA's and Con Edison's transmission facilities

Description	Submitted to	Approximate Due Date
The Certificate Holders shall work with NYPA and Con Edison engineers and safety personnel on testing and energizing equipment and develop a start-up testing protocol providing a detailed description of the steps that they will take to limit system impacts prior to and during testing of the Project. Such protocol shall be provided to NYISO, Con Edison, and NYPA for review and comment and, following the review and comment phase, a copy of such protocol shall be provided to Staff of the Bulk Electric System Section of the DPS. The Certificate Holders shall comply with this protocol once established, unless NYISO provides written authorization to Certificate Holders to deviate from that protocol. The Certificate Holders shall make a good faith effort to notify DPS Staff of meetings related to the electrical interconnection of the Project to the NYPA's or Con Edison's transmission system, as applicable, and provide the opportunity for Staff to attend those meetings. The Certificate Holders shall provide a copy of the testing protocol to Staff of the Bulk Electric Systems Section of DPS (CC 130).	NYISO, Con Edison, NYPA, DPS Staff, Bulk Electric Systems Section of DPS	During the testing and energizing phase of the Project.

3.4 STOP WORK ORDERS

During the pre-construction meeting, all Contractors will be notified that the Environmental Inspector(s) will have the authority to stop work and direct actions in the event of, or for the occurrence or prevention of violations of a Certificate Condition or a condition of another Project permit. The Safety Inspector will have stop work authority in the event of a leak or spill or other event that impacts human health and safety during construction activities.

All Project personnel will be encouraged to notify the Environmental Inspector, Safety Inspector, Construction Manager, Contractor, Project Preservation Officer, or DPS Staff if they observe conditions that could potentially be in non-compliance so that corrective action(s) can be taken. If any non-compliant or potentially non-compliant actions or issues are observed, all Project personnel should report it to their supervisor as soon as it is safe to do so.

Upon becoming aware of any concern, the Environmental Inspector, Safety Inspector, and other Project personnel will meet with the contractor's or subcontractor's employees to discuss and resolve the issues. Stop Work Authority will be exercised sparingly and with due regard to potential environmental impact,

economic costs involved, possible impact on construction activities, and whether an applicable statute or regulation is or is claimed to be violated.

Any observation of spills, leaking fluids or improperly stored fluids may trigger the issuance of a "stop work" notice by the Safety Inspector or the Environmental Inspector until the situation is resolved (BMP Document Section 13.7).

The Certificate Holders will regard DPS Staff representatives as the PSC's designated representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate or may violate the terms of the Certificate Conditions, the WQC, or any other terms of any relevant permits or jurisdictional agencies, DPS Staff may also issue stop work order for that location or activity (CC 54a). Before exercising such authority, DPS Staff will consult (wherever practicable) with the Environmental and/or Safety Inspector. Within reasonable time constraints, all attempts will be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter will be brought immediately to the attention of the Certificate Holders' Construction Manager and the Director of the DPS Office of Energy Efficiency and the Environment. If DPS Staff issues a stop-work order, neither the Certificate Holders nor the EPC Contractor will be prevented from undertaking any safety-related activities that they deem necessary and appropriate under the circumstances. The issuance of a stop-work order, or the implementation of measures as described below may be directed at the sole discretion of the DPS Staff during these discussions.

A stop work order issued by DPS Staff will expire 24 hours after issuance unless confirmed by a single Commissioner. If a stop-work order is confirmed, the Certificate Holders may seek reconsideration from the confirming Commissioner or the whole Commission. If the emergency prompting the issuance of a stop work order is resolved to the satisfaction of the Commissioner or the Commission, the stop work order will be lifted. If the emergency has not been satisfactorily resolved, the stop work order will remain in effect. (CC 54b)

If DPS Staff or the Environmental Inspector discovers a specific activity that represents a significant environmental threat that is or immediately may become a violation of the Certificate Conditions, the WQC, or any other terms of any relevant permits or jurisdictional agencies, and on-site construction personnel refuse to take appropriate action after being advised of the threat, DPS Staff and/or the Environmental Inspector may direct the field crews to stop the specific potentially harmful activity immediately. If the direction to stop work is issued by DPS Staff and Certificate Holders' responsible personnel are not on site, the DPS Staff will immediately thereafter inform the Construction Inspector and/or the Inspector of the action taken. The stop work order will be lifted by the DPS Staff when the situation prompting its issuance has been resolved.

If DPS Staff determines that a significant threat exists such that protection of the public or the environment at a particular location requiring the immediate implementation of specific measures, the DPS Staff may, in the absence of the Environmental Inspector and the Construction Inspector, or in the presence of such personnel who, after consultation with the DPS Staff, refuse to take appropriate action, direct the Certificate Holders or their Contractors to implement the corrective measures identified in the approved EM&CP. The field crews will comply with the DPS Staff's directive immediately. DPS Staff will immediately thereafter inform the Certificate Holders' Construction Inspector and/or Environmental Inspector of the action taken.

DPS Staff or the Environmental Inspector will promptly notify the appropriate NYSDEC representative of any activity that is a significant environmental threat to a state-regulated wetland or its regulated adjacent area, a protected stream or other waterbody, an RTE species, or a state- or federally- identified hazardous waste site or that may become a violation of the Certificate Conditions, WQC, or any other terms of any relevant permits or jurisdictional agencies. If any NYSDEC field representatives observe any activities that violate or may violate either the Certificate Conditions or the ECL, the representative will notify the DPS Staff and the Environmental Inspector. NYSDEC field representatives and APA representatives (where applicable) will consult with the Environmental Inspector in assessing site conditions and determining whether a recommendation should be made to DPS staff to exercise its stop-work authority or alternatively if the Certificate Holders should be directed to take action to minimize further impacts to streams and regulated wetlands as appropriate.

Any archaeological materials or human remains encountered in the field during construction will result in a stop work order until appropriate agencies can be consulted, and appropriate mitigation measures be implemented. See Section 11.0 of this EM&CP for additional information related to the response to cultural resources encountered during construction.

3.5 DECOMMISSIONING PLAN

The permanent Project components involved in Segment 12 are all buried infrastructure which is entirely located within or adjacent to the public road ROW. As such, the Certificate Holders do not contemplate removing these below-ground components in the event that the Project is de-energized at some future date (CC 162(k)). Given the anticipated depth of burial, the continued presence of buried infrastructure is not anticipated to pose a concern following de-energizing of the Project (CC 162(k)). Therefore, the decommissioning plan for Segment 12 will be to leave buried Project components in place (CC 162(k)). Any at-surface components (e.g., manhole, splice vault structures) within four feet of ground elevation would be removed, and the area would be restored in accordance with the restoration requirements.

4.0 CONSTRUCTION METHODS

The Certificate Holders will construct the Project in a manner that conforms to Good Utility Practice, as herein defined, and all applicable standards of the American National Standards Institute (ANSI) including, without limitation, the National Electrical Safety Code (NESC), Institute of Electrical and Electronics Engineers (IEEE), Standard IEEE C2-2002, and any stricter standards adopted by the Certificate Holders. Upon completion thereof, the Certificate Holders will certify to the PSC that the Project was constructed in full conformance with the standards specified herein. Before any construction begins within any segment of the project, the boundaries of the Construction Zone will be delineated in the field. All vegetation clearing methods and protection measures to be used prior to and during construction are described in Section 8.0. All cleanup and restoration methods that will be performed after construction are described in Section 14.0.

As described in the SWPPP (Appendix G), the approximate construction sequence for each segment will be as follows:

1. Establish work area and contractor staging areas.
2. Install stabilized construction entrance and temporary erosion and sediment control measures (installed in progressive phases).
3. Perform initial clearing to remove vegetation (where required).
4. Build gravel access roads.
5. Place temporary timber mattings through accessible wetland areas (where required).
6. Perform excavation to facilitate conduit placement or splice pits.
7. Perform conduit, splice box, handhole, etc. installation.
8. Backfill the trench in accordance with project details and specifications.
9. Within HDD areas, set up laydown, staging and excavate pits.
10. Perform HDD.
11. Restore HDD disturbed areas in accordance with the plans.
12. Within pavement areas, restore pavement to pre-existing grade, mill and overlay areas as depicted on the plans.
13. Pull and/or splice cable.
14. Restore signage, guiderail, mailboxes etc. and staging/access roads impacted by construction to pre-existing condition.
15. Remove temporary timber mattings through wetland areas and apply appropriate seed mixture where necessary.
16. When all disturbed areas have been stabilized, remove all temporary sediment and erosion control measures.

The following sections describe the procedures and methods to be employed during the construction of the Project.

4.1 NOTIFICATION REQUIREMENTS

The Certificate Holders provided notice to residents, businesses, and stakeholders as required by the Certificate. The Certificate Holders also provided notice to the owners of buildings and structures with foundations (including underground and aboveground) within 100 feet of any HDD staging area or trenching activity with an offer to inspect foundations before, during, and after construction (see Appendix B). The notice provided included the following provisions (CC 154(a)):

1. An offer to inspect building, facility, and structure foundations before, during, and after construction.
2. An explanation of the benefits of such inspections and what documentation will be provided to building or facility or structure owners and operators.

The building foundation inspection reports conducted for residents, businesses, and facility owners/operators can be performed by the Certificate Holders' designated subcontractor or by the specified building owner's designated contractor, if requested by the owner. If the inspection is performed by the building owner's designated contractor, the Certificate Holders will reimburse costs as needed.

All inspection reports will:

1. Provide each building, facility, or structure owner or, to the extent known, operator with documented conditions at each significant stage of construction.
2. Include photographs of any existing and post-construction damage and document measurements of foundation crack lengths during each inspection phase.
3. Provide each building, facility, and structure owner/operator with a report detailing foundation condition findings.
4. Provide a copy of each prepared report to DPS Staff within 30 days of completion (CC 154(b)).

As described in Table 3-2, at least 30 days prior to the commencement of any construction activity, the Certificate Holders will advise the owners or operators of co-located infrastructure (CI) of all construction activities that take place within 100 feet of non-natural gas operating CI and within 200 feet of natural gas operating CI. The Certificate Holders will notify the owners or operators of CI if any CI has been impacted by the Project or has the potential to be impacted. This includes any emergency involving imminent risk to health, safety, property, or the environment that requires the Segment to cross CI or to use any associated CI owned property to address the emergency. All known locations of CI within Segment 12 and appropriate BMPs are summarized in Section 13 of this EM&CP.

HDD site preparation or trench excavation work will not commence until all building, facility, and structure owners and operators provided with notice (as described) have accepted or declined inspection offers, or a response has not been received within 2 weeks from service. A record will be created and maintained by the Certificate Holders to document all offers of inspections and subsequent responses.

4.2 CABLE INSTALLATION REQUIREMENTS

Segment 12 and the associated transmission cable is not proposed to be located beneath existing buildings, footings, or foundations, and all excavations will be in accordance with all NYSDOT standards and specifications, and other applicable standards and specifications including the following:

1. The Building Code of New York State, including Section 1803 and other relevant sections
2. The Occupational Safety and Health Administration (OSHA) Technical Manual (OTM), including Section V: Chapter 2 and other relevant sections
3. OSHA Regulations, including Part Number 1926, Standard Number 1926.651, and other applicable provisions.

The Certificate Holders have designed, engineered, and will construct the Project such that, to the extent applicable the operation of the Project will comply with the interim electrostatic field standard established by the PSC in Opinion No 78-13 (issued on June 19, 1978, in Cases 26529 and 26559 and the limit for magnetic fields set in the Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities (issued on September 11, 1990 in Cases 26529 and 26559) (CC 30, CC 159(s)). Demonstration of compliance with this Certificate Condition was submitted to the PSC as Exhibits B, C and D and Appendix A and B to the Certificate Holders' January 29, 2021, *Petition for an Amendment to Certificate of Environmental Compatibility and Public Need* (DMM Item 819), which amendment was approved by the Commission in a May 14, 2021, *Order Granting Amendment of Certificate of Environmental Compatibility and Public Need Subject to Conditions* (DMM Item 831).

All cable installation methods will follow the procedures described in Section 19 of the BMP Document (2012 BMPs, Section 19) to the maximum extent practicable.

4.3 HORIZONTAL DIRECTIONAL DRILLING

Horizontal direction drilling (HDD) will be performed in accordance with the Horizontal Direction Drilling Preliminary Site Investigation and Planning Report included as Appendix J, the specifications described in Section 4.2.1 "Installation and the Performance Controls" below, Inadvertent Release and Recovery Plan included as Appendix J, and the BMP document (BMP Document, Section 8.1). Dewatering procedures at

the bore pits are described in Section 4.3.2. Table 4-1 describes the locations of HDD in Segment 12. More specific design details are included in Appendix J and the HDD design drawings in Appendix C.

Table 4-1. Segment 12 HDD Locations

HDD #	Sheet	Length (feet)	Station (Approximate – see Drawings for Details)	Purpose
124	C-100 - C-101	815	STA 72496+75 to 72503+75	Stream, roadway, and utility crossing
126	C-105 - C-106	2,175	STA 72561+20 to 72582+60	Utility crossing
127	C-108 - C-109	1,460	STA 72610+85 to 72625+30	Utility and roadway crossing
129	C-110 - C-111	1,660	STA 72635+50 to 72654+15	Stream, roadway, and utility crossing
131	C-111 - C-112	2,140	STA 72655+10 to 72675+45	Roadway crossing
132	C-112 - C-114	1,840	STA 72677+55 to 72697+00	Utility and roadway crossing
124	C-100 - C-101	815	STA 72496+75 to 72503+75	Stream, roadway, and utility crossing

4.3.1 Installation and Performance Controls

During installation of each HDD, the Certificate Holders will follow the avoidance and minimization measures related to waterbodies, wetlands, species habitat etc. as described in Section 9.0. Additionally, where applicable the Certificate Holders will follow all avoidance and minimization measures related to vegetation clearing (Section 8.0), sensitive noise receptors (Section 10.0), and cultural resources (Section 11.0), and co-located infrastructure (Section 13.0). These avoidance and minimization measures will serve as the Environmental Impacts Mitigation and Restoration Plan as described in this EM&CP. Where impacts require restoration, the Certificate Holders will follow the measures described in Section 14.0 and the Soil Erosion & Sediment Control Plans & Details (Appendix C).

There are no known hazardous materials within the work areas for Segment 12. While hazardous materials are not expected to be used and therefore hazardous waste will not be generated, the measures described in Section 5.3 will be followed for all solid waste disposal including hazardous waste. While not expected to be encountered, the measures described in Section 5.9 and Appendix L will be followed if any environmental contamination is encountered during installation of each HDD.

Protective enclosures will be implemented to protect workers, non-essential personnel, and bystanders in accordance with the requirements of OSHA Technical Manual (OTM) and shown in the Plan and Profile Drawings in Appendix C.

Section 4.3.3 summarizes the drilling fluids management measures that will be followed during all HDD installation. Section 10.3 describes nighttime work requirements for HDD operations.

4.3.2 Structures Within 100 Feet of HDD Operations

Vibrations will be monitored at locations of HDD installations, with a focus on structure(s) closest to the work area (e.g., within 100 feet). Contractors will implement vibratory monitoring in accordance with NYSDOT 634.99010017 (non-blasting) for baseline survey and construction phase work. The Contractor will perform vibration monitoring during construction operations, as applicable and when adjacent construction activities make monitoring prudent. Monitoring will be performed at these locations, if requested. The contractor will adjust the construction parameter to control the amplitude of the vibration to diminish its force at distances where sensitive structures exist. Standards developed by the NYSDOT and/or U.S. Bureau of Mines (USBM) set limits on vibration magnitudes that will prevent damage to above and below-ground structures. Adherence to these standards will avoid and minimize adverse impacts to existing structures (BMP Document Section 8.1.3).

A desktop assessment has identified approximately 162 parcels within 100 feet of HDD activities associated with Segment 12 of the Project. Table 4-2 identifies those parcels and their approximate locations on the Plan and Profile Drawings (Appendix C). All of the parcel owners within 100 feet of HDD operations will be notified as required by the Certificate (see Appendix B, Structure Owner Notice) regarding pending construction activities.

Table 4-2. Parcels within 100 Feet of HDD Operations

HDD #	Parcel Number	Sheet	Location (Approximate – see Drawings for Details)
124	15.04-3-18	C-100 - C-101	STA 72496+75 to 72503+75
124	15.04-3-14	C-100 - C-101	STA 72496+75 to 72503+75
124	15.02-4-49	C-100 - C-101	STA 72496+75 to 72503+75
124	15.02-4-46	C-100 - C-101	STA 72496+75 to 72503+75
124	15.02-4-50	C-100 - C-101	STA 72496+75 to 72503+75
124	15.02-4-59	C-100 - C-101	STA 72496+75 to 72503+75
124	15.02-4-45	C-100 - C-101	STA 72496+75 to 72503+75
126	20.07-3-64	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-3-65	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-2-13	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-2-82	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-2-14	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-2-15	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-3-63	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-3-62	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-3-60	C-105 - C-106	STA 72561+20 to 72582+60

HDD #	Parcel Number	Sheet	Location (Approximate – see Drawings for Details)
126	20.07-3-57	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-3-59	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-3-58	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-20	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-19	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-18	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-2-20	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-2-19	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-3-59./1	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-2-21	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-2-18	C-105 - C-106	STA 72561+20 to 72582+60
126	20.07-2-16	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-28./26	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-28	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-27	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-25	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-24	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-23	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-22	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-21	C-105 - C-106	STA 72561+20 to 72582+60
126	20.02-11-34	C-105 - C-106	STA 72561+20 to 72582+60
126	20.02-11-35	C-105 - C-106	STA 72561+20 to 72582+60
126	20.02-11-37.1	C-105 - C-106	STA 72561+20 to 72582+60
126	20.02-11-32	C-105 - C-106	STA 72561+20 to 72582+60
126	20.02-11-31./300	C-105 - C-106	STA 72561+20 to 72582+60
126	20.02-11-31./104	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-28./27	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-2-29	C-105 - C-106	STA 72561+20 to 72582+60
126	20.02-11-30	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-3-1	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-3-7	C-105 - C-106	STA 72561+20 to 72582+60
126	20.11-3-6	C-105 - C-106	STA 72561+20 to 72582+60
127	20.15-3-2	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-1	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-49	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-50	C-108 - C-109	STA 72610+85 to 72625+30

HDD #	Parcel Number	Sheet	Location (Approximate – see Drawings for Details)
127	20.19-7-2.1	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-1-1	C-108 - C-109	STA 72610+85 to 72625+30
127	20.15-3-1	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-1-3	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-1-4	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-1-7.1	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-1-5	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-1-6	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-1-54	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-42	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-47	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-48	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-46	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-45	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-44	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-43	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-41	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-6-3	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-6-1	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-39	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-7-40	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-4-13	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-4-9	C-108 - C-109	STA 72610+85 to 72625+30
127	20.19-4-10	C-108 - C-109	STA 72610+85 to 72625+30
129	26.42-2-1	C-110 - C-111	STA 72635+50 to 72654+15
129	26.42-2-2	C-110 - C-111	STA 72635+50 to 72654+15
129	26.34-1-1	C-110 - C-111	STA 72635+50 to 72654+15
129	26.34-1-2	C-110 - C-111	STA 72635+50 to 72654+15
129	26.34-1-3	C-110 - C-111	STA 72635+50 to 72654+15
129	26.34-2-1	C-110 - C-111	STA 72635+50 to 72654+15
129	26.34-2-2	C-110 - C-111	STA 72635+50 to 72654+15
129	26.07-5-70	C-110 - C-111	STA 72635+50 to 72654+15
129	26.07-4-3	C-110 - C-111	STA 72635+50 to 72654+15
129	26.07-4-4	C-110 - C-111	STA 72635+50 to 72654+15
129	26.07-3-25	C-110 - C-111	STA 72635+50 to 72654+15
129	26.07-3-24	C-110 - C-111	STA 72635+50 to 72654+15

HDD #	Parcel Number	Sheet	Location (Approximate – see Drawings for Details)
129	26.07-3-1	C-110 - C-111	STA 72635+50 to 72654+15
129	26.07-3-22	C-110 - C-111	STA 72635+50 to 72654+15
129	26.07-3-23	C-110 - C-111	STA 72635+50 to 72654+15
129	26.11-1-12.4	C-110 - C-111	STA 72635+50 to 72654+15
129	26.11-1-12.3	C-110 - C-111	STA 72635+50 to 72654+15
129	26.07-5-71	C-110 - C-111	STA 72635+50 to 72654+15
129	26.07-5-72	C-110 - C-111	STA 72635+50 to 72654+15
131	26.42-2-4	C-111 - C-112	STA 72655+10 to 72675+45
131	26.42-1-11	C-111 - C-112	STA 72655+10 to 72675+45
131	26.42-2-5	C-111 - C-112	STA 72655+10 to 72675+45
131	26.42-2-8	C-111 - C-112	STA 72655+10 to 72675+45
131	26.42-1-10	C-111 - C-112	STA 72655+10 to 72675+45
131	26.42-1-9	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-52	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-54	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-55	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-56	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-57	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-66	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-65	C-111 - C-112	STA 72655+10 to 72675+45
131	26.42-2-10	C-111 - C-112	STA 72655+10 to 72675+45
131	26.42-2-9	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-19	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-58	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-16	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-17	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-18	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-70	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-15	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-68	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-69	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-64	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-60	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-59	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-61	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-63	C-111 - C-112	STA 72655+10 to 72675+45

HDD #	Parcel Number	Sheet	Location (Approximate – see Drawings for Details)
131	26.50-1-62	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-60	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-59	C-111 - C-112	STA 72655+10 to 72675+45
131	26.50-1-58	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-55	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-56	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-57	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-24	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-25	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-51	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-54	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-52	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-50	C-111 - C-112	STA 72655+10 to 72675+45
131	26.51-1-26	C-111 - C-112	STA 72655+10 to 72675+45
131	26.11-1-12.3	C-111 - C-112	STA 72655+10 to 72675+45
131	26.11-1-12.1	C-111 - C-112	STA 72655+10 to 72675+45
131	26.11-1-12.2	C-111 - C-112	STA 72655+10 to 72675+45
132	26.51-1-34	C-112 - C-114	STA 72677+55 to 72697+00
132	26.16-1-2	C-112 - C-115	STA 72677+55 to 72697+00
132	26.52-1-31	C-112 - C-116	STA 72677+55 to 72697+00
132	26.52-1-30	C-112 - C-117	STA 72677+55 to 72697+00
132	26.52-1-32	C-112 - C-118	STA 72677+55 to 72697+00
132	26.51-1-47	C-112 - C-119	STA 72677+55 to 72697+00
132	26.51-1-46	C-112 - C-120	STA 72677+55 to 72697+00
132	26.51-1-45.1	C-112 - C-121	STA 72677+55 to 72697+00
132	26.51-1-45.2	C-112 - C-122	STA 72677+55 to 72697+00
132	26.51-1-42	C-112 - C-123	STA 72677+55 to 72697+00
132	26.51-1-43	C-112 - C-124	STA 72677+55 to 72697+00
132	26.51-1-44	C-112 - C-125	STA 72677+55 to 72697+00
132	26.51-1-48	C-112 - C-126	STA 72677+55 to 72697+00
132	26.51-1-49	C-112 - C-127	STA 72677+55 to 72697+00
132	26.51-1-50	C-112 - C-128	STA 72677+55 to 72697+00
132	26.51-1-26	C-112 - C-129	STA 72677+55 to 72697+00
132	26.51-1-41	C-112 - C-130	STA 72677+55 to 72697+00
132	26.60-1-1	C-112 - C-131	STA 72677+55 to 72697+00
132	26.60-1-15	C-112 - C-132	STA 72677+55 to 72697+00

HDD #	Parcel Number	Sheet	Location (Approximate – see Drawings for Details)
132	26.60-1-16	C-112 - C-133	STA 72677+55 to 72697+00
132	27.61-1-28	C-112 - C-134	STA 72677+55 to 72697+00

4.3.3 Inadvertent Release and Contingency Plan and Drilling Fluids Management

An Inadvertent Release and Contingency Plan (Appendix J) was prepared and addresses the following:

1. Provides an overview of the HDD process with a specific focus on the composition, management, and use of drilling fluids.
2. Identifies controls to be implemented during construction to minimize the potential of an inadvertent release.
3. Identifies the planned means of monitoring to permit early detection of inadvertent releases.
4. Identifies planned means to protect areas that are considered environmentally sensitive (rivers, wetlands, other biological resources or cultural resources).
5. Establishes site-specific environmental protection measures to be utilized prior to, during, and following drilling and pipe installation activities to minimize and control erosion and sediment releases to adjoining wetlands or watercourses.
6. Has site specific preplanned general response programs in place at the start of construction that is understood and can be implemented immediately by all field crews in the event of an inadvertent release of drilling fluid occurs.
7. Establishes a chain of command for reporting and notifying, in a timely manner, the construction management team, the Certificate Holders, and the proper authorities in the event of an inadvertent release of drilling fluid and of the preplanned actions that are to be implemented.

4.3.3.1 Drilling Fluid Management

As described in the BMP document and Inadvertent Release and Recovery Plan (Appendix J), drilling fluid (typically bentonite and water based with selected polymers/additives) will be National Sanitation Foundation (NSF) certified and all recycling and reuse regulations will be followed where applicable. The drilling fluid management system and subsequent disposal is the responsibility of the subcontractor performing HDD. The drilling fluid management system and subsequent disposal will adhere to the following requirements:

1. Used drilling fluid will be processed through an initial clearing that separates the solid materials from the fluid.

2. Heavy solids will be sifted out by a screening apparatus/system and the solids deposited into a dump truck and periodically transported off-site and disposed of at an approved disposal facility determined by the HDD construction subcontractor.
3. All drilling fluid that is deemed unacceptable to be reused during construction or left over at the end of drilling will be collected and transferred into a tanker truck for disposal at an approved disposal facility determined by the HDD construction subcontractor.
4. All disposal locations not pre-approved by DPS will be included in the EM&CP as a modification and submitted via the procedures outlined in Section 3.2.6. All disposal locations not pre-approved by DPS will be included in the EM&CP as a modification and submitted via the procedures outlined in Section 3.2.6.
5. A supply of spill containment equipment and measures shall be maintained and readily available around drill rigs, drilling fluid mixing system, entry and exit pits and drilling fluid recycling system, if used, to prevent spills into the surrounding environment. Pumps, vacuum trucks, and/or storage of sufficient size will be in place to contain excess drilling fluid.
6. An overview of the drilling fluid system will be submitted to the Environmental Inspector for approval once determined and prior to any HDD installation activities.
7. Drilling fluid may be solidified by the HDD subcontractor using solidification agents for the purposes of complying with landfill requirements and aiding with disposal.

4.3.4 Road and Railroad Crossing Methods

Table 12-3 and Section 12.0 describes the road construction that will occur within Segment 12. No railroad crossings occur in Segment 12. Some of the road crossings will be completed utilizing trenchless techniques, including HDD, resulting in minimal disruption of traffic patterns. Where HDD is not feasible due to site conditions, open cuts will be conducted. Each crossing method is discussed in the sections mentioned above. See Sections 4.3 and 4.4 for additional detail.

4.4 TRENCHING

All trenching that may occur during the construction of Segment 12 will follow the specifications on the Plan and Profile Drawings (Appendix C) and the BMPs described below. All excavated material will be managed in accordance with the Soil Management Plan in Appendix L. All dewatering, bedding, and backfilling will follow the measures specified in Section 4.3.3 and 4.3.4.

All excavation shall be made to such depth as required and of the width shown on the Plan and Profile Drawings (Appendix C) to provide suitable room for building the structures and laying the pipe(s) required to for sheeting, shoring, pumping, and draining as necessary. Additionally, all excavation shall be made to such a depth to provide suitable room for removing or stabilizing peat, silt, or any other materials which

the Engineer may deem unsuitable. Hand trench excavation may be required to protect existing utilities and structures.

4.4.1 Trenching in Agricultural Lands

No agricultural lands occur within Segment 12; therefore, there will be no trenching in agricultural lands during construction of Segment 12.

4.4.2 Trenching in Roadways

Table 12-3 notes the project road crossings and the method that will be used to cross. Trenched road crossings will be conducted in accordance with the following specifications in accordance with Section 10.1.2.1 of the BMP Document:

1. Owners or operators of other underground utilities in the area (identified in Appendix R) have been consulted during the EM&CP development and will be notified no less than 30 days prior to the start of construction. Notice provided after normal business hours or on weekends will not begin the notice period.
2. All existing underground facilities will be marked prior to the initiation of asphalt cutting or excavation.
3. Tree limbs, shrubs, cobble stones, or any other natural or man-made features that are not at risk of damage will be temporarily moved, protected, or removed and stored. Where landscaping trees are affected, an arborist will be consulted regarding root cutting and pruning.
4. Detours, signage, and public notice will be posted no later than 24 hours prior to the initiation of construction.
5. Traffic flow will be provided in at least one lane of the road at all times or a detour will be provided. Flaggers or temporary traffic lights will be used where necessary to control traffic flow (see MPT Plan in Appendix C).
6. Any water control devices (roadside ditches, culverts, etc.) disturbed during excavation or construction will be restored immediately after conduit installation.
7. Temporary restoration of the roadway will occur immediately after the conduits are installed.
8. All work within state highway ROW will be conducted in accordance with a highway work permit issued NYSDOT and the requirements of 17 NYCRR Part 131.

For parking vehicles, work crews will utilize Tompkins Cove as the main muster area and have additional parking in vault/HDD work areas along Segment 12 Project Corridor within temporary easements. Crews will carpool to shuttle workers to the work zones using crew vehicles. Crews accessing work zones will not utilize parking in privately-owned lots where temporary easements have not been secured.

4.4.3 Trenching in Wetlands

There is no trenching in wetlands proposed within Segment 12; therefore, the associated BMPs do not apply (BMP Document Section 19.2.4).

4.4.4 Length of Open Trench

The length of the open trench for traditional installation will be determined by the maximum length of conduit that can be placed during a working day. For land installation within Segment 12, the typical length of trench that will be open per day is 200 feet but may be more if conditions allow (up to a maximum of 300 feet).

The general sequence of events for conduit placement and cable installation is as follows:

1. Excavate a portion of trench,
2. Place conduit,
3. Backfill the portion of trench,
4. Repeat for all portions of the trench,
5. Pull cable at splice and vault locations.

4.4.5 Splicing and Jointing

The number of splices required will be determined by the maximum length of cable that can be efficiently transported and pulled. Joints may also be required where trenching methods change and where there are transitions from underwater to overland cable.

The jointing work will be performed in a jointing enclosure (house) supported on a stable work base of crushed stone, concrete or suitable native soil. The jointing house controls the ambient conditions during the splicing operation, including controlled levels of humidity, temperature, and airborne dust. The jointing house is a pre-constructed modular unit. The units include heating, air conditioners, dehumidifiers, and lifting equipment. Where necessary, the jointing house and splicing location (bay) may include a concrete base and side walls for mechanical protection and separation from parallel utilities (BMP Document Section 7.3.3). Table 4-3 notes the splice locations for Segment 12.

Table 4-3. Splice Locations in Segment 12

Splice Number	Sheet	Center of Splice Location (Approximate – see Plan and Profile Drawings for Details)
Transition Vault 3	C-100	STA 72495+61
245	C-102	STA 72527+57
245A	C-103	STA 72538+41
246	C-104	STA 72560+05
246B	C-106	STA 72583+91
246A	C-107	STA 72600+80
247	C-109	STA 72634+00
248	C-112	STA 72676+61
248A	C-115	STA 72712+36
249	C-116	STA 72730+02
249A	C-118	STA 72766+29
250	C-120	STA 72785+29
250A	C-121	STA 72810+72
251	C-123	STA 72843+22
251A	C-125	STA 72866+92
Transition Vault 4	C-127	STA 72898+79

4.4.6 Drainage and Dewatering Methods

The Construction Contractor or applicable subcontractor will be responsible for providing a dewatering system for construction that is adequate size and capacity to lower and maintain the groundwater at the specified level. The dewatering system shall meet the following requirements:

1. Utilize portable sediment tanks with elevated and screened intake hoses to withdraw water from the trench and to minimize pumping of deposited sediment. Where not practicable (due to space within the rail ROW) commercial sediment filter bags may be used. A dewatering hose will be connected to a filter bag placed on the ground surface within a stabilized area. As needed additional erosion and sediment controls may be installed as determined by the Environmental Inspector. Sediment filter bags will be inspected regularly. The trapped sediment will be disposed of in an upland location at least 100 feet from a wetland or waterbody or disposed of at an off-site disposal location in accordance with the Soil Management Plan (Appendix L) (2012 BMPs, Section 4) and the bag itself will be thrown away in a dumpster. A Sediment Dewatering Bag detail is provided on the

Plan and Profile Drawings (Sheet C-602 of Appendix C) to show the general design of one of the methods that may be utilized by the Construction Contractor.

2. Manage trapped sediment collected during dewatering activities as excavated soil materials as described in the Soil Management Plan (Appendix L).
3. Include standby pumps and power sources for continuous operation.
4. Consist of wellpoints, deep wells, cut-off walls, riser pipes, swing joints, header lines, valves, pumps, sumps, discharge lines, and all other necessary fittings, accessories, and equipment for a complete operating system.

The dewatering system shall be kept in continuous operation from the time excavation is started in the dewatering area (or before if required by site conditions to lower groundwater to the elevations specified on the Plan and Profile Drawings [Appendix C]) until the time backfilling is completed at least 2 feet above the normal groundwater level. All water removed from the excavation must be conveyed in a closed conduit. No trench excavations will be used as temporary drainage ditches. All water removed from the excavation will be disposed of by the Construction Contractor in a manner as to not endanger public health, property, or any portion of the Project under construction or completed. If contaminated water is encountered during dewatering, the procedures described in the Soil and Materials Management Plan (Appendix L) will be followed. Water disposal will not cause erosion or sedimentation to occur in existing wetland and stream resources areas, or other swales or water bodies (see SWPPP, Appendix G).

If dewatering wells are required, they shall be installed and developed by a licensed well driller in accordance with state and local regulations. When the dewatering wells are no longer required, they shall be abandoned by the well driller in accordance with these same regulations.

Temporary drainage features shall be installed and maintained, as required, to prevent surface water and groundwater from entering excavations, from ponding on prepared subgrades, and from flooding the project site and surrounding area. Prevent excavated areas from becoming destabilized by the flow of water into the excavations. Slopes of excavated areas shall be protected from scouring and erosion. Surface water shall not be permitted to flow uncontrolled down the face of any slope. Protect subgrades and slopes from softening, undermining, washout, and damage by rain or water accumulation. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations.

4.4.7 Bedding and Backfilling Methods

The conduit will be encased and backfilled with fluidized thermal fill or thermal concrete as described on Sheet C-621 of Appendix C. Fluidized thermal fill and thermal concrete shall conform to project specifications.

The following compaction requirements apply to soil backfill including all non-conduit pipe trench backfill (pipe zone bedding, pipe zone backfill, and trench backfill) and backfill at open pit splices. The Engineer may revise the compaction requirements depending on material properties, compaction equipment, and fill placement location.

1. Backfill within NYSDOT, CP, or CSX ROW and backfill under structures or pavements shall be compacted to a minimum dry density of 95 percent of the standard Proctor maximum dry density of the material used (American Society of Testing and Materials [ASTM] D698) and within plus or minus 2 percent of optimum moisture content.
2. Backfill outside of the areas listed above shall be compacted to a minimum of 92 percent of standard Proctor maximum dry density and within plus or minus 3 percent of optimum moisture content or in accordance with facility owner requirements.
3. Fill used to replace unsuitable materials at the base of the trench excavation shall be compacted to a minimum of 90 percent of standard Proctor maximum dry density and within plus or minus 3 percent of optimum moisture content.

Bedding and backfilling shall be accomplished in three stages unless otherwise specified on the Plan and Profile Drawings (Appendix C). The first stage will involve placement of pipe zone bedding as a layer(s) of selected material required to support, or to stabilize unsound or unsatisfactory foundation conditions. The second stage will involve placement of pipe zone backfill from the top of the bedding material up to 1 foot above the pipe. The third stage will involve the placement of trench backfill in the remainder of the trench up to the surface of the ground or the bottom of any special surface treatment subgrade elevation.

Pipe zone bedding will at a minimum consist of a select mixture of graded crushed stone free from organic, frozen, or other deleterious materials and conforms to the requirements of NYSDOT Section 703-02 and meets the gradation requirements of NYSDOT Size 2.

Pipe zone backfill will at a minimum consist of sound, durable sand, gravel, stone, or a blend of these materials that is free from organic, frozen, or other deleterious materials and conforms to the requirements of NYSDOT Section 304 and meets the gradation requirements of NYSDOT Subbase Type 4.

Trench backfill will at a minimum consist of sound, durable sand, gravel, stone, or a blend of these materials that is free from organic, frozen, or other deleterious materials and conforms to the requirements of NYSDOT 203-2.02C. Screened native on-site soils are suitable for use as trench backfill or general fill in the locations shown on the Drawings or as approved by the Geotechnical Engineer. These materials shall be free of organic and inorganic trash and debris, and frost or frozen material. The material shall not contain particle sizes greater than three (3) inches (75 mm).

Thermal sand will be used as pipe zone bedding and backfill at locations shown in the drawings. Thermal sand shall be a well-graded sand meeting the grading limits in Table 4-4 or an alternate approved by the engineer. Thermal sand shall have a maximum thermal resistivity of 100° C-cm/Watt at 0% moisture as tested per IEEE STD 442.

Table 4-4. Thermal Sand Grading Limits

Sieve Size	Percent Passing
4	100
8	70 to 100
16	45 to 70
30	30 to 50
50	20 to 35
100	15 to 25
200	12 to 18

4.5 DREDGING

There will be no dredging activities in the overland segments of the Project; therefore, the certificate conditions associated with the Dredge Management Plan and the Turbidity Monitoring Plan do not apply.

4.6 CONVERTER STATION AND SUBSTATION REQUIREMENTS

Converter Station and Substation Requirements do not apply to Segment 12 of the Project.

4.7 RIGHTS-OF-WAYS AND EASEMENTS

The Certificate Holders have acquired and/or are in the process of acquiring control of all required interests in lands within the Facility ROW necessary to construct the project (CC 141), including through municipal consents. For permanent rights acquired, the Certificate Holders' will record, in accordance with the New York State Law relating to the official recordation of property interests, their rights to use and occupy such lands for the life of the Project (CC 141), where appropriate. For this Segment of the Project, a Memorandum of Understanding (MOU) was executed by Rockland County and the host Towns in whose jurisdiction the Facility will be located to, among other things, grant necessary municipal consents for placement of the CHPE line in public roads and rights-of-way; the Certificate Holders provided this MOU as part of their

Petition for a Certificate of Public Necessity and Convenience under PSL § 68 (CC 142).[1] Temporary rights will be obtained through appropriate instruments and recorded where required by law. To the extent any additional instruments are required, those will be provided once obtained.

For all rights concerning property upon which permanent facility components will be located, the Certificate Holders have obtained or will obtain initial title information, to the extent available or appropriate, and will continue to develop the required title information consistent with CC 143.

Most of the construction of Segment 12 will take place within NYSDOT ROW and extensive coordination has occurred with the NYSDOT on the design presented herein.

Table 4-4 summarizes the easements along Segment 12 that Certificate Holders do not believe are required for the Facility and are requesting be waived in accordance with CC140 which reads:

> "*Except as may be detailed, justified, and approved by the Department of Public Service pursuant to the EM&CP process, each edge of the permanent overland Facility ROW shall be no closer than (a) when located entirely within lands owned or controlled by a railroad company or a public highway, 6 feet to the outer surface of the nearest installed cable and (b), in all other areas, 8 feet to the outer surface of the nearest installed cable. [as amended in Amendment 1 (March 20, 2020)].*"

There will be no permanent infrastructure placed in these locations and construction will not be conducted in these areas; Facility operation and maintenance activities can take place wholly within existing permanent easement areas already obtained without the need for additional ROW width at the identified locations. For those reasons, CHPE does not believe that the easement widths set forth in CC 140 are necessary to the safe and reliable operation of the Facility and submits that acquisition of private easements solely to meet CC 140 ROW widths at these locations imposes unnecessary costs and restrictions on private property, without a concomitant benefit to the Facility. Therefore, CHPE respectfully requests waiver of the ROW width requirements for the specific easement locations detailed below.

Table 4-5. Certificate Condition 140 Easements for Segment 12

Town	Parcel Number	Station Start	Station End	Owner Type	Type of Easement
Stony Point	20.11-2-25	72574+77	72575+86	Private	Permanent
Stony Point	20.11-2-27	72576+09	72577+20	Private	Permanent
Stony Point	20.15-1-18	72595+33	72596+41	Private	Permanent
Stony Point	20.15-2-20.2	72601+80	00726+01	Public	Permanent
Haverstraw	20.19-7-41	72622+25	72622+67	Private	Permanent

[1] Municipal consents were submitted to the PSC in case 21-E-0425 for purposes of CHPE obtaining a Section 68 Certificate of Public Convenience and Necessity (CPCN), which was issued September 15, 2022. Consents can be obtained through that docket on DMM.

Town	Parcel Number	Station Start	Station End	Owner Type	Type of Easement
Haverstraw	20.19-7-40	72622+67	72623+49	Private	Permanent
Haverstraw	26.11-1-12.1	72657+50	72658+06	Private	Permanent
Haverstraw	26.42-2-10	72664+47	72664+79	Private	Permanent
Haverstraw	26.50-1-65	72665+43	72666+76	Private	Permanent
Haverstraw	26.51-1-47	72680+53	72680+90	Private	Permanent
Haverstraw	26.51-1-46	72680+90	72681+00	Private	Permanent
Haverstraw	27.17-1-17	72728+83	72729+05	Private	Permanent
Haverstraw	35.11-1-8	72783+70	72786+63	Private	Permanent

4.7.1 Right-of-Way Encroachment Plan

There were no encroachments identified along Segment 12 of the Project. Any vegetation and tree encroachments will be handled according to the procedures outlined in Section 8.0. All wetlands encountered in the Facility ROW or adjacent areas should be handled according to the procedures outlined in Section 9.1.

If any encroachments are identified during the construction phase of the Project the following procedures will be followed:

1. Identify the location of the encroachment using necessary deeds, plans, and other property records as needed
2. Determine property rights (fee, easement, other rights, etc.) and identify reservations or usage rights conveyed to others
3. Acquire property rights if applicable
4. Consult with necessary federal, state, and local agencies as needed.

Encroachments involving safety or emergency situations will be investigated immediately and all necessary safety precautions will be followed.

4.8 RIGHT-OF-WAY CLEARING

The procedures for vegetation and tree clearing, as well as the locations within Segment 12 where clearing will be necessary are described in Section 8.

4.9 BUILDING AND STRUCTURE REMOVAL

There will be no building or structural removal required for the construction of Segment 12.

4.10 ACCESS ROADS

Construction access to the Project Corridor within Segment 12 will utilize existing public road ROWs where feasible. Where direct access to the Project Corridor via existing roads is not available, the Project will install temporary access roads during construction. Table 4-6 summarizes the existing access roads to be utilized or proposed temporary access roads that will be built for Segment 12 construction and includes the approximate location.

The construction specifications for the access road are included in the Plan and Profile Drawings in Appendix C (see also Table 4-5). Parking for workers will be in designated areas (see Plan and Profile Drawings in Appendix C). Parking will not interfere with normal traffic, cause a safety hazard, or interfere with existing land uses and infrastructure. Where needed, all erosion and sediment control devices will be installed in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (SSESC) (CC 67).

To the extent practicable, access roads were routed to avoid areas of unstable soils, steep banks, wetlands, and streams (BMP Document, Section 6.1). Before construction begins, the Certificate Holders will stake and flag all access roads and extra workroom areas that may be used during any construction activities. All information related to the permitting and consultation with transportation departments including NYSDOT is summarized in Section 12.0.

The Certificate Holders will not construct or allow their Contractors to construct any new, or improve any existing access roads for the construction, operation, or maintenance of the Project, except as authorized in the Plans and Profiles (Appendix C). The Certificate Holders will not violate the property rights of individual landowners and will not commit trespass upon their lands. Before the Certificate Holders attempt to enter private property that they do not have the legal right to enter, they will first obtain the permission of the landowner and will abide by all conditions of such permission that the landowner may impose. Easements obtained for the Project are identified in Section 4.6. If the Certificate Holders rely on a document as evidence of their easement or other right to access land owned in fee by an individual landowner, they will provide a copy of such document to the landowner upon their request.

Table 4-6. Access Roads in Segment 12

Access Road Description	Sheet	Location (Approximate – see Drawings for Details)	Sensitive Areas Crossed (Ag or Wetlands)
7B-01-RTE	C-104	STA 72551+00	Town Park
Access Road - Parking Lot entrance	C-105	STA 72562+00	None

Access Road Description	Sheet	Location (Approximate – see Drawings for Details)	Sensitive Areas Crossed (Ag or Wetlands)
Access Road - Hoke Drive	C-106 - C-107	STA 72590+75	None
7B-02-RD	C-108	STA 72608+00	Hospital
7B-03-RTE	C-108	STA 70609+00, STA 72614+50	Hospital
Access Road - Parking Lot entrance	C-109, C-110	STA 72636+50	None
Access Road - Hillside Ave and Unnamed Road	C-111	STA 72650+50; STA 72657+50	None
Access Road - Existing commercial driveway	C-115	STA 72711+00; STA 72714+00	None

4.10.1 Driveway Access During Construction

When trenching work takes place across private driveways for conduit placement, backfill, and roadway restoration, road plates will be used to span the trench to maintain access to the driveways. The road plates will be put in place when work is not taking place in the area of the driveway to allow unimpeded access to the driveways while the trench is open. When work is taking place at driveway locations that requires the removal of the road plates, they will be kept in the immediate vicinity of the driveway to lessen the time to re-install them in an emergency event. In the event of an emergency where access is required into a private driveway while work is taking place at the driveway location, all work will be stopped in the area and the trench plates will be put back into place. Maintenance of traffic involving single lane closures on the side of the road with private driveways will be coordinated and planned to maintain driveway access while the lane closure is in place. This is discussed further in Section 12. Owners of private driveways will be notified of the work before it takes place and coordinated with during construction. Driveways are shown on the Plan and Profile Drawings in Appendix C.

4.10.2 Access Through Wetlands

There are no access roads through wetlands and therefore the associated BMPs (BMP Document, Section 19.2.3) do not apply.

4.10.3 Access Through Agricultural Lands

There are no agricultural areas within Segment 12 and therefore the BMPs relevant to access through agricultural lands do not apply.

4.10.4 Drain Lines and Subsurface Drainage within Agricultural Areas

There are no agricultural lands within Segment 12, therefore no subsurface drainage lines or plans have been created in Segment 12.

4.11 CULVERT REPLACEMENT

No culverts are proposed to be modified by CHPE construction. Culverts damaged by construction activities throughout the Facility ROW will be replaced in accordance with culvert owner's specifications. The general replacement procedure is that culverts will be excavated and removed, new pipe zone bedding, and piping will be installed, and the trenched area will be backfilled with suitable material. If applicable, a new pavement section will be installed. If the culvert involves a state-protected stream, the separation guidance provided by NYSDEC and described in Section 9.1 will be implemented and NYSDEC will be notified at least 30 days prior to the culvert replacement.

The Utilities Summary Matrix (Appendix R) identifies all the stormwater and stream culverts, respectively, present within Segment 12 of the Project and their approximate locations. A description of NYSDOT and/or Railroad and other CI Owner coordination regarding culverts, where applicable, is also included in Sections 12 and 13.

Any temporary culverts that will be installed as identified on the Plan and Profile Drawings (Appendix C) will be designed and installed to withstand two-year flood events (BMP Document Section 18.3).

4.12 BLASTING AND ROCK REMOVAL

Based on a geotechnical analysis of the bedrock conditions within Segment 12, no blasting is anticipated. However, if locations with very high rock strength (excess of 20k psi) are identified along the alignment where it would be prohibitive to trench using conventional methods, blasting would be considered in consultation with NYSDPS and in accordance with the Overland Rock Removal Plan included as Appendix S. If locations requiring blasting are identified during construction, the Certificate Holders will notify DPS and other applicable parties and modify this EM&CP as necessary. NYSDEC will also be notified in the event blasting is determined to be required in the vicinity of sensitive environmental resources.

4.13 INADVERTENT DAMAGE TO EXISTING UTILITIES

If, during construction, damage occurs to existing utilities discussed in Section 13 and Appendix R, the typical process will be to:

1. Ensure the site personnel and public are safe.
2. Contact CHPE, LLC Safety and Construction Inspectors who will immediately notify the Utility Owner; If the damaged utility poses an imminent danger to public safety, the contractor will contact emergency services and the utility owner.
3. Document the damage by filing a Utility damage report and notify the one-call center (811) about utility damage.
4. Follow the utility owner repair procedures.

5.0 POLLUTION PREVENTION

5.1 POTENTIAL POLLUTANT SOURCES

Some polluting materials that may be found in staging/laydown areas and active work sites during construction of Segment 12 of the Project (see Table 5-1). Further, any land-disturbing construction activity creates the potential for sediment to act as a pollutant to nearby resources; Certificate Holders will adhere to a SWPPP (Appendix G) and other BMPs contained within this EM&CP, such as erosion control measures, to address potential sediment impacts

Table 5-1. Potential Pollutant Sources for Segment 12 Construction Activities

Pollutant	Quantity	Container and Storage Description
Used oil	50–100 gallons	Drum with secondary containment
Lube Connex containing diesel, engine oil, hydraulic oil, 30W oil, 50W oil, used oil, DEF, coolant, grease	1,530 gallons	Lube trucks
Lube Connexes containing various oil types: 15-40, 10W, 30W, 50W, ATF, used coolant, new coolant, used oil	2,050 gallons	20-foot connexes with bulk storage tanks inside secondary containment
Off-Highway Diesel Tanks	16,000 gallons	2 UL-142 Tanks
On-Highway Diesel Tanks	16,000 gallons	2 UL-142 Tanks
Wire pulling lubricants	250 gallons	
Hydraulic fluid	Greater than 25 gallons	Approved containers
Gasoline	Less than 50 gallons	5-gallon steel containers located inside secondary containment for chainsaws, pumps, etc.
Mobile fueling truck w/spill kit on board	no full-time storage. Diesel fuel 30 to 500 gallons	Steel AST
Herbicides	Varies	Approved containers and application devices
Solid waste (litter and construction debris)	Varies	Covered dumpsters
Sanitary waste	Varies	Portable facilities
Used filter and absorbent bins	990 gallons	330-gallon steel containers
Chemicals associated with laydown yard equipment maintenance	Varies	Flammable cabinets inside shops and on service trucks, shelves in storage connex, 20-inch Hazmat

Pollutant	Quantity	Container and Storage Description
		connex with rollup doors and built-in secondary containment
HDD Fluid	Final volume will be determined by Contractor.	Approved containers.

5.2 GOOD HOUSEKEEPING PRACTICES

Good housekeeping practices were developed as part of the development of the SWPPP and are included in the "Spill Prevention" section of the SWPPP (Appendix G). These good housekeeping practices will be followed within Project construction areas to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff:

- Where possible, store only enough products required to do the job.
- Store all materials within project areas in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- Keep products in their original containers with the original manufacturer's label.
- Avoid mixing substances with one another unless recommended by the manufacturer.
- Whenever possible, use all of a product before disposing of the container.
- Follow manufacturers' recommendations for proper use and disposal.
- The Work Area superintendent will inspect daily to ensure proper use and disposal of materials.

5.3 WASTE DISPOSAL

5.3.1 Solid Waste

Foreign waste materials will be collected and stored in a secured area until removal and disposal by a licensed solid waste management company. All trash and construction debris from the Project Corridor will be disposed of in a portable container unit. No foreign waste materials will be buried within the Project Corridor. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the Project trailer and the Contractor (or their designee) will be responsible for seeing that these procedures are followed.

5.3.2 Sanitary and Hazardous Waste

Any sanitary waste from portable units will be collected from the portable units by a licensed sanitary waste management contractor, as required by NYSDEC regulations.

The installation of the overland transmission cable will require the transport, handling, use, and onsite storage of hazardous materials and petroleum products, and small amounts of hazardous wastes would be generated as by-products of the transmission cable installation and burial process. These will be handled in accordance with the Construction and Safety Policies and Procedures (see Appendix H). Handling of hazardous soil materials will be in accordance with the Soil and Materials Management Plan (Appendix L).

All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacturer. Project personnel will be instructed in these practices, and the Contractor (or their designee) who manages daily project operations will be responsible for seeing that these practices are followed.

Procedures for the storage and use of hazardous products are outlined in the "Spill Prevention" section of the SWPPP which is included in Appendix G. These products may include but are not limited to petroleum products, fertilizers, and paints. These procedures are used to reduce the risks associated with hazardous materials.

5.4 CONSTRUCTION MATERIALS

Table 5-2 summarizes the locations of where construction materials and equipment will be temporarily staged during the construction of Segment 12. Construction materials will be stored in a manner that minimizes exposure to precipitation and runoff, where appropriate, or otherwise to prevent the contamination of stormwater and the environment. The Construction Contractor will have only the minimum amount of material at each work site necessary to complete the work at that site. Construction materials and equipment will be temporarily staged at all entry and exit points for all horizontal directional drilling (HDD) crossings along the Project. Materials (including fill, construction materials, or debris) cannot be deposited, placed, or stored in any waterbody as described in Section 9.1.

All construction materials stored onsite will be stored in a neat, orderly manner in appropriate containers with appropriate labels. Products will be kept in their original containers with the original manufacturer's label unless the containers are not re-sealable and manufacturer's recommendations for proper use and disposal will be followed. Original labels and Safety Data Sheets (SDSs) will be retained for the period that the product is being utilized onsite in accordance with all applicable OSHA regulations (29 CFR 1926.33). Containers will not be stored on the ground but will be stored in cabinets or on a stable working surface such as a portable trailer bed or other secure decking. Containers will be kept closed unless the material is being transferred. All transfer operations will be monitored and not left unattended (BMP Document, Section 12.3). The good housekeeping practices outlined in the "Spill Prevention" section of the SWPPP included in Appendix G will be followed to minimize the risk of spills or other accidental exposure of materials and substances to stormwater runoff and ecologically sensitive sites.

Table 5-2. Construction Materials and Equipment Staging Location

Work Area Description	Sheet	Location (Approximate- see Drawings for Details)
HDD 124 Entry Work Area	C-100	STA 72496+00
HDD 124 Exit Work Area	C-101	STA 72504+15
Equipment Staging Area	C-104	STA 72551+00
HDD 126 Entry Work Area	C-105	STA 72561+20
HDD 126 Exit Work Area	C-106	STA 72582+95
HDD 127 Entry Work Area	C-108	STA 72611+03
HDD 127 Exit Work Area	C-109	STA 72625+60
Equipment Staging Area	C-109	STA 72631+50
Equipment Staging Area	C-110	STA 72637+00
HDD 129 Entry Work Area	C-110	STA 72637+85
HDD 129 Exit Work Area	C-111	STA 72654+45
HDD 131 Entry Work Area	C-111	STA 72655+40
Equipment Staging Area	C-112	STA 72674+00
HDD 131 Exit Work Area	C-112	STA 72676+80
HDD 132 Entry Work Area	C-112	STA 72679+03
HDD 132 Exit Work Area	C-114	STA 72697+40
Equipment Staging Area	C-125	STA 72866+00

The Construction Contractor will not store, mix, or load chemicals labeled toxic or petroleum products within 100 feet of a wetland, river, creek, stream, lake, reservoir, or other ecologically sensitive site or existing recreational area along the proposed ROWs (BMP Document Section 12.3.1). This applies to storage and does not apply to normal operation or use of equipment or chemical in these areas. All employees and/or other handlers of hazardous materials will be properly trained and instructed on the proper reporting and handling requirements.

5.4.1 Secondary Containment

Secondary containment shall be used to prevent leaks or spills from reaching the environment and to contain spills until they can be cleaned up (CC 114h). The Construction Contractor requires that any amount of hazardous materials must be stored in secondary containment. Spill management will be required for any stationary piece of equipment staying onsite for more than 4 hours. Secondary containment for portable containers (drums and buckets) will be of sufficient size to contain 110% of the capacity of the largest container. Tank containment will be of sufficient size to contain 100% of the capacity of the largest tank

within its boundary and have additional capacity sufficient to contain precipitation from a 25-year, 24-hour rainfall event. The liner or structural material used for secondary containment will be compatible with the product that it's expected to contain. Carbon steel, for example, would not be compatible with corrosive liquids such as sulfuric acid. In this case, plastic should be used.

Spill management consists of plastic laid underneath oil containing equipment. Plastic will be replaced as needed.

5.5 CONSTRUCTION EQUIPMENT

Table 5-2 summarizes the locations of where construction materials and equipment will be temporarily staged during the construction of Segment 12. All on-site construction vehicles including contractor employee vehicles will be monitored for leaks and will receive regular preventative maintenance to reduce the risk of leakage. Section 4.10 summarizes the locations of access roads within Segment 12 as well as all procedures that should be followed for vehicle access to Segment 12 Construction Zone. The following measures will be followed for all construction material and equipment staging locations:

1. Any equipment leaking oil, fuel or hydraulic fluid will be repaired immediately or removed from the site.
2. Contractor personal vehicles at all times, and construction equipment at the end of the working day, will be parked at least 100 feet from a wetland, river, creek, stream, lake, reservoir, spring, well or other ecologically sensitive site or existing recreational area along the proposed construction ROW except where it is necessary to maintain continuity of construction.
3. Equipment cannot be deposited, placed, or stored in any waterbody.
4. Equipment or machinery will not be cleaned in any regulated wetland or adjacent area, and debris resulting from cleaning operations will not be permitted to directly enter any regulated wetland or protected stream or waterbody (CC 113(f)).
5. In accordance with the amended CC114, in general, and to the maximum extent practicable, refueling equipment, storage mixing, or handling of open containers of pesticides, chemicals labels "toxic", or petroleum products will not be conducted within 100 feet of a stream or waterbody or wetland. Requirements for refueling within 100 feet of wetlands or streams will be allowed under certain circumstances identified below.
    a. Refueling of hand equipment with be allowed within 100 feet of wetlands or streams when secondary containment is used. Secondary containment will be constructed of an impervious material capable of holding the hand equipment to be refueled and at least 110% of the fuel storage container capacity. Fuel tanks of hand-held equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas.

Crews will have sufficient spill containment equipment on hand at the secondary containment location to provide prompt control and cleanup in the event of a release.

b. Refueling of equipment will be allowed within 100 feet of wetlands or streams when necessary to maintain continuous operations and where removing equipment from a sensitive area for refueling would increase adverse impacts to the sensitive area. Fuel tanks of such equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Absorbent pads or portable basins will be deployed under the refueling operation. In addition, the fuel nozzle will be wrapped in an absorbent pad and the nozzle will be placed in a secondary containment vessel (e.g., bucket) when moving the nozzle from the fuel truck to the equipment to be refueled. All equipment operating within 100 feet of a wetland or stream will have sufficient spill containment equipment on board to provide prompt control and cleanup in the event of a release.

c. Field personnel and contractors shall be trained in spill response procedures, including the deployment and maintenance of spill response materials.

6. The contractor will coordinate with the Environmental Inspector to determine the appropriate location for all refueling operations. These areas will be properly contained to prevent excess spillage during routine refueling.
7. Spill containment devices and materials will be readily accessible at the refueling site. Any effluent generated on/resulting from these sites will be contained, treated or disposed of, as appropriate. All drivers of fueling trucks will take all usual and reasonable environmental and safety precautions during refueling, such as connecting a safety grounding strap between the fuel tank and vehicle, or equipment being refueled.
8. Drivers will frequently check for fuel spills, drips, or seeps during the refueling operation (BMP Document, Section 12). When not feasible to move a vehicle or construction equipment from an environmentally sensitive area to a suitable access area, the following precautions will be used to prevent petroleum products or hazardous materials from being released to the environment.
    1. Deployment of portable basins or similar secondary containment devices
    2. Use of ground covers (such as plastic tarpaulins)
    3. Precautionary placement of a floating boom on nearby surface waterbodies if applicable

5.6 PETROLEUM AND CHEMICAL HANDLING PROCEDURES

Petroleum and Chemical handling procedures are outlined in the SPCC Plan in Appendix K. These procedures will be used to minimize the potential for spills of petroleum and hazardous substances, or other materials, that have the potential to pollute the environment. The SPCC Plan also describes the response measures that will be implemented to contain, clean-up and dispose of any spilled substances during construction. The Certificate Holders will keep required parties appraised of on-site chemicals and waste stored within 100 feet of their CI or service area. These required parties include local fire departments, emergency management teams, and owners and operators of CI (CC 34).

5.7 SPILL RESPONSE AND CLEANUP PROCEDURES

The spill response and cleanup procedures are outlined and described in the SPCC included in Appendix K.

5.8 NOTIFICATION AND REPORTING

Section 4.0 of the SPCC included in Appendix K describes the notification and reporting requirements that are necessary after a spill has occurred. Reporting obligations are also addressed in Table 3-2.

5.9 UNANTICIPATED ENCOUNTERS WITH CONTAMINATED SOIL

Installation of the overland transmission cables could disturb contaminants potentially deposited in the soil due to the extended use of portions of these areas as railroads and the current and former use of nearby areas for industrial and commercial operations. The Soil and Materials Management Plan in Appendix L describes procedures for identifying and managing contaminated soils.

6.0 STORMWATER POLLUTION, SOIL EROSION, AND SEDIMENT CONTROL

A SWPPP (Appendix G) was prepared in conjunction with this EM&CP in accordance with the criteria presented in the State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities (GP-0-20-001), the New York State Stormwater Management Design Manual (January 2015), and the New York State Standards and Specifications for Erosion and Sediment Control (July 2016). Similar to this EM&CP, the SWPPP was prepared to cover Segment 12 (approximately 7.65 miles) of a multi-phase project. Along with the EM&CP, the SWPPP and Erosion and Sedimentation Control Plan (ESCP) will be updated with subsequent project phases as they occur. A copy of the SWPPP and SPDES general permit will be available on-site at all times during construction.

6.1 TOPOGRAPHY AND SITE SOILS

A summary of the soils in the Segment 12 Project site are listed and described in the SWPPP included in Appendix G of this EM&CP.

6.2 CONSTRUCTION SEQUENCING

The sequence of construction is summarized in Section 4.0 and further detailed in the SWPPP (Appendix G). All of the erosion and sediment controls will be temporary. Erosion and sediment controls must be implemented early in the construction process and prior to the start of grading and excavation activities. Such procedures will be maintained throughout the construction period in accordance with the ESCP (Appendix C) (CC 114i).

6.3 STRUCTURAL CONTROLS

6.3.1 Erosion and Sediment Control

Soil and sediment control measures will be implemented early in the construction process and will be installed prior to any site clearing or earth moving operations. These measures will be maintained throughout the duration of construction until the permanent stabilization of soil has been achieved. All erosion and sediment control devices will be installed in accordance with the ESCP in Appendix C and the New York State Standards and Specifications for Erosion and Sediment Control (SSESC) (CC 67).

The "Controls" section of the SWPPP included in Appendix G describes the erosion and sediment controls that will be constructed prior to clearing or grading any portion of the Project in order to reduce excessive stormwater runoff. In addition, all erosion and sedimentation controls will follow the Erosion Control notes

shown on sheet G-002 of the Plan and Profile Drawings in Appendix C. If needed, additional erosion and sediment control measures will be installed following site inspections.

6.3.2 Dust Control

The Certificate Holders and all associated subcontractors will take appropriate measures to minimize fugitive dust and airborne debris from construction activity associated with the Segment 12 construction (CC 64). Only plain water will be used for dust suppression. Stabilized construction entrances will be consistent with NYSDEC stabilized construction entrance requirements (see Plan and Profile Drawings in Appendix C) and will help provide dust control. All applicable regulations and standards related to dust control will be followed including the SSESC pages 2.25.

6.3.3 Stream Crossings

Unanticipated culvert replacement(s) within the public road ROW may be required during or following construction as a result of damage. These unanticipated culvert replacements may involve a stream crossing. Protection measures will be used to minimize impacts to streams and waterbodies including erecting silt fences and inlet protections in accordance with the specifications provided on the Plan & Profile Drawings as needed to minimize erosion and sediment runoff. Section 9.1 of this EM&CP describes impacts to streams and waterbodies that may occur along Segment 12 of the Project. The Certificate Holders will minimize disruption to streams and waterbodies along and within the vicinity of the Project ROW during construction, operation, and maintenance of the Project.

6.3.4 Horizontal Directional Drilling

HDD is typically used to cross utilities, streams, wetlands, and other physical obstructions/barriers that may be encountered. There are 7 HDD installations within Segment 12 (see Table 4-2 and Sheets C-301 through C-315.A2 of Appendix C). While not used at every encounter, the HDD method will help the Certificate Holders minimize impacts to physical barriers and ecologically sensitive sites and areas. All appropriate erosion and sediment controls described in Section 6.3.1 of this EM&CP, the SWPPP (Appendix G), ESCP (Appendix C), the Erosion Control Notes on Sheet G-002 of the Plan & Profile Drawings (Appendix C), and the details shown on the Keyplan E&S Drawings (Sheet C-401 to C-414, Appendix C) will be followed at each HDD crossing. Additionally, an Inadvertent Release and Recovery Plan has been developed to minimize any stormwater pollution that may occur during HDD operations and is included in Appendix J.

6.4 MS4 COORDINATION

The municipalities that Segment 12 runs through operate a Municipal Separate Storm Sewers Systems (MS4), and therefore require an MS4 permit to implement measures to reduce pollution in stormwater runoff. Table 6-1 identifies those municipalities and the status of the MS4 permit for each.

Table 6-1. Status of MS4 Permits Required for Segment 12

Municipality	Status
Town of Stony Point	MS4 Application approved on July 19, 2022.
Village of Haverstraw	MS4 Application approved on January 9, 2023.
Village of West Haverstraw	MS4 application submitted on August 5, 2022; Village provided minor comment on September 1, 2022; the Certificate Holders are working with the Village to respond to comments. MS4 approval and receipt of MS4 acceptance form.
Town of Clarkstown	MS4 Application approved on August 29, 2022.

6.5 MAINTENANCE, INSPECTION, AND RECORDKEEPING

In accordance with the SWPPP (Appendix G), sediment and erosion control measures will be inspected at least once every seven days by the Qualified Inspector. More frequent inspections will occur as needed and defined in the SWPPP (e.g., land disturbance exceeds 5 acres). Sediment and erosion control inspections will be performed by the Environmental Inspector who will have the necessary credentials to serve as the Qualified Inspector. All maintenance required by inspection will commence within 24 hours and be completed within 48 hours of the inspector's report. Additional details regarding the minimum required inspection and maintenance practices used to maintain erosion and sediment controls are described in the "Maintenance/Inspection Procedures" section of the SWPPP (Appendix G) as well as Section 3.0 of this EM&CP. These procedures include inspection requirements for Owner/Operator, Qualified Inspectors, and general requirements.

6.6 POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN

Construction of Segment 12 of the Project will not result in a significant increase of impervious area, and it is not anticipated to contribute a significant pollutant load within the watershed or to downstream waterbodies (Appendix G). As such, peak flow mitigation and water quality treatment are not included as a part of this Project, and post-construction stormwater management practices are not proposed.

7.0 SENSITIVE LAND USES

Given that most of the overland portion of the Project is sited within existing public road ROWs, most of the land use in this Segment is considered disturbed/maintained. However, portions of the Project cross sensitive lands, and those specific to Segment 12 are summarized in the following subsections.

7.1 AGRICULTURAL LANDS CCS AND BMPS

No agricultural lands have been identified within Segment 12; therefore, the CCs and BMPs relating to agricultural resources do not apply to the construction of Segment 12.

7.2 RECREATIONAL AREAS CCS AND BMPS

Section 8.1 describes the procedures to be followed for vegetation, tree clearing, and disposal are occurring within the boundary of a recreational area. Section 9.1 summarizes the procedure and locations of any wetlands and waterbodies that are located within recreational areas and the associated mitigation measures that will be followed. Section 14.2.4 summarizes the cleanup and restoration procedures that will follow construction in a recreational area.

7.2.1 Recreational Areas within Segment 12

Per the BMP Document (Section 12.3), The Certificate Holders will not store, mix or load chemicals labeled toxic or petroleum products within 100 feet of an existing recreational area along the Project Corridor. This applies to storage and does not apply to normal operation or use of equipment in these areas.

Per the BMP Document (Section 14.3.2), herbicides will not be applied within recreational areas.

Based on review of the New York Protected Areas Database (2022), recreational areas were identified within 100 feet of Segment 12 and are summarized in Table 7-1.

Due to the siting of Segment 12 within or immediately adjacent to the public road ROWs, no direct impacts to recreational uses within the parkland are anticipated. Recreators may experience minor traffic delays in the vicinity of the park and noise from the public roadway may be temporarily elevated at these sensitive receptors during construction. Please refer to Section 12.0 for additional detail regarding the measures that will be implemented for the maintenance and protection of traffic and Section 10.0 for noise mitigation measures to be implemented during construction.

Temporary disturbance within parkland properties may include limited tree and vegetation clearing where additional space is needed to support construction within or immediately adjacent to the public road ROW. Locations where tree clearing are proposed are summarized in Table 8-4.

Table 7-1. Recreational Areas within 100 feet of Segment 12

Recreational Area	Parcel Number	Plan and Profile (Appendix C) Sheet Number	Station (approximate – see Appendix C for details)	Anticipated Impacts to Recreational Area
Stony Point Battlefield National Historic Landmark and State Historic Site	187.00-2-8.2	C-100 – C-101	STA 72495+32 to 72505+00	Temporary disturbance at boundary of property line for additional construction space adjacent to the roadway
WWI Memorial Spring – Stony Point Town Lands	15.19-3-86	C-103	STA 72536+00 to 72537+00	None
Charles Eccher Park/ Lowland Park – Stony Point Town Lands	20.07-3-76	C-104	STA 72549+00 to 72553+00	Temporary disturbance at boundary of property line for additional construction space adjacent to the roadway
Haverstraw Beach State Park	35.11-1-8	C-119 - C-121	STA 72777+00 to 72806+50	Temporary disturbance at boundary of property line for additional construction space adjacent to the roadway
Hook Mountain State Park	32-11-2-1	C-121	STA 72807+00 to 72814+00	Temporary disturbance at boundary of property line for additional construction space adjacent to the roadway
Rockland Lake State Park	35.15-1-2	C-121 to C-123	STA 72814+00 to 72835+00	None
State Bicycle Route 9 along Route 9W	-	C-126 to C-127	STA 72888+50 to 72899+31	Temporary disturbance at boundary of property line for additional construction space adjacent to the roadway

8.0 VEGETATION CLEARING AND DISPOSAL

The objective of vegetation clearing is to remove vegetation from the work area as necessary for safe and proper installation of the Project and selection of the appropriate vegetation clearing methods to avoid and/or minimize impact to sensitive resources (e.g., threatened or endangered species habitat, streams and wetlands or areas of high visual sensitivity). Tree (limb) trimming will consist of cutting branches off trees as needed. Both vegetation clearing and tree trimming are accomplished through site specific prescriptions for clearing and disposal of woody vegetation and selective retention of vegetative buffer zones (BMP Document Section 5.1). There is limited vegetation clearing within this Segment. Table 8-1 below provides the terms and definitions associated with vegetation clearing and disposal.

Table 8-1. Terms and Definitions from BMP Document Section 5.2

Term	Definition
Clearing	The cutting and physical removal, either by hand or mechanical means, of all vegetation from the work area
Grubbing	The mechanical removal of the stump and root mass of felled woody vegetation
Slash	Shrubs, saplings, and tops of trees 4 inches in diameter or less at the large end for hardwood and 6 inches in diameter or less at the large end for softwoods.
Stumps	The woody stem and fibrous root mass left in the soil after removing the trunk at the butt.
Timber/logs	Trunks and limbs greater than 6 inches in diameter at the small end, with a minimum 8-foot length.

8.1 CLEARING METHODS AND PROCEDURES

The cleared width within the construction and road ROWs and temporary construction workspace will be kept to the minimum that will allow for spoil storage at HDD areas, staging, assembly of materials, construction vehicle passage, and all other activities required to safely install the conduit. The Certificate Holders and their subcontractors will also limit grubbing activities (the removal of stumps and roots) that are not in the footprint of the excavated trench or along access roads to allow resprouting and assist in the recovery of woody species, except where removal is required for safe construction or operation of the Project.

In general, the limits of clearing are on average 45 feet from each side of the centerline of the conduit. Locations of limits of clearing, and the type of clearing required are shown on the EM&CP Plan and Profile drawings (Appendix C) and the Erosion and Sediment Control Plans (Appendix C).

All vegetation clearing and removal within Segment 12 will implement the following management practices (BMP Document Section 5.0):

1. Trees, shrubs, and other vegetation indicated to remain or to be relocated will not be removed.
2. Minor roots and branches of trees indicated to remain will be cut in a clean and careful manner where such roots and branches obstruct installation of new construction.
3. Cleared vegetation, specifically woody material, will not be stored within 100 feet of wetlands or waterbodies to avoid impacts to water quality.
4. Hand methods will be used for clearing within tree protection zone.
5. Any chipped black cherry tree material will be segregated and disposed of at a landfill. A list of approved disposal locations will be submitted to DPS Staff via an EM&CP change notice if needed to supplement the current list in this EM&CP (Appendix L).
6. Burning of debris onsite is not permitted.
7. Disposal of all diseased trees will occur within 4 days after cutting to prevent the spread of the invasive insect as described in Section 9.4.
8. All vegetation clearing and disposal will comply with all NYSDEC regulations regarding invasive species.
9. No logs or other woody material will be left in any designated floodway or other flood hazard area.

8.1.1 Tree and Vegetation Clearing Methods

During clearing operations, crews, in coordination with the Environmental Inspector, will assess the terrain ahead for unexpected conditions, check ROW boundaries and review property specific conditions or restrictions noted on the EM&CP Plan and Profile Drawings (Appendix C). Where tree removal is determined to be necessary, all tree clearing and removal will follow the specifications documented in Section 8.1 of this EM&CP. ANSI A300 Standard will be used for all clearing. Trees will be felled into the ROW to avoid off-ROW damage, using the following methods listed in Table 8-2 and BMP Document Section 5.4:

Table 8-2. Tree and Vegetation Clearing Methods

Method Type	Method Title	Method Description
Type I	Hand Cutting (HC)*	This method employs a hand-held chain saw. It is selective but is slower and more expensive than motorized mechanical devices. Residential areas, buffer zones, wetlands, and highway screens are areas where hand cutting is typically prescribed. *Mechanized tree clearing will be utilized in select scenarios where hand clearing is deemed unsafe or unfeasible. All mechanized clearing

Method Type	Method Title	Method Description
		in wetlands will be done utilizing approved temporary wetland access methods (see Section 4.10.2).
Type II	Mechanical Clearing Machine (HA)	This term usually refers to a machine known as the Hydro-ax or Kershaw mower. This machine can cut trees up to 10 inches in diameter at the rate of several acres a day, depending on stem density and terrain. It is essentially nonselective and a good device for clearing rights-of-way that are composed of young undesirable species in a relatively uniform stand.
Type III	Mowing	This technique is primarily used in areas of herbaceous vegetation. Terrain must be relatively flat with no gullies or rocks.
Type IV	Mechanical whole-tree felling equipment	This method allows controlled felling and loading of whole trees while minimizing damage to adjacent trees. Where vegetation is cleared, erosion and sediment control measures will be installed and monitored until the topsoil is stabilized and can support grassy vegetation.

8.1.2 Clearing in Upland Areas Along the Overland Route (Type I, II, III, IV)

Initial clearing operations will include the removal of vegetation within any temporary additional construction workspace (e.g., HDD workspace) either by mechanical (Type II, III, IV) or hand cutting (Type I). Vegetation will be cut at ground level, leaving existing root systems intact except for the immediate trench area, and the aboveground vegetation removed in accordance with the disposal methods described in Section 8.4. Tree stumps and rootstock will be left undisturbed in the temporary workspace wherever possible to encourage natural revegetation. Timber, brush, and tree limb disposal will follow the BMPs outlined in Section 8.4. Any vegetation removal within the ROW of a state highway will be conducted pursuant to a highway work permit issued by NYSDOT and as approved in this EM&CP as shown on the Plan and Profile Drawings (Appendix C) (BMP Document, Section 5.4.1).

8.2 VEGETATION CLEARING IN ENVIRONMENTALLY SENSITIVE AREAS

Environmentally Sensitive Areas are indicated in the EM&CP Plan and Profile drawings (Appendix C). The specific vegetation clearing of vegetation procedures relevant to those areas are included the following sections of the EM&CP:

1. Wetlands – not applicable to this segment
2. Stream Crossing – Section 8.2.1 and Section 9.1.1.
3. Threatened and Endangered Species/Sensitive Habitats – Section 9.3.
4. Agricultural Lands – not applicable to this segment.

In addition to following the sensitive area specific procedures applicable to categories of Environmentally Sensitive Areas, the Contractor will minimize the amount of clearing and grubbing in such areas as shown in the drawings in Appendix C. Unless required for safety or reliable operation of the Facility, the Certificate Holders will limit the removal of stumps and roots that are not in the footprint of the excavated trench in these Environmentally Sensitive Areas and access roads.

As described in Section 9.3, to the extent practicable, tree clearing activities during construction will be conducted during the winter months (November 1 - March 31), when northern long-eared bats (*Myotis septentrionalis*) are in their winter hibernacula. No tree clearing will occur in June or July, except in an emergency to protect human life or property. In the event that tree clearing is necessary between April 1 to May 31 or August 1 to October 31, the procedures outlined in the CHPE Bat Habitat Assessment and Survey Protocol (July 20, 2023) shall be implemented for all tree clearing activities within the habitat areas shown on maps dated June 1, 2023, which represent areas within 5 miles of a mapped NLEB hibernaculum or maternity roost, or within 2.5 miles of a mapped Indiana bat hibernaculum or maternity roost in the Project Corridor ("Geographic Buffers"), subject to confirmation by USFWS and NYSDEC.

If at any time during Project construction, any NLEB or Indiana Bat maternity roost trees are discovered within any Project Segment, NYSDEC and USFWS will be notified within twenty-four (24) hours of discovery, and an area at least one hundred fifty (150) feet in radius around the maternity roost tree shall be marked and avoided until notice to continue work at that site is granted by NYSDEC and USFWS.

8.2.1 Wetland Areas and Stream Crossings

As described in Section 9.1.2, no wetlands have been identified in Segment 12. For any tree or vegetation clearing needed at stream crossings, the following measures will be implemented:

1) Clearing of existing vegetation (Using Type I clearing only) in or near regulated waterbodies will be limited to that material necessary to allow completion of construction activities and to allow for reasonable access for long-term maintenance to reduce the amount of activity and disturbance to the stream and adjacent area.
2) Cleared vegetation will not be stockpiled within 100 feet of streams to avoid impacts to water quality.
3) Temporary mattering or geotextile and stone will be used for all construction and access within streams, as applicable.

All protection and mitigation procedures for waterbodies are summarized in Section 9.1.1. These procedures will be followed during any vegetation clearing or removal in or near water bodies (i.e., stream crossings).

8.2.2 Agricultural Lands

As described in Section 7.1, no agricultural lands have been identified within Segment 12; therefore, this section is not relevant to the construction of Segment 12.

8.3 VEGETATION BUFFER AREAS

8.3.1 Buffer Areas for Streams and Wetlands

Vegetative buffers adjacent to streams will be maintained to the maximum extent practicable. To prevent soil erosion along streams, vegetation will be left in place along a minimum 25-foot-wide corridor on each streambank until the time of crossing. All streams and stream buffers have been illustrated on the EM&CP Plan and Profile drawings (Appendix C).

Tree cutting in sensitive areas will be limited to hand cutting methods (Type I). Streams and any designated buffer areas will be marked in the field to avoid unintentional clearing. Additionally, the Environmental Inspector or construction supervisor will notify clearing and other crews of streams or their buffer areas that will be encountered that day (BMP Document Section 5.7). Erosion control measures and protection fences will be installed to prevent unintended impacts.

8.3.2 Buffer Areas for Visually Sensitive Locations

Existing vegetation buffers will be maintained at selected road and stream crossings and other sensitive land uses where possible, especially at HDD drilling or boring sites, residential areas, and the peripheries of historic sites.

To the greatest extent possible, trees that provide a buffer to sensitive land uses will be avoided. Where buffer areas cannot be avoided, a qualified arborist will be consulted before construction in these areas and Tree Protections Zones (TPZ) will be established (BMP Document Section 5.7).

8.4 TREE AND VEGETATION DISPOSAL METHODS

The log disposal and vegetation disposal methods that may be used for Segment 12 are described in Table 8.3 (BMP Document Sections 5.5.1 to 5.5.4). A list of vegetation disposal locations is included in Appendix L via an EM&CP change order if needed to supplement the current list in this EM&CP (Appendix L. In general, the log disposal method along the right-of-way will be selected after assessing each designated clearing area, and with consideration of the following (BMP Document Section 5.5):

1. Tree species and potential volumes of marketable timber

2. Soil and terrain conditions that would allow mechanized collection and skidding without creating severe rutting or significantly increasing erosion potential
3. Sufficient marketable volumes of wood to make economic utilization practical
4. Whether adequate log-hauling access exists between the nearest public road and the yarding area on the ROW or yarding directly to a highway is desirable and economically feasible
5. Abutter/landowner cooperation, as well as clearing and trimming rights.
6. All vegetation disposal will comply with NYSDEC regulations to prevent the spread of invasive species.

Regarding the description of the Type C disposal method (see Table 8-3), the Certificate Holder will negotiate in good faith with each landowner for the purchase of rights to all logs over 6 inches in diameter at the small end and 8 feet or longer (merchantable logs) to be cleared from Segment 12 (if applicable). The Certificate Holder will not leave any permanent slash piles or log piles along railroad ROWs or public highways (CC 65a).

Table 8-3. Tree and Vegetation Disposal Methods

Method Type	Method Title	Method Description
Type A	Construction Use	Logs may be utilized as needed during construction for cribbing, retaining walls, or other uses. Following use, any logs unsuitable for firewood, saw logs, or chipping will be transported off the right-of-way to an approved disposal site.
Type B	Log Piles	Logs not needed for construction will be removed from the ROW to an approved disposal area and will be shown on the Plan and Profile drawings (Appendix C) as applicable.
Type C	Sale	Where sufficient merchantable volume exists on the site, logs may be sold to a third party. Where appropriate and practical, and with the agreement of landowners, unsold logs will be hauled to accessible locations for salvage by the public in accordance with the substantive requirements of 6 NYCRR Part 192.5, firewood restrictions to protect forests from invasive species.
Type D	Tree/Log Chipping	When logs cannot be reused or sold, they will be chipped on site. The resulting wood chips will be piled in upland areas within the ROW or transported off ROW to an approved disposal site. Wood chips will be spread 3 to 5 inches thick with fertilizer spread over the chips to minimize soil nitrogen depletion due to cellulose decomposition.
Type E	Vegetation Chipping	Vegetation may be chipped to reduce debris volume. See Type D the handling of chips.
Type F	Vegetation Hauling	Vegetation and stumps may be hauled to a NYSDEC approved landfill or other suitable off-site location with the approval of the landowner and all applicable permitting agencies.

Method Type	Method Title	Method Description
Type G	Vegetation Burial	Stumps may be buried on the ROW with landowner agreement. The burial areas will be sufficiently compacted and monitored after construction to assure that settling does not occur. Where significant settling after construction has been identified by the Construction Inspector et. al., finished grade will be re-established using locally obtained run-of-bank material and/or topsoil and re-seeded as appropriate as specified in Section 14.2. Areas where significant amounts of stump burial occur will be noted on as-built drawings and monitored for settling during ROW condition surveys and maintenance activities.

8.5 TREE AND VEGETATION CLEARING LOCATIONS WITHIN SEGMENT 12

Table 8-4 identifies clearing location and methods to be incorporated within Segment 12. The locations and clearing types identified are approximate and the Plan and Profile Drawings (Appendix C) will be referenced for exact locations and clearing types. Tree clearing in parkland will be limited to the minimum amount necessary for project construction and will include only selective clearing at the outer boundaries of the property where additional workspace is required adjacent to the roadway.

Table 8-4. Tree Clearing Locations for Segment 12

Sheet	Location (Approximate – see Drawings for Details)	Tree Clearing Method Type	Environmentally Sensitive Area(s)
C-400A	STA 72495+00 to 72499+00	Type I and II	State Parkland; State Historic Site
C-402	STA 72539+90 to 72540+00 STA 72550+50 STA 72558+50 to 72558+75	Type I and II	Town Park
C-403	STA 72583+00 to 72586+50	Type I and II	
C-404	STA 72600+50 to 72602+00 STA 72603+00 STA 72604+00 STA 72605+00	Type I and II	
C-404	STA 72609+50	Type I and II	
C-408	STA 72711+00 to 72713+50	Type I and II	
C-409	STA 72765+00 to 72768+75	Type I and II	ESA 1, State parkland

Sheet	Location (Approximate – see Drawings for Details)	Tree Clearing Method Type	Environmentally Sensitive Area(s)
C-410	STA 72794+00 to 72795+50	Type I and II	ESA 1, State parkland
C-411	STA 72809+00 to 72812+00	Type I and II	ESA 1, State parkland
C-412	STA 72840+00 to 72847+00	Type I and II	Wetland, ESA 1, State parkland
C-413	STA 72866+00 to 72868+50	Type I and II	ESA 1
C-414	STA 72898+50 to 72899+59	Type I and II	ESA 1

*Type II and Type IV clearing types will used interchangeably depending on field conditions.

9.0 ENVIRONMENTALLY SENSITIVE AREAS

This Section of the EM&CP addresses environmentally sensitive areas, specifically waterbodies and regulated wetlands, groundwater and wells, ecologically sensitive species and habitats (e.g., state and federally listed species, significant natural communities), and invasive species.

9.1 WATERBODIES AND REGULATED WETLANDS

Waterbodies and wetlands were identified by CHA (see Appendix M) in accordance with the United States Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual, the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (January 2012), as well as the New York State Freshwater Wetlands Delineation Manual (Browne et al. 1995). Wetlands have been completed avoided by design of the Segment 12 Project Corridor. Direct impacts to streams at crossing located have also been avoided by the proposed installation methods (e.g., HDD, bridge attachment, and trenching above or below an existing culvert).

9.1.1 Waterbodies

9.1.1.1 Summary of Waterbodies Within Segment 12

A total of four waterbodies were identified in the survey area within the Segment 12 Project Corridor (see Table 9-1 and the Wetland Delineation Report in Appendix M for additional detail). All four waterbodies are classified as perennial streams.

9.1.1.2 Waterbody Impact Avoidance, Protection, and Minimization Measures

Segment 12 has been designed to avoid direct stream impacts by crossing under or over existing culverts. This construction will involve excavating underneath (or above) the culvert and using supports to protect and hold the culvert in place[2]. The minimum clearance between the excavation and the culvert, as well as the minimum cover required for the cable once installed in the trench, are all noted on the Plan and Profile Drawings (Appendix C). Impacts will also be avoided by crossing under one stream through use of HDD or by bridge attachment. Additionally, protective buffer zones have been established to define areas where construction activities will be restricted to the extent necessary to minimize impacts on waterbodies. All

[2] Please see Section 12.0 for information regarding NYSDOT consultation for culvert crossings and Section 13.0 for additional co-located infrastructure owner consultations.

HDD crossing locations and protective buffer zones are included on the Plan and Profile Drawings (Appendix C).

Stream protection measures have been established to ensure that stream flow and water quality will be maintained throughout construction. Most stream crossings will be completed using dry crossing techniques, where the work area is kept dry either by installing control measures or by avoiding disturbance of the waterbody entirely (e.g., crossing under the waterbody). In the case of a culvert replacement, the work area would be kept dry by installing a cofferdam at the upstream side of the culvert and redirecting the flow either through a bypass culvert or pumping around the work area.

Impacts to water quality will be minimized while work is being performed in waterbodies by implementing the following measures (BMP Document Section 18.4):

1) During construction, vegetated buffers at all waterbody crossings will be maintained. Where the vegetation exists along the railroad ROW, a minimum 15-foot buffer will be maintained with existing trees and shrubs except for the portion of the bank that has been cleared for the construction path (CC 114d)
2) Where HDD is proposed, all vegetation will be maintained between the HDD entry and exit points.
3) Soil and excavated materials will be spread in an upland area or loaded into dump trucks and transported off-site to an approved disposal facility.
4) Equipment crossings will be carefully installed to minimize streambank disturbance, where applicable. Installation of stream crossings, diversions of water during construction, and removal or restoration of crossings will maintain the original stream conditions and characteristics, unless minor manipulations to prevent stream bank erosion (e.g., placements of boulders, root wads, wing deflectors) are requested or approved by the DPS and NYSDEC. Temporary crossings will be designed and constructed to withstand the two-year flood event at a minimum (CC 114c).
5) In accordance with the amended CC 114, in general, and to the maximum extent practicable, refueling equipment, storage mixing, or handling of open containers of pesticides, chemicals labels "toxic", or petroleum products will not be conducted within 100 feet of a stream or waterbody or wetland. Requirements for refueling within 100 feet of wetlands or streams will be allowed under certain circumstances identified below.
    a. Refueling of hand equipment with be allowed within 100 feet of wetlands or streams when secondary containment is used. Secondary containment will be constructed of an impervious material capable of holding the hand equipment to be refueled and at least 110% of the fuel storage container capacity. Fuel tanks of handheld equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Crews will have sufficient

spill containment equipment on hand at the secondary containment location to provide prompt control and cleanup in the event of a release.

b. Refueling of equipment will be allowed within 100 feet of wetlands or streams when necessary to maintain continuous operations and where removing equipment from a sensitive area for refueling would increase adverse impacts to the sensitive area. Fuel tanks of such equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Absorbent pads or portable basins will be deployed under the refueling operation. In addition, the fuel nozzle will be wrapped in an absorbent pad and the nozzle will be placed in a secondary containment vessel (e.g., bucket) when moving the nozzle from the fuel truck to the equipment to be refueled. All equipment operating within 100 feet of a wetland or stream will have sufficient spill containment equipment on board to provide prompt control and cleanup in the event of a release.

c. Field personnel and contractors shall be trained in spill response procedures, including the deployment and maintenance of spill response materials.

6) Construction vehicle access will be limited across streams and waterbodies to existing bridges and culverts and to temporary crossings installed in accordance with the provisions set forth in this approved EM&CP (CC 114e).
7) Equipment will be well maintained and checked daily for leaks.
8) No permanent structural shoreline protection or stabilization will be used, except where such protection is pre-existing.
9) In-stream work will be isolated from the flow of water and discolored (turbid) discharges and sediments will be prevented from entering the water due to excavation, dewatering and construction activities.
10) The use of heavy construction equipment will be excluded below mean high water until the work area is protected by an approved structure and dewatered, except where an emergency response requires immediate action and deviation from this requirement.
11) Soil disturbance will be minimized, and appropriate grading and temporary and permanent revegetation of stockpiles and other disturbed areas will be provided to minimize scour, erosion and sedimentation potential.
12) Effective erosion control measures will be installed on the downslope of all disturbed areas and maintained in fully functional condition. Control measures will include but will not limited to stabilized construction entrances, temporary and permanent stabilization by seeding and mulching, silt fence, and other measures as identified on the SWPPP (Appendix G) and ESC Plan (Appendix C).

These erosion control measures are to be installed before commencing any other activities involving soil disturbance (CC 114(i).

13) All dredged and excavated material, debris or excess materials from construction will be removed, from the bed and banks of all water areas to an approved upland disposal site where not suitable for backfill or reuse.
14) All temporary fill and other materials placed in the waterbodies will be completely removed and the original condition re-established, immediately upon completion of construction, unless otherwise directed by NYSDEC.
15) The status of each HDD waterbody crossing will be monitored while construction activities are underway until the crossing has been completed and the stream and stream banks have been restored. In the event of any potential or actual failure of the crossing, the Certificate Holders will have adequate staff and equipment available to take necessary steps to prevent or avoid adverse environmental impacts (CC 114(n)).
16) Clearing of existing vegetation in or near waterbodies will be limited to that material necessary to allow completion of construction activities and to allow for reasonable access for long-term maintenance so as to reduce the amount of activity and disturbance to the waterbody (BMP Document Section 19.2.2).
17) Equipment or machinery will not be washed in any regulated waterbody, and runoff resulting from washing operations will not be permitted to directly enter any protected stream or waterbody (CC 113(f)).
18) Precautions will be employed when not feasible to move a vehicle or piece of equipment from an environmentally sensitive area to a suitable access area (i.e., pumping equipment), to prevent petroleum products or hazardous materials from being released into the environment. These precautions will include (but are not limited to) deployment of portable basins or similar secondary containment devices, use of ground covers (such as plastic tarpaulins), and precautionary placement of floating booms on nearby surface waterbodies (CC 11h).
19) Water will be pumped from dewatering operations into a temporary straw bale or silt fence barrier or filter bag to settle suspended silt material prior to discharge. Direct discharge of sediment laden water to state and/or federally regulated streams and stormwater systems will be avoided (CC 114j).
20) Spill response and cleanup procedures have been developed (refer to SPCC in Appendix K) and will be implemented to minimize and respond to any accidental spills of petroleum producing chemicals or hazardous liquids that occur during construction (CC 114(l)).
21) During the performance of any HDD waterbody crossing, contractors will monitor the use of inert biodegradable drilling solution and, in the event of a detected release of fluid, will implement the procedures specified in the Inadvertent Release and Recovery Plan (Appendix J) (CC 114(m)).

22) DPS Staff or the Environmental Inspector will promptly notify the appropriate NYSDEC representative of any activity that is a significant environmental threat to a protected waterbody and exercise Stop Work Authority if needed (CC 54d, CC 116).
23) The Certificate Holders will notify DPS Staff and NYSDEC at least five days prior to construction involving protected stream crossings (CC 115).
24) For a proposed change that would involve any State-regulated wetland or protected stream or water body, the Certificate Holders will give at least two weeks prior notice to NYSDEC, and the Certificate Holders will give at least two weeks prior notice to NYSDEC or APA (where applicable) prior to providing notice to DPS staff of the proposed change (CC 158a).
25) Any proposal to modify this EM&CP will address, but not be limited to, the following information:
    a) Location of the utility, water, steam, sewer, and wastewater crossings and other nearby utility facilities, including CI facilities, and methods for protecting the cable and other facilities, including CI facilities, at those crossings and nearby locations; the plan will include detailed construction techniques, methods, and equipment descriptions for the protection of existing utilities including, but not limited to, how damage to existing utilities will be avoided and how any contingency will be met in case damage does occur, and for coordination with utilities and public service providers (CC159c).
    b) Impact avoidance and/or minimization measures for regulated streams including any maps and plan drawings of streams, site-specific stream-crossing techniques for the construction of the Facility and for the construction of any access roads to be used for such construction, and selective vegetation-clearing techniques in areas near streams (CC 159u).
    c) Details of erosion control plans, including grading and filling at the overland Construction Zone, so as to provide for the control of discharges incidental to the construction of the Facility, including to stormwater, groundwater, and surface waters, and meet applicable water quality standards (CC 159y).
    d) Other mitigation measures as appropriate to demonstrate compliance with other permits and approvals (CC 159ii).
    e) Please also note that specific construction timing windows indicate when the conduit installation can be performed for each waterbody. These windows are directly related to the waterbody type and stream classification designated for each waterbody. In general, the protection of significant cold-water fisheries (i.e., trout streams) requires that construction only occur between June 1 and September 30, while waterbodies not classified as significant fisheries or waterbodies under which the conduit is installed using HDD do not always have specific construction windows (BMP Document Section

26). All designated trout streams along the Project route will be avoided by crossing over or under existing culverts, which will avoid disturbance of these streams. Where the Project crosses a waterbody over or under an existing culvert, there will be no time of year restrictions because the method does not require disturbance to the bed or bank of the stream (BMP Document Section 26). Should the culvert require replacement, then time of year restrictions for the work would apply.

There are no streams designated as T or TS within the Segment12 Project Corridor; therefore, no time of year restrictions apply to any proposed stream crossings.

9.1.1.3 Waterbody Impacts

Construction activities within the Segment 12 Project Corridor will primarily include the installation of conduit beneath the ground within an existing public road ROW. Direct impacts to streams and waterbodies are avoided by crossing under existing culverts, crossing via bridge attachment to avoid any machinery within Cedar Pond Brook, and incorporating HDD. Table 9-1 summarizes the waterbodies present and the measures to avoid stream impacts during Project construction.

Table 9-1. Summary of Waterbodies within Segment 12

Approximate Station	Waterbody Name	NYSDEC Classification	Waterbody Field ID	Flow Status	Avoidance and Minimization Measure	Impact (linear feet)
72503+00	Unnamed Tributary to Hudson River	SC/C	Stream 3 (S-3)	Perennial	HDD	0
72515+00	Unnamed Tributary to Hudson River	Unmapped	Stream 5.10 (S-4)	Intermittent	Trench below Existing Culvert (Separation Distance = 5 feet)	0
72551+00	Cedar Pond Brook	B/B	Stream 2 (S-2)	Perennial	Bridge attachment	0
72643+50	Minisceongo Creek	SC/C	Stream 1 (S-1)	Perennial	HDD	0

* Per 6 NYCRR Part 703. Classifications identified based on review of NYSDEC Environmental Resources Mapper (ERM).
** Unique flagging sequence used to delineate/differentiate feature in the field.
*** Based on review of USGS Topo Maps, NYSDEC ERM, and stream characteristics and hydrology sources.

Approximate Station	Waterbody Name	NYSDEC Classification	Waterbody Field ID	Flow Status	Avoidance and Minimization Measure	Impact (linear feet)

**** NYSDEC mapped stream Tom's Brook was not identified in the vicinity of the Segment 12 Project Corridor during on-site delineations.

There are no impacts anticipated to waterbodies as a result of construction of Segment 12. The Certificate Holders have obtained a wetland permit from, and are continuing to coordinate with, USACE to ensure that all Project construction will be in compliance with the requirements of Permit NAN-2009-01089-M4 and all approved permit modifications. Documentation of the coordination with the USACE is included in Appendix A.

Ground disturbance from construction activities may result in increased potential for indirect impacts associated with erosion and sedimentation. Runoff on construction sites will be managed in accordance with the requirements for erosion and sedimentation controls as outlined in Section 6.0 of this EM&CP and in accordance with the Stormwater Pollution Prevention Plan provided in Appendix G. Additionally, the use of HDD has the potential for inadvertent return (i.e., leaks of HDD drilling fluid) that could cause drilling fluid to become suspended or dispersed and could impact water quality. An Inadvertent Release and Recovery Plan (Appendix J) has been developed that addresses the potential release of drilling fluid.

Minisceongo Creek is documented by NYSDEC as a waterbody containing S1 and S2 imperiled freshwater mussel species. No direct impacts are proposed to this waterbody as it will be crossed via HDD. In the event of an inadvertent return in Minisceongo Creek, NYSDEC will be notified immediately and consulted with to develop a restoration plan. Additionally, in the event culvert replacement is required at Stream 5.10 which is adjacent to NYSDEC regulated wetland HS-11, culvert specifications will be provided to NYSDEC for review at least 30 days prior to culvert replacements.

9.1.1.4 Waterbody Cleanup and Restoration

As discussed in Section 9.1.1.2, there are no stream impacts proposed within Segment 12; therefore, the CCs and BMPs associated with waterbody cleanup and restoration do not apply.

9.1.2 Wetlands

9.1.2.1 Summary of Wetlands Within Segment 12

A total of four wetland areas were identified along Segment 12 of the Project Corridor. Table 4-1 in Attachment B of the Wetland Delineation Report (Appendix M) provides a summary of the wetlands

identified along the entire length of Segment 12, including their National Wetland Inventory (NWI) classification in accordance with Cowardin et al. (1979) and state wetland identifier and classification. Of these delineated features, one wetland along the Segment 12 Project Corridor is anticipated to be jurisdictional by the NYSDEC. A second state-regulated wetland (HS-11) is mapped by NYSDEC in the vicinity of the Segment 12 Project Corridor; however, no wetlands were identified in this area during on-site delineations and a desktop review indicates that the actual boundaries of HS-11 are likely more than 100 feet from the Project Corridor. The location and type of all wetland resources delineated along the Segment 12 Project Corridor and their regulated adjacent areas are shown in the EM&CP Plan and Profile Drawings in Appendix C.

The Certificate Holders have designed Segment 12 to completely avoid direct impacts to wetlands; therefore, the CCs and BMPs associated with wetland protection and restoration do not apply to this segment. A portion of the Segment 12 Project Corridor does intersect the 100-foot regulated adjacent area of NYSDEC Wetland HS-2 (Wetland D) and is anticipated to result in approximately 0.7 acre of temporary disturbance during construction. Where applicable, the protection measures to be implemented within the wetland adjacent areas include the following (BMP Document Section 19.2):

- Sediment and erosion control devices will be installed across the ROW on any slopes leading into wetlands and along the edge of the ROW, as necessary, to prevent spoil from flowing off the ROW into a wetland. Locations of sediment/erosion control devices are identified on the Erosion and Sediment Control Plans (Appendix C).
- Construction materials, including fuels, will not be stored within 100 feet of any surface water or wetland system, unless no alternative is available. If no alternative is available, the Environmental Inspector will ensure appropriate protection measures for spill prevention and control are implemented. This may include but is not limited to temporary secondary containment as specified in the SPCC (Appendix K).
- The temporary storage of spoils and excavated materials from work in or near wetlands will be avoided to the extent practicable. Excavated material will be directly loaded onto a dump truck, except in the vicinity of slice boxes and HDDs. All excess material will be disposed of in approved upland and off-site locations (CC113g).
- Construction through regulated wetlands or adjacent areas will be done with tracked equipment or on temporary mats or geotextile/gravel access roads and will be restricted to access roads and work areas set forth on the approved EM&CP drawings, provided that the Certificate Holders' use of geotextile and gravel for access roads will not contravene the requirements set forth in Condition 77 of this Certificate (CC113d).

- Equipment or machinery will not be washed in or adjacent to any regulated wetland or adjacent area, and runoff resulting from washing operations will not be permitted to directly enter any regulated wetland or protected stream or waterbody (CC 113f).
- Clearing of existing vegetation in wetlands will be limited to that material necessary to allow completion of construction activities and to allow for reasonable access for long-term maintenance so as to reduce the amount of activity and disturbance to the wetland and adjacent area (CC113e).
- Application of herbicides will conform to all label instructions and all applicable federal and state laws and regulations. Herbicides will not be applied within 100 feet of any public water supply (reservoirs and wellheads), or any private well-head of which Certificate Holders have actual knowledge. Applicators will reference maps that indicate treatment areas, and wetland and adjacent area boundaries, prior to treating. Applications required in seasonally flooded freshwater wetlands will be undertaken during a dry season (CC 83).
- In accordance with the amended CC114, in general, and to the maximum extent practicable, refueling equipment, storage mixing, or handling of open containers of pesticides, chemicals labeled "toxic", or petroleum products will not be conducted within 100 feet of a stream or waterbody or wetland. Requirements for refueling within 100 feet of wetlands or streams will be allowed under certain circumstances identified below.
    - Refueling of hand equipment will be allowed within 100 feet of wetlands or streams when secondary containment is used. Secondary containment will be constructed of an impervious material capable of holding the hand equipment to be refueled and at least 110% of the fuel storage container capacity. Fuel tanks of handheld equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Crews will have sufficient spill containment equipment on hand at the secondary containment location to provide prompt control and cleanup in the event of a release.
    - Refueling of equipment will be allowed within 100 feet of wetlands or streams when necessary to maintain continuous operations and where removing equipment from a sensitive area for refueling would increase adverse impacts to the sensitive area. Fuel tanks of such equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Absorbent pads or portable basins will be deployed under the refueling operation. In addition, the fuel nozzle will be wrapped in an absorbent pad and the nozzle will be placed in a secondary containment vessel (e.g., bucket) when moving the nozzle from the fuel truck to the equipment to be refueled. All equipment operating within 100 feet of a

wetland or stream will have sufficient spill containment equipment on board to provide prompt control and cleanup in the event of a release.

- Field personnel and contractors shall be trained in spill response procedures, including the deployment and maintenance of spill response materials.

9.1.3 Floodplains

9.1.3.1 Summary of Floodplains Within Segment 12

According to Federal Emergency Management Agency (FEMA) map services the Segment 12 Project Corridor transects portions of designated floodplains associated with three streams, including an unnamed tributary to the Hudson River, Cedar Pond Brook, and Minisceongo Creek.

Construction within FEMA designated floodplains has been avoided and minimized to the greatest extent practicable by the design of the Project within previously disturbed areas. Table 9-3 summarizes the FEMA designated floodplains identified along the Segment 12 Project Corridor and the approximate locations (see drawings in Appendix C).

Table 9-2. FEMA Designated Floodplains in Segment 12

Sheet Number	Station (Approximate – see Drawings for details)	Floodplain
C-400A – C-401	STA 72498+00 to STA 72503+50	100-year flood; 500-year flood
C-402	STA 72550+25 to STA 72552+00	100-year flood; 500-year flood
C-405	STA 72643+75 to STA 72644+60	100-year flood; 500-year flood

9.1.3.2 Construction Measures to be Implemented within Floodplains

Where construction is required within designated floodplains, the Certificate Holders will implement the following measures (BMP Document Section 23.5):

1) Work within floodplains has been minimized to the extent possible during preconstruction, construction, operation and maintenance activities through intentional design of the Facility;
2) The boundaries of 100-year floodplains, streams, wetlands, and other water resources are depicted on the EM&CP Plan and Profile drawings (Appendix C);

3) The boundaries of floodplains within the construction area and along access routes will be flagged prior to the start of construction. The Environmental Inspector will replace flagging, as needed, so that boundaries are clearly marked in the field;
4) Temporary access roads will, where possible, be constructed using native soils to minimize imported materials that may require removal when the road is deactivated. Where the addition of imported materials is necessary to provide a stable road base these will be kept to an absolute minimum consistent with the duration of use and loads to be carried;
5) Where construction equipment must cross floodplains with saturated soils (i.e., water at or near the surface), a crossing method will be selected that is appropriate to the site-specific conditions pertaining to soil moisture, vegetative characteristics, and depth of topsoil layer;
6) In floodplains with saturated soils, prefabricated wooden mats or equivalent will be used to provide support for equipment. These will remain in place until the completion of construction along this Segment and, if appropriate, restoration. If final restoration will not occur until the next growing season wooden mats or equivalent will be removed until restoration resumes;
7) Unless required for a permanent floodplain crossing, all prefabricated mats will be removed from temporary access ways no later than following final restoration;
8) Low pressure wide tracked equipment may be used in floodplains with saturated soils without support, depending on substrate type and degree of saturation (e.g., water depth) and on the extent of rutting caused by this equipment;
9) In floodplains with non-saturated soils that have a firm substrate, standard construction equipment may be utilized;
10) Where practicable, existing access ways will be used in floodplains;
11) The need for and placement of additional erosion controls in floodplains will be determined on a site-specific basis, based on factors such as weather conditions during all work activities, vegetative cover, hydrologic regime, and the construction sequence. See the ESC Plans in Appendix C;
12) Such temporary erosion controls in floodplains will be removed in a timely manner after restoration is complete;
13) Disturbed portions of floodplains will be regraded to restore preconstruction contours and normal hydrology;
14) On floodplains, spoil or excavated materials will be stored at least 100 feet from wetlands and streams wherever possible. All excavated materials will be stored at a sufficient distance to prevent sedimentation into any stream, wetland, wetland adjacent area, or other waterbody, or erosion of the stream bank. If no other storage area is available, spoil will be covered, and

erosion/sedimentation control measures will be installed to prevent materials from eroding and entering into adjacent areas from stormwater or flooding;

15) Excavated material in floodplains that is determined to be excess material will be disposed of in approved upland locations outside of the floodplain; and
16) For construction activities along segments of the route that follow railroad rights-of-way, floodplain areas will be avoided where possible through the use of existing railroad access. Use of low ground pressure vehicles and minimal use of permanent fill will be given high priority during design of construction access in flood-prone areas
17) No construction equipment or Facility materials shall be left, parked, staged, or stockpiled within a designated floodplain for longer than 24 hours at a maximum.
18) Cut timber and slash will not be stacked or stockpiled piled on floodplains.

9.1.3.3 Restoration within Floodplains

Upon completion of construction activities, all disturbed areas will be stabilized in accordance with the Erosion and Sediment Control Plan (see ESC plans in the SWPPP, Appendix J). All construction in floodplain areas will be restored to pre-facility conditions. Native vegetative cover will be restored to the extent practicable, and no fill will be allowed. If fill is determined to be necessary, the Environmental Inspector must ensure the material matches the physical characteristics of the original material. There will be no permanent change in topography in any designated floodplain.

9.2 GROUNDWATER AND WELLS

A review of publicly available water district maps for each municipality that Segment 12 occurs within was performed. For any portions of Segment 12 not within a water district, a review of the publicly available NYSDEC well data was performed. No wells were identified in the vicinity of the Segment 12 Project Corridor. Out of an abundance of caution, to the greatest extent possible, the Contractor will limit refueling operations at least 200 feet from residences along the route. Refueling of vehicles within 200 feet may occur following implementation of the necessary BMPs (e.g., secondary containment around stationary equipment, drip pans utilized during refueling and routine maintenance operations, and absorbent pad wrapped nozzles to catch drips from refueling) outlined in CC 114(g). Secondary containment shall be used to prevent leaks or spills from reaching the environment and to contain spills until they can be cleaned up and is further discussed in Section 5.3.1

The use of herbicides is not planned during construction. During operations and maintenance (O&M) activities after construction, herbicides will not be applied within 100 feet of any public water supply

(reservoirs and wellheads) or any private well-head of which Certificate Holders have actual knowledge (CC 83). A separate O&M plan will be developed by the Certificate Holders with further detail.

9.3 ECOLOGICALLY SENSITIVE SPECIES AND HABITATS

As part of environmental training, the Certificate Holders and Environmental Inspector will provide training to contractors and employees regarding known and potential rare, threatened, and endangered (RTE) plant and wildlife species and significant natural communities that may be encountered, and the identification and protection measures that are included in this EM&CP. Appendix T identifies all ecologically sensitive species and habitats identified by NYSDEC, New York Natural Heritage Program (NYNHP), USFWS, and National Oceanic and Atmospheric Administration (NOAA) across the entire Project and if there are anticipated impacts due to the Project. If a species or community was determined not to be within the Project Corridor or there are no impacts to the species, that is discussed in Appendix T. The species and communities that require additional avoidance or minimization measures are discussed below. These resources are appropriately depicted on the EM&CP Plan and Profile Drawings (Appendix C) where practicable. The EM&CP Plan and Profile drawings will be provided to the NYSDEC, NYNHP, and DPS Staff for review of significant natural community mapping prior to start of construction (BMP Document Section 16.3). The Environmental Inspector will be responsible for ensuring that prescribed protection measures are appropriately utilized during construction (BMP Document Section 16.0).

Section 7.0 of this EM&CP identifies other sensitive lands in Segment 12. Based on review of the New York State Geographic Information Gateway, no significant coastal fish and wildlife areas were determined for this segment of the Project (BMP Document Section 16.2.1).

9.3.1 Federally Listed Species Within Segment 12

The USFWS has identified the following listed species within the Segment 12 Project Corridor:

- Northern long-eared bat (*Myotis septentrionalis*) – Endangered (effective March 31, 2023)
- Shortnose sturgeon (*Acipenser brevirostrum*) – Endangered
- Atlantic sturgeon (*Acipenser oxyrinchus*) – High Priority Species of Greatest Conservation Need

Additionally, the monarch butterfly (*Danaus plexippus*), a candidate species was identified within the Segment 12 Project Corridor. The habitat descriptions for each of the species identified by the USFWS are provided in Appendix T.

9.3.1.1 Federally Listed Species Impact Avoidance and Minimization Measures

As described in Appendix T, documented location information by NYNHP and NYSDEC have indicated no northern long-eared bat maternity roosts occur within 1.5 miles of Segment 12 and no hibernacula occur

within 5 miles of Segment 12. Therefore, no impacts to northern long-eared bat are anticipated to occur as a result of Segment 12 construction; however, tree clearing within Segment 12 will occur during the approved winter clearing window between November 1 and March 31 to the extent practicable as forested areas may provide suitable foraging habitat. If clearing outside of the winter window is required, it will be performed as described in Section 8 subject to USFWS and NYSDEC approval. No tree clearing will occur in June or July, except in an emergency to protect human life or property. These measures are documented in Table 9-3.

The DOE requested re-initiation of informal consultation pursuant to Section 7 of the Endangered Species Act in a letter dated March 17, 2021 (Appendix A). Minor route modifications and proposed relocation of the site and of the converter station were noted. DOE's determination in their Biological Assessment is that the Project "may affect but is not likely to adversely affect the endangered Indiana bat or the threatened northern long-eared bat critical habitat."

The USFWS responded in a letter dated March 29, 2021 (Appendix A), indicating that they concur with the above determination for Indiana bat and the northern long-eared bat.

Due to the change in northern long-eared bat ESA status, the Certificate Holders will continue to coordinate with USFWS and DOE for updated concurrence.

9.3.2 State-Listed Species and Rare Communities Within Segment 12

NYNHP correspondence dated April 22, 2022 and spatial information provided by NYSDEC on April 20, 2022 (Appendix A), identified several RTE species and significant natural communities that may occur along the entirety of the Project. State-listed plant and wildlife species and significant natural communities identified in the vicinity of Segment 12 include the following:

- Bald Eagle (*Haliaeetus leucocephalus*) – Threatened
- Shortnose sturgeon (*Acipenser brevirostrum*) – Endangered
- Atlantic sturgeon (*Acipenser oxyrinchus*) – High Priority Species of Greatest Conservation Need
- Basil Mountain Mint (*Pycnanthemum clinopodioides*)– Endangered
- Torrey's mountain mint (*Pycnanthemum torreyi*)– Endangered
- Oak-Tulip Tree Forest – Rare Community
- Rocky Summit Grassland – Rare Community

Appendix T provides habitat descriptions for each species and natural communities and addresses the likelihood of occurrence within the Segment 12 Project Corridor.

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9.3.2.1 State Listed Species Impact Avoidance and Minimization Measures

The Certificate Holders identified locations of previously documented bald eagle nests within 0.5 mile of construction during consultation with NYNHP and NYSDEC (BMP Document Section 16.2). According to spatial data provided by NYSDEC on October 19, 2022, four previously documented bald eagle nests occur within 0.5 mile of the Segment 12 Project Corridor. Of the nests identified, two previously documented nests were mapped within 660 feet of Segment 12 construction, one previously documented nest is located just under 0.25 mile of construction, one previously documented nest is located approximately 0.5 mile of Segment 12 construction. As noted in Section 4.13, no blasting is proposed for the construction of Segment 12 and only minimal tree clearing proposed (see Section 8 for mor detail). A steep forested ridge separating the Segment 12 Project Corridor from the nest location within 0.25 mile from proposed construction. Therefore, no visual or noise impacts are anticipated to this nest location during construction and no avoidance, minimization, or mitigation measures are required at this location. A bald eagle field reconnaissance survey was conducted by the Certificate Holders to evaluate the mapped nests within 660 feet of Segment 12 construction. The survey found that no eagle nests were present in the vicinity of the mapped locations and that given the high amount of existing anthropogenic disturbance, any bald eagles in the vicinity would be habituated to elevated noise conditions. The survey results were filed with DPS on January 25, 2023 with the Stony Point Transitional HDD (Segment 16) EMCP. Based on these findings, no adverse impacts to bald eagles are anticipated as a result of Segment 12 construction and no additional avoidance or minimization measures are required.

The Certificate Holders will consult with NYSDEC annually for updated data on known eagle bald nest locations. Contractors and construction crews will be trained on the identification of bald eagles and location of known nests and will be instructed to report any sightings of potential eagle nests that were not previously identified by the NYNHP or NYSDEC. If any previously unidentified eagle nests are discovered, the Certificate Holders will report findings to the NYS Natural Heritage Program as soon as possible, and consult with the NYSDEC and USFWS for guidance to avoid or minimize the potential for disturbance, if needed (BMP Document Section 16.2).

As stated in Appendix T, short-nosed sturgeon and Atlantic sturgeon were identified to occur within the Hudson River. Construction of Segment 12 will not include aquatic impacts within the Hudson River; therefore, there will be no impact or required avoidance or mitigation measures for these species. In addition, Appendix T documents that current mapping of significant natural communities indicate that both the Oak-Tulip Tree Forest and the Rocky Summit Grassland occur outside of the Segment 12 Project Corridor. The two rare plants (basil mountain mint and Torrey's mountain mint) were also documented to occur within the Rocky Summit Grassland. Therefore, no impacts to significant natural communities or rare plants are anticipated to occur as a result of construction of Segment 12.

9.3.3 Summary of RTE Species Impact Avoidance and Minimization Measures

Table 9-3 summarizes the locations, avoidance and minimization measures to be implemented for the federal and state-listed species that are anticipated to occur within the Segment 12 Project Corridor.

Table 9-3. RTE Species Impact Avoidance and Minimization Efforts

ESA #	Station Start	Station End	Avoidance and Minimization Measures
ESA 9	72495	72899	(a) Conduct tree clearing between November 1 and March 31. Tree clearing outside of this window, if needed, will be conducted in accordance with a protocol developed and approved by USFWS, USDOE, and NYSDEC. (b) During the pre-construction survey, the contractors would identify large live or dead trees with peeling bark, including large specimens of shagbark hickory (*Carya ovata*), with the potential to serve as maternity or roost trees and these would be marked. Potential roost trees identified within the construction limits would be avoided where possible during construction activities.

9.3.4 Unanticipated Discovery of Threatened and Endangered Species

In the event RTE species are encountered during the pre-construction or construction phases of the Project that were not identified previously, the following measures will be implemented (BMP Document Section 16.3):

- The Environmental Inspector will identify the area of the sighting or encounter, flag the boundaries of the newly identified occupied habitat or locations where RTE plants have been observed to be present along the overland portions of the cable route, and record GPS locations of the likely habitat boundary.
- Any unanticipated sightings of observation of RTE plants will be reported as soon as possible to DPS Staff, NYSDEC, NYNHP, or USFWS. The Certificate Holders will consult with applicable resource agencies for measures to avoid and/or minimize impacts to RTE species and their occupied habitat.
- If RTE species or their occupied habitats are discovered during construction activities, the Certificate Holders and associated contractors will temporarily halt construction activities, excepting any activity required for immediate stabilization of the area, to avoid and/or minimize the impacts to the species or habitat. Construction activities in the area will resume once avoidance, minimization, and/or mitigation measures, developed in consultation with DPS Staff, NYSDEC, and USFWS (as species listing requires), are implemented.

- If new TE species occupied habitat is identified or RTE plants are observed and verified, EM&CP Plans will be updated to show the new TE occupied habitat(s) and locations of RTE plants. Areas of TE occupied habitat and locations of RTE plants along the overland route will also be flagged in the field.
- Construction personnel will be updated on the locations of any new RTE species or occupied habitats or locations that are identified. These areas will be reported to the applicable resource agencies.

In addition, recent consultation with NYSDEC indicated that the eastern copperhead (*Agkistrodon contortrix*), a designated species of greatest conservation need in New York State, may occur in the vicinity of Segment 12. Therefore, in the unanticipated even that an eastern copperhead snake is encountered during Segment 12 construction, the following measures will be implemented:

- It is unlawful for any person to approach, touch, move, threaten, harass, disturb, injure, or kill an eastern copperhead.
- The Environmental Inspector and construction personnel will be trained on the identification of eastern copperhead snakes.
- The Environmental Inspector will monitor the work area for snakes during construction.
- If a copperhead snake is encountered, stop work immediately and contact the supervisor in charge to delay work in the area until the snake has been moved safely from the area.
- Allow the snake to continue on its way. If the snake does not move out of harms way on its own or needs to be moved out of the work area, contact the Environmental Inspector who should be licensed in New York to handle and relocate this species, or if a licensed monitor is not available, contact Regional Wildlife Office at 845-256-3098, Wildlife.R3@dec.ny.gov on legal options available to move
- Any encounters will be reported to the Regional Wildlife Office within 24 hours.

9.4 INVASIVE SPECIES MANAGEMENT

The Certificate Holders have identified certain invasive species that potentially occur along Segment 12 based on field survey, online research, and consultation with federal and state agencies. Invasive species are typically nonindigenous and include both terrestrial and aquatic species that can spread rapidly in the environment, resulting in the displacement of native species, and potentially causing economic impacts. Additionally, areas that have been disturbed by human activity may provide opportunity for the colonization and spread of invasive species, which are often more disturbance-tolerant than the native communities.

The movement of vehicles, equipment, and personnel, and the transport of materials and/or construction debris to and from areas that are inhabited by invasive species could result in the unintentional spread of these species. The Certificate Holders have included BMPs to control the transport of invasive plant species from areas where they may occur. Measures such as training personnel in the identification of invasive species, inspecting and cleaning vehicles, and equipment, and practices to encourage rapid stabilization, and restoration and revegetation of disturbed work areas have been incorporated to minimize any adverse impacts due to invasive species, as guided by the Environmental Energy Alliance of New York (EEANY), New York Utility Company Best Management Practices for Preventing the Transportation of Invasive Species (2015) (Appendix N).

9.4.1 Invasive Species Within Segment 12

Invasive species were encountered in upland and wetland areas throughout the Segment 12 Project Corridor, occurring as individual plants or groupings of plants.

A list of invasive plant species developed by NYSDEC and NYSDAM is provided in *New York State Prohibited and Regulated Invasive Plants (2014)* (Appendix N). Common reed grass (*Phragmites australis*) was identified within wetland and streambeds during delineations (see Wetland Delineation Report in Appendix M). No other invasive species were noted during site walks; however, the Environmental Inspector will be present during construction and will notify crews if invasive species are present in an upcoming work area. The Environmental Inspector will ensure that measures to prevent and control the transport of invasive species described in Section 9.4.2 and the Invasive Species Control Plan (Appendix N) will be followed during construction.

9.4.2 Measures to Prevent or Control the Transport of Invasive Species

On a Project-wide basis, the Certificate Holders will perform the following measures (BMP Document Section 21.1.1) to prevent or control the transport of aquatic invasive species in accordance with applicable regulations and guidance from NYSDEC and the New York Invasive Species Council. Measures are also specified under the EEANY, New York Utility Company Best Management Practices for Preventing the Transportation of Invasive Species (2015) (Appendix N):

1) Prior to construction, training will be conducted to educate the Project contractor(s) and subcontractor(s) on identifying invasive plant species and the site-specific protocol for preventing or controlling their transport throughout or off of the Project site. These protocols include the various cleaning or decontamination methods to be used for the Project. In addition, the contractors will be instructed to stay within access paths and work areas that are designated on the EM&CP Plans & Profile Drawings (Appendix C) to minimize ground disturbance.

2) Sediment and erosion control devices (Appendix G) will be installed across the construction right-of way on slopes leading into wetlands and along the edge of the construction ROW to prevent spoil from migrating into these areas. This will also help to prevent the dispersion of seeds from invasive plant species into un-infested wetlands during construction.
3) Vehicles (including trailers) machinery, equipment, and materials (including swamp mats) will be inspected for, and cleaned of, any visible soils, vegetation, and debris before bringing them to the Site or moving them to the next wetland along the construction ROW. As specified under NYSDEC's General Permit for Routine ROW Maintenance Activities, DEC No. 0-0000-01147/00001:

    a. Equipment used in areas containing invasive plant species will be mechanically brushed before leaving the invasive infested area or Facility ROW for another project, to prevent the spread of seeds, roots or other viable plant parts. The debris will not be discharged within 100 feet of any stream, existing or proposed wetland or adjacent area, or stormwater conveyance (e.g., ditch, catch basin, etc.).
    b. Loose plant and soil material that has been removed from clothing, boots and equipment, or generated from cleaning operations will be rendered incapable of any growth or reproduction, disposed of off-site, or handled as follows: If upon completion of work, the area remains infested with invasive plant species, the invasive material cleaned from equipment used within the same construction area may remain within the infested area, provided that no filling of a wetland will occur.
    c. If disposed of off-site, the plant and soil material will be transported in a secure manner. Any off-site disposal must occur at either a landfill-incinerator or a state-approved disposal facility.
4) Revegetation of wetlands will be expedited by stripping the topsoil from over the trench, except in areas with standing water or heavily inundated soils, or where no topsoil layer is evident or where it exceeds the depth of the trench. Topsoil will then be stockpiled separately from subsoil to insure preservation of the native seed bank.
5) Following conduit installation, the disturbed areas will be backfilled and the area recontoured to its original grade. Segregated topsoil will be replaced, and natural drainage patterns restored to facilitate natural re-establishment of native vegetation.
6) The restored ROW will be seeded with an invasive species free seed mix and mulched (see Appendix G) immediately after final regrading to create a rapid cover over the disturbed ROW and help to prevent establishment of invasive species which typically colonize disturbed sites.
7) Expediting construction in and around wetlands and limiting the amount of equipment and construction activities within wetlands will reduce the amount and duration of disturbances. In

addition, equipment used will be tracked or balloon-tired, often operating on top of timber mats or corduroy. This will minimize the amount of heavily disturbed soils in which invasive species might colonize.

8) To the extent practicable, water for dust control and other uses will come from municipal water supplies or other potable sources. If surface waters are used, equipment will be disinfected afterwards.
9) To the extent practicable, the movement of invasive-plant-infested soils, gravel, rock, and other fill materials to relatively-invasive-plant-free locations will be avoided. Soil, gravel, rock, and other fill material will come from invasive-plant-free sources on and off the site, if such sources are available.
10) Where the NYSDEC has identified the presence of Rock Snot or Didymo (*Didymosphenia geminata*), any footwear used in streams or waterbodies will be soaked in a one percent solution of Virkon® Aquatic for 10 minutes before leaving the area adjacent to the affected waterbody (BMP Document Section 21.3).

The Asian longhorned beetle (*Anoplophora glabripennis*), the emerald ash borer (*Agrilus planipennis*), and the spotted lanternfly (*Lycorma delicatula*) have been identified by the NYSDEC as potential problems to native trees and vegetation. If these insects are found during construction, they will be reported to the NYSDEC regional forester. In addition, prior to construction, training will be conducted to teach Project contractor(s) and subcontractor(s) to identify invasive insect species and the Project-wide protocol for reporting to the NYSDEC regional forester. Unmerchantable timber will be provided as firewood to interested parties pursuant to the substantive requirements of NYSDEC's firewood restrictions found in 6 NYCRR Part 192.5 to protect forests from invasive species (BMP Document Section 21.2).

10.0 NOISE AND NOISE MITIGATION PLAN

Construction of the overland portion of the transmission cable is anticipated to cause a temporary increase in noise levels consistent with construction activities associated with linear projects. The Project will not result in any permanent increases to noise levels. The sections below summarize the noise control and mitigation measures to be implemented for the Project.

Overland transmission cable installation requires a wide range of construction activities and equipment that generate temporary noise increases. Table 10-1 summarizes the types of equipment and activities that are anticipated during construction of the Project as well as their typical associated noise level. Some of the equipment listed may have multiple uses during the construction phase but is listed under its primary use.

Table 10-1. Noise Impact Summary

Use	Type of Equipment	Equipment Noise Level at 50 feet, dBA
Site clearing and earth moving operations.	Bulldozer	86
	Loader	78
	Excavator	80
	Dump Trucks	84
Compaction during earth moving operations.	Vibratory Drum Compactor	73
Vegetation and tree clearing.	Kershaw mower	85
	Mower	75
	Hydro-ax	85
	Chainsaw	85
Resurfacing	Crawler Tractor	82
	Sandblaster	85
	Asphalt paver	85
Cable and conduit installation.	Backhoe	80
	Cable puller	85
HDD	Directional drilling rig	85

Data are compiled from FHWA 2006 Handbook.
Note: Data are provided for illustrative purposes only and may not be representative of final equipment used during Project construction.

Overland transmission cable construction would generally occur approximately 100 to 500 feet (30 to 152 meters) from residences and users of recreational resources along the terrestrial portions of the Project. However, in a few places within Segment 12, construction activities would occur within 100 feet of residences. Some noise-producing activities taking place within 100 feet could result in speech or sleep

interference at these residences, however these disruptions will be temporary and will be minimized to the maximum extent practicable. The Certificate Holders have proposed measures to minimize such impacts include equipping construction equipment with appropriate sound-muffling devices (e.g., Original Equipment Manufacturer [OEM] or better), always maintaining equipment in good operating condition, and minimizing the loudest types of construction activities during nighttime hours (7 p.m. to 7 a.m.) in close proximity to residences where possible, and as permitted by agreements with the host communities to conduct the bulk of roadway construction to nighttime hours to limit impacts to the traveling public. The Certificate Holders will notify residents at least 2 weeks ahead of time regarding construction activities in accordance with CC 33.

HDD operations would be in place for up to approximately 2 weeks at each location, for a total of up to 12 weeks of HDD work in Segment 12. Where warranted, the Certificate Holders will perform the noise minimization measures described in Section 10.2.

The Commission waived local noise laws in the host communities during Certification of the project, and local officials have requested that construction activities occur primarily at night in this Segment to reduce impacts to traffic and disruption of the community. As such, CHPE will necessarily need to conduct some construction work during the nighttime hours. However, CHPE anticipates these disruptions will be temporary and that impacts will be avoided and minimized to the maximum extent practicable.

10.1 SENSITIVE NOISE RECEPTORS

Sensitive noise receptors include, but are not limited to, recreational areas, residences, schools, hospitals, businesses, and libraries. The noise receptors that occur near Segment 12 at various points include residences, businesses, a hospital, and recreational areas. As indicated in Section 4.0 of this EM&CP, there are 197 noise receptors within 100 feet of trenching and HDD activities along the Segment 12 route, 79 of which are within 100 feet of HDD activities. The majority of these noise receptors are located along existing public road/highway ROWs and are therefore proximate to existing noise sources. However, the procedures described in Section 10.2 will ensure that Project-related noise at receptors in the vicinity is minimized.

10.2 NOISE CONTROL MEASURES

10.2.1 Noise Control Measures for Equipment and Linear Construction

Noise control measures for overland transmission cable construction that the Certificate Holders will implement along Segment 12 will include the following (BMP Document Section 25.2.1):

- Locate equipment yards and marshalling areas away from sensitive noise receptors as practical.

- Install improved mufflers on heavy construction equipment when used within 100 feet (30 meters) of sensitive noise receptors.
- Utilize low-noise technologies (e.g., vibratory pile drivers), as appropriate.
- Minimize high noise level construction activities (e.g., wood chipping, pile driving, rock drilling, blasting, excavation and loading) during overnight hours as much as possible when construction is conducted in proximity to noise-sensitive receptors.

10.2.2 Noise Control Measures for Point Source Producers

Noise control measures for point sources (e.g., HDD, or other activities that remain in a single location for an extended time) include the following (BMP Document Section 25.2.2):

- Minimize high noise level construction activities during nighttime hours where possible when construction is conducted within 100 feet of residences, where permitted by agreement with host communities.[3]
- Install temporary wooden sound barriers to reduce noise levels at all HDD entry pit work areas depicted in the Plan and Profile drawings (Appendix C), except in the vicinity of HDD-124 which is not located within 100 feet of sensitive noise receptors.

10.3 NIGHTTIME WORK

There are anticipated to be several circumstances where HDD operations and conduit installation will be required to occur during nighttime hours. Along this segment, HDDs will be used extensively to avoid impacts to subsurface infrastructure and reduce traffic impacts. Accordingly, the NYSDOT and local stakeholders understand that nighttime construction work occurs along this segment. These may include instances when directed by NYSDOT, when necessary to maintain the integrity of the HDD bore, and/or when necessary to finish continuous operations such as pullback. Additionally, nighttime work will be implemented in certain locations to avoid impacting public access to specific businesses. In accordance with CC 159(m), the following nighttime provisions will be implemented:

- Near noise-sensitive receptors, measures established in Section 10.2 above will be followed.

[3] There may be instances when construction will be required outside of these working hours for safety or operational purposes (e.g., HDD boring). Moreover, the host communities have requested that construction activities taking place within roadways be conducted during nighttime hours as much as possible to limit impacts to the traveling public. As such, it will be necessary to conduct construction at night for this Segment, and the Certificate Holders and/or Contractor will communicate anticipated construction schedules the DPS and local municipalities 24-48 hours in advance of these activities, to the greatest extent possible, so that the community is aware of nighttime construction.

- Lighting will be provided using equipment and light plants as required for safe operations to provide illumination necessary for worker safety and site security purposes, while considering energy conservation, glare, and the minimization of light trespass. The installed lights will shield the lamp filaments from direct view and will be designed and installed per NYSDOT directive # 95-005 on Lighting for Nighttime Operations.

11.0 CULTURAL RESOURCES

Cultural resources include archaeological and historic architectural resources that are listed on, eligible, or potentially eligible for listing on the National Registry of Historic Places (NRHP).

Table 11-1 summarizes the generalized locations of cultural resources and the protection measures that will be implemented along the Segment 12. All impacts to cultural resources identified within the Segment 12 as well as associated protection and mitigation measures are described in the Cultural Resource Management Plan (CRMP) included in Appendix O as required by the BMP Document (BMP Document, Section 17).

Table 11-1. Segment 12 Cultural Resources

Cultural Resource Name	Location	Impact	Protection Measure
Stony Point Battlefield (NHL)	Limit of Work extends 75 feet east and 40 feet west of cable alignment, just outside the western property boundary of the National Historic Landmark (NHL), Stony Point Battlefield State Historic Site.	Marine HDD work area and Transition Vault.	Testing or monitoring recommended.
R.B. Marks Site (SUBi 2575, 08705.000081, NYSM 11696	Within the lawn of a residential property.	Cable within the road. No impacts expected.	Existing chain link fence. Add signage to keep heavy construction traffic out
Stony Point Blacksmith Shop (08705.000080, NYSM 11695)	Town of Stony Point. Site is well to the north of Project impacts.	LOW in park for equipment storage and access to the James A. Farley bridge to install conduit under the bridge.	None.

Cultural Resource Name	Location	Impact	Protection Measure
Peck Rolling Mill Site (0744.0004)	Town of Stony Point. Well east of the Project.	No ground disturbing activity in the vicinity.	None.
"Treason House" Site (08744.000005)	Town of Stony Point. Well west of Project likely destroyed.	No ground disturbing activity in the vicinity.	None.
William Smith House / "White House" (08744.000017)	Town of Stony Point. West of Project.	No ground disturbing activity in the vicinity.	None.
NYSM 6373 (likely precontact)	Southern portion of cable route. Town of Clarkstown.	Cable within road or road shoulder.	None.
NYSM 4653	Town of Stony Point.	HDD and work area.	Testing or monitoring recommended.
High archeological sensitivity	Limit of Work extends beyond the road's ROW into an area of lawn and light woods. Town of Clarkstown.	Splice Vaults 251 and 251A and associated access road and work areas.	Testing or monitoring recommended.
Michael J. Higgins Funeral Service, Inc	73 North Liberty Drive, Town of Stony Point. Eligible property.	Splice Vault 245. Impacts expected to low stone wall in front of property within public ROW.	No adverse effects to eligible property. Testing or monitoring recommended for splice and work area.
2 Summit Avenue	2 Summit Avenue, Town of Stony Point. Undetermined.	Proposed impacts to modern retaining walls and landscaping.	None.
c. 1830 Vernacular Dwelling	92 East Main Street. Town of Stony Point. Eligible property.	Near access road, no impacts.	None.
c. 1840 Vernacular Dwelling	90 East Main Street. Town of Stony Point. Eligible property.	Near access road, no impacts.	None.
Henry M. Peck House (08702.000180/ 00NR01648)	HDD under property (as drawn on nomination form). Listed and then delisted after house was demolished. West Haverstraw.	HDD 127 and 128.	None.
Cultural Resource Name	Location	Impact	Protection Measure
Stony Point Battlefield (NHL)	Limit of Work extends 75 feet east and 40 feet west of cable alignment, just outside the	Marine HDD work area and Transition Vault.	Testing or monitoring recommended.

Cultural Resource Name	Location	Impact	Protection Measure
	western property boundary of the National Historic Landmark (NHL), Stony Point Battlefield State Historic Site.		
R.B. Marks Site (SUBi 2575, 08705.000081, NYSM 11696	Within the lawn of a residential property.	Cable within the road. No impacts expected.	Existing chain link fence. Add signage to keep heavy construction traffic out
Stony Point Blacksmith Shop (08705.000080, NYSM 11695)	Town of Stony Point. Site is well to the north of Project impacts.	LOW in park for equipment storage and access to the James A. Farley bridge to install conduit under the bridge.	None.
Peck Rolling Mill Site (0744.0004)	Town of Stony Point. Well east of the Project.	No ground disturbing activity in the vicinity.	None.
"Treason House" Site (08744.000005)	Town of Stony Point. Well west of Project likely destroyed.	No ground disturbing activity in the vicinity.	None.
William Smith House / "White House" (08744.000017)	Town of Stony Point. West of Project.	No ground disturbing activity in the vicinity.	None.
NYSM 6373 (likely precontact)	Southern portion of cable route. Town of Clarkstown.	Cable within road or road shoulder.	None.
NYSM 4653	Town of Stony Point.	HDD and work area.	Testing or monitoring recommended.
High archeological sensitivity	Limit of Work extends beyond the road's ROW into an area of lawn and light woods. Town of Clarkstown.	Splice Vaults 251 and 251A and associated access road and work areas.	Testing or monitoring recommended.
Michael J. Higgins Funeral Service, Inc	73 North Liberty Drive, Town of Stony Point. Eligible property.	Splice Vault 245. Impacts expected to low stone wall in front of property within public ROW.	No adverse effects to eligible property. Testing or monitoring recommended for splice and work area.

Cultural Resource Name	Location	Impact	Protection Measure
2 Summit Avenue	2 Summit Avenue, Town of Stony Point. Undetermined.	Proposed impacts to modern retaining walls and landscaping.	None.
c. 1830 Vernacular Dwelling	92 East Main Street. Town of Stony Point. Eligible property.	Near access road, no impacts.	None.
c. 1840 Vernacular Dwelling	90 East Main Street. Town of Stony Point. Eligible property.	Near access road, no impacts.	None.
Henry M. Peck House (08702.000180/ 00NR01648)	HDD under property (as drawn on nomination form). Listed and then delisted after house was demolished. West Haverstraw.	HDD 127 and 128.	None.

11.1 IMPACT AVOIDANCE

The CRMP (Appendix O) includes provisions for identifying traditional cultural properties in consultation with Native Americans whose ancestorial land may potentially be affected by Project construction or operation. The procedures for determining the appropriate treatment, avoidance, or mitigation of Project effects on these resources have been developed in consultation with the affected Native Americans, the New York State Historic Preservation Office (NYSHPO), and the other Consulted Parties, as appropriate. The CRMP (Appendix O) has been approved by the NYSHPO.

The Certificate Holders will avoid creating adverse impacts on heritage resource sites, archaeological sites, historic structures, and underwater cultural resources in the vicinity of the Project by implementing location, design, vegetation management, resource protection, and construction scheduling measures as specified in the CRMP (Appendix O) and Certificate Condition 107. In addition to the EM&CP filing with the DPS, the Applicant is also providing links to submitted documents to the NY SHPO (State Historic Preservation Office) for each Package segment including the narrative report, appendices, and Project plan sheets due to size restriction in the CRIS (Cultural Resources Information System) portal. Appendix O, the Supplemental CRMP (Cultural Resources Management Plan), will be submitted to CRIS directly for review and comment by SHPO.

This Supplemental CRMP has been developed in response to Programmatic Agreement Stipulation IV(B) and Stipulation II(C)(8 – 11 and 19) and to assist Project compliance with Section 106 of the National Historical Preservation Act. TRC Companies, Inc. (TRC) created a draft comprehensive Cultural Resources Management Plan in 2015, finalized in 2021 to include three additional reports. The Programmatic

Agreement specifies the CRMP will be applied in lieu of Section 106 implementing regulations 36 CFR Part 800.4 – 800.6 to satisfy requirements of compliance with Section 106 of the National Historic Preservation Act (16 U.S.C. 470) related to identification of historic properties (36 CFR Part 800 800.4), assessment of adverse effects (36 CFR Part 800 800.5), and resolution of adverse effects (36 CFR Part 800.6).

Current design and engineering requirements indicate effects to historic and landscape resources may also require consideration throughout project execution; this the Supplemental CRMP (Appendix O) supports streamlined coordination and consultation with NY SHPO through agreement on programmatic allowances and treatments and provides structure and process for implementing requirements of the Programmatic Agreement and the TRC CRMP (2021).

11.2 CONSULTING ARCHAEOLOGIST

Hartgen Archaeological Associates will act as the Consulting Archaeologists (CA) and will work closely with the Project Preservation Officer (PPO). The CA will be responsible for training the PPO construction personnel on the identification of archaeological remains and the procedures for notification of the PPO when archaeological remains have been discovered or are believed to have been uncovered. The CA will develop a mandatory, hands-on workshop to familiarize construction personnel with examples of the types of artifacts that may be uncovered in the ground. The PPO and the construction team will understand cultural resources present in different areas as well as the potential of unknown cultural deposits.

Per the CRMP (Appendix O), the PPO or designee will be present for all ground disturbing activities and will have "stop work" authority as described in Section 3. The PPO will have the authority to cease excavation or construction work. In the event of encountering cultural materials or human remains, it is the responsibility of the PPO to halt construction activities and contact and coordinate with the CA to visit the location of the discoveries as quickly as possible. In the event of these discoveries, the CA will have up to three workdays to excavate and remove cultural material before the construction continues. The Consulting Archaeologist, in consultation with the PPO and the NYSHPO, may request additional archaeological field assistance to complete the necessary work in a timely manner. It is the responsibility of the PPO to work with the appropriately trained archeologists to ensure that the survey and assessment of any change in the APE is completed prior to construction taking place.

The Certificate Holders will refrain from undertaking construction in areas where archaeological surveys have not been completed and until such time as the appropriate authorities, including NYSHPO and DPS Staff, have reviewed the results of any additional historic properties and archaeological surveys that are required (CC 108).

11.3 UNANTICIPATED DISCOVERY OF ARCHAEOLOGICAL RESOURCES

The specific procedures for the unanticipated discovery of archaeological resources during the Project's construction were developed in consultation with the necessary state, federal, and local agencies and described in the CRMP (Appendix O). As specified in the CRMP, should archaeological materials be encountered during constructions, the Certificate Holders will stabilize the area and cease all construction activities in the immediate vicinity of the find, and protect the site from further damage (BMP Document Section 17.1).

As stated in the BMP Document, typically, measures and barriers to avoid known archaeological sites include installation of temporary fencing, and site delineation of Facility maps. Where needed Specific control measures and barriers will be developed in consultation with the NYSHPO and other Consulted Parties, as appropriate. In addition, cultural resources sensitivity training will be provided to all contractors and others that will be working on the Facility in a capacity that has the potential to cause ground disturbing activities in areas of known historic properties or areas where construction preparation work is being conducted prior to archaeological assessment of the area (BMP Document Section 17.1).

Within 24 hours of an unanticipated archaeological discovery, the Certificate Holders will notify and seek to consult with DPS Staff and OPRHP Field Services Bureau to determine the best course of action. The Project PPO must be notified immediately upon discovery of cultural resources and the PPO must notify the CA. No ground-disturbing activities will be permitted in the vicinity of the archaeological materials until such time as the significance of the resource has been evaluated and the need for and scope of impact mitigation have been determined (CC110).

11.4 UNANTICIPATED DISCOVERY OF HUMAN REMAINS

As described in the CRMP (Appendix O), should human remains or evidence of human burials be encountered during the conduct of archaeological data recovery fieldwork or during construction, all work in the vicinity of the find will be halted immediately and the site will be protected from further disturbance. Within twenty-four (24) hours of any such discovery, the Certificate Holders will notify the DPS Staff and NYSHPO Field Services Bureau. Treatment and disposition of any human remains that may be discovered will be managed in a manner consistent with the Native American Graves Protection and Repatriation Act (NAGPRA); the Advisory Council on Historic Preservation's Policy Statement Regarding Treatment of Burial Sites, Human Remains, any Funerary Objects (February 2007); and NYSHPO's Human Remains Discovery Protocol. All archaeological or remains-related encounters and their handling will be further reported in the status reports summarizing construction activities and reviewed in the site-compliance audit inspections (CC111).

The following measures will be implemented in accordance with the BMP Document (BMP Document Section 17.3):

1) Any human remains discovered will be treated with the utmost dignity and respect.
2) Work in the general area will stop immediately, and the area will be physically secured and a barrier prohibiting vehicles, equipment, and unauthorized persons from accessing the discovery site will be put in place. The site will be protected from damage and disturbance to the fullest extent possible.
3) Human remains and associated artifacts will be left in-situ and not disturbed. No human remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place.
4) The Certificate Holders will contact local law enforcement, the county coroner's office, the NYSHPO, and Native tribes, as appropriate. Local law enforcement officials, and the county coroner's office will examine the remains to determine if the remains are forensic or archaeological.
5) Within 24 hours of any such discovery, the Certificate Holders will notify the DPS Staff and OPRHP Field Services Bureau/NYSHPO. Treatment and disposition of any human remains that may be discovered will be managed in a manner consistent with the Native American Graves Protection and Repatriation Act ("NAGPRA"); the Council's Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects (February 2007); and OPRHP/NYSHPO's Human Remains Discovery Protocol. All archaeological or remains-related encounters and their handling will be reported in the status reports summarizing construction activities and reviewed in the site compliance audit inspections.
6) If the remains are determined to be Native American, the remains will be left in-situ and protected from disturbance until a plan for their protection or removal can be generated. The Certificate Holders will notify the NYSHPO and Native tribes within 24 hours (during normal business hours) or as soon as possible after the discovery has been determined to be archaeological rather than forensic. The Certificate Holders will consult with the NYSHPO and Native tribes to develop a plan of action, consistent with the guidance provided in the NAGPRA, the Council's 2007 Policy Statement, and the OPRHP/NYSHPO's Human Remains Discovery Protocol. Avoiding further disturbance of the remains is the preferred option.
7) If the human remains are determined to be non-Native American, the remains will be left in-situ and protected from disturbance until a plan for their avoidance or removal can be generated. The Certificate Holders will consult with the NYSHPO and other appropriate parties to determine a plan of action.
8) Work will resume only after the completion of the necessary consultation and treatment.

The Certificate Holders will respond promptly to any complaints of negative archaeological impacts during the Project's construction and will consult with NYSHPO, the Advisory Council on Historic Preservation (ACHP), Native Americans, and other appropriate parties identified in the CRMP to resolve adverse effects on historic properties and determine the appropriate avoidance, treatment, or mitigation measure (CC 112).

12.0 ROADWAY CONSTRUCTION AND MPT PLAN

During construction, minor and temporary impacts to existing transportation and infrastructure may occur where such features are crossed or paralleled by the Project, where construction occurs within a highway ROW, and/or where construction vehicles are entering and existing the Construction Zone from a local roadway. In areas where the Project crosses existing infrastructure, the Certificate Holders evaluated the construction activities associated with each infrastructure crossing to determine whether open trenching or a trenchless method is appropriate. The Certificate Holders have coordinated with state and local authorities and owners when developing the construction schedule for the Project in order to avoid any construction conflicts to minimize disruption of existing features to the greatest extent possible. Section 4.0 summarizes the various construction methods that will be utilized during Project construction.

12.1 PRE-CONSTRUCTION PLANNING

All necessary highway work permits that have been or will be applied for are described in Table 12-1 (CC 18).

Table 12-1. Segment 12 Highway and Road Work Permits

Description	Status
NYSDOT Highway Work Permit (HWP)for Utility Work (PERM 32)	Coordination in progress, including submission of plans.
Rockland County, Town of Stony Point, Town of Haverstraw, Village of Haverstraw, Village of West Haverstraw, and Town of Clarkstown	Memorandum of Understanding (MOU) signed January 31, 2018; plans provided to municipalities for additional coordination on co-located infrastructure. MOU in Appendix A.
Conduit Spools (OS/OW Permit)	Coordination in progress, including submission of plans.

The Certificate Holders have been coordinating with and will continue to coordinate with DPS and NYSDOT for all work to be performed in the State ROW (CC 68), and local municipalities for work to be performed in local roadways. Prior to submitting construction plans for any state ROW segment, the Certificate Holders have provided to DPS and NYSDOT a preliminary design intended to avoid conflict with potential future transportation projects that NYSDOT may seek to undertake and have offered to consult with the NYSDOT concerning any comments it may offer and will use reasonable efforts to accommodate any NYSDOT concerns (CC 68). Table 12-2 describes the ongoing coordination with NYSDOT.

Table 12-2. NYSDOT Coordination Summary

Coordinating Parties	Description	Current Status
Certificate Holders, DPS Staff, NYSDOT	All plans and work to be performed in State-owned ROW under NYSDOT's supervision and management.	Ongoing for years and will continue throughout construction.
Certificate Holders, DPS Staff, NYSDOT Staff	Certificate Holders shall provide DPS Staff and NYSDOT staff with a preliminary design marked to avoid conflict with potential transportation projects that NYSDOT Staff may seek to undertake in the future and shall offer to consult with NYSDOT Staff concerning any comments it may offer and shall use reasonable efforts to accommodate any NYSDOT concerns (CC 68).	Prior to filing any Segment EM&CP involving any such state-owned ROW.
Certificate Holders, NYSDOT, Agency crossed by project	Certificate Holders will consult with each transportation department or agency having jurisdiction over any roads, related structures, and components that will be crossed by the Facility or used for direct access to the Construction Zone. If the access road takes direct access from, or lies within the limits of, such roads, the Certificate Holders will notify each relevant transportation department or agency of the approximate date when work will begin (CC 69a).	During preparation of the EM&CP and when work begins.
Certificate Holders, NYSDOT, DPS Staff, NYSDEC	The Certificate Holders will provide status reports summarizing construction and indicating construction activities and locations scheduled for the next month (CC 47).	Bi-weekly.

Where installation of Segment 12 occurs within or involving a road ROW, the Certificate Holders have coordinated, and will continue to coordinate with the jurisdictional municipality or regulatory agency to ensure appropriate protection and safety measures are employed. The local jurisdictional entity could be the Town, Village, or County highway departments, or the NYSDOT.

Where New York State Highway ROW is to be occupied, as identified in Table 12-3, all work will be performed in accordance with 17 NYCRR Part 131 of the Highway Law covering Accommodation of Utilities within State Highway ROW and the applicable design standards of the American Association of State Highway Transportation Officials (AASHTO), the guidance in Requirements for the Design and Construction of Underground Utility Installations within the State Highway Right-of-Way (NYSDOT 2007), the Manual of Uniform Traffic Control Devices (MUTCD) (NYSDOT 2008b, USDOT 2009), the Highway Design Manual (NYSDOT), the Policy and Standards for Entrances to State Highways (NYSDOT), the Requirements for the Design and Construction of Underground Utility Installations with the State Highway ROW (NYSDOT 2007), the Accommodation Plan (NYSDOT 1995), and the NYSDOT 2008 Standard Specifications (BMP Document Section 10.1.1).

12.1.1 Maintenance and Protection of Traffic

The Certificate Holders have examined existing conditions and traffic flow and volume patterns to determine the appropriate construction methods for all areas identified in Table 12-3 and Table 12-4 where the Project installation occurs within a road/highway ROW. Where in-road work will be extensive enough to require detours or road closings, an MPT Plan has been completed in consultation with all affected agencies. The MPT plan for Segment 12 is included in Appendix C. By complying with this plan, the Certificate Holders will minimize the impact of construction of the Project on traffic circulation (CC 71).

The Certificate Holders will consult periodically with state and municipal highway transportation agencies about traffic conditions near Project construction and will notify each such transportation agency of the approximate date work will begin in its jurisdiction, using access points that take direct access from highways in that jurisdiction (CCs 69a and 72).

12.1.2 Signage

Traffic control personnel and safety signage will be employed to facilitate safe and adequate traffic flow when secondary roadways are affected by construction (CC 71). MPT, including protection of the public from damage to persons and property within the limits of (and for the duration of) work within the state ROW, will be done in full conformance with Section 619 – Maintenance and Protection of Traffic of the NYSDOT Standards Specifications for Construction and Materials (NYSDOT 2008a), and all addenda thereto. Additionally, all MPT activities, materials, signage, and construction details will comply with the Manual of Uniform Traffic Control Devices (NYSDOT 2008b, USDOT 2009) and permits issued by NYSDOT (CC 39a).

All placements of signs will be determined in consultation with the applicable jurisdictional agencies (CC 39a). At a minimum, signs will be placed at the following distances:

1. Signs announcing construction at 500 feet and 1,000 feet.
2. Signs depicting workers at 300 feet.
3. Where blasting is to take place within 50 feet of a road, a blast warning sign at 1,000 feet.

Flagmen will be present at all times when equipment is crossing or entering any road, when equipment is being loaded or unloaded and when two-lane traffic has been reduced to one lane All flagging operations will comply with 17 NYCRR Part 131 (CC39b).

12.2 ROAD AND HIGHWAY CROSSINGS WITHIN SEGMENT 12

The majority of construction for Segment 12 will take place within the public road ROW. All appropriate safety and construction procedures that involve the crossing of a road or highway are addressed in the

Maintenance and Protection of Traffic (MPT) Plan included in Appendix C (CC 39). Table 12-3 describes all road and highway crossings within Segment 12. All HDD road and highway crossings will follow the specifications summarized in Section 4.3, those listed below, and the technical specifications on the drawings included in Appendix C (CC 162g). All trenched road crossings will follow the specifications in Section 4.4, as well as those listed below and technical specifications on the drawings included in Appendix C (CC 162g).

Table 12-3. Segment 12 Road and Highway Crossings

Municipality	Jurisdiction	Road Crossing	Crossing Method (HDD or Open Trench)	Sheet	Location (approximate, see plans for details)
Stony Point	Rockland County	West Main Street	Trench	C-104	STA 72547+50
Stony Point	Town	Fliors Lane	Trench	C-107	STA 72592+50
Haverstraw	Rockland County	Railroad Avenue	HDD 128	C-109	STA 72623+75
Haverstraw	NYSDOT/ City or Village	Hillsdale Road	HDD 129	C-111	STA 72650+50
Haverstraw	NYSDOT/ City or Village	Gurnee Avenue	HDD 131	C-111, C-112	STA 72664+50
Haverstraw	NYSDOT	Westside Avenue	HDD 132	C-113	STA 72685+00
Haverstraw	Town	New Main Street	Trench	C-114	STA 72704+00

The following specifications will apply for trenchless (i.e., HDD) crossings of roads (BMP Document Section 10.1.2.2):

- Owners/operators of other underground utilities in the area will be consulted during the EM&CP development and notified no less than 30 days prior to the start of construction. Notice provided after normal business hours or on weekends will not begin the notice period.
- All existing underground facilities will be marked prior to the start of drilling or boring.
- Jacking and receiving pits adjacent to the road shoulder will be clearly identified and barricaded to prevent them from being a hazard to pedestrian or vehicular traffic.
- HDD or Jack and Bore entry and exit points will be fenced and marked if left open overnight.
- All work within state highway ROW will be conducted in accordance with a highway work permit issued by NYSDOT.

The following specifications will apply for trenched road crossings (BMP Document Section 10.1.2.1):

- Owners or operators of other underground utilities in the area will be consulted during the EM&CP development and notified no less than 30 days prior to the start of construction. Notice provided after normal business hours or on weekends will not begin the notice period.
- All existing underground facilities will be marked prior to the initiation of cutting or excavation.
- Tree limbs, shrubs, cobble stones, or any other natural or man-made features that are at risk of damage will be temporarily moved, protected, or removed and stored. Where landscaping trees are affected, an arborist will be consulted regarding root cutting and pruning.
- Detours, signage, and public notice will be posted no later than 24 hours prior to the initiation of construction.
- Traffic flow will be provided in at least one lane of the road at all times or a detour will be provided. Flaggers or temporary traffic lights will be used where necessary to control traffic flow.
- Any water control devices (roadside ditches, culverts, etc.) disturbed during excavation or construction will be restored immediately after cable installation.
- Temporary restoration of the roadway will occur immediately after the cable is installed.
- All work within state highway ROW will be conducted in accordance with a highway work permit issued by NYSDOT and the requirements of 17 NYCRR Part 131.

12.3 PARALLEL ROAD CONSTRUCTION

There are several sections of Segment 12 that parallel roads or highways. These locations are noted in Table 12-4.

Table 12-4. Segment 12 Road Parallel Construction

Municipality	Jurisdiction	Parallel Road	Construction Method	Sheet	Approximate Station Location (See Drawings for Details)
Stony Point	NYSDOT	Battlefield Road	Trench; HDD 124	C-100, C-101	72499+00 to 72502+00
Stony Point	NYSDOT	Park Road	Trench; HDD 124	C-101, C-102	STA 72502+00 to STA 72515+50
Stony Point	NYSDOT	North Liberty Drive	Trench	C-102 to C-104	STA 72515+50 to STA 72547+50
Haverstraw	NYSDOT	South Liberty Drive (North Route 202/ North US-9W)	Trench; HDD 126; HDD 127	C-104 to C-109	STA 72547+50 to STA 72623+50

Municipality	Jurisdiction	Parallel Road	Construction Method	Sheet	Approximate Station Location (See Drawings for Details)
Haverstraw	NYSDOT	South Route 9W (South Route 202/ Conger Avenue)	HDD 127; Trench; HDD 129;	C-109 to C-121	STA 72623+50 to STA 72805+00
Clarkstown	NYSDOT	North Route 9W	Trench	C-121 to C-124	STA 72805+00 to STA 72897+50

The following specifications apply where the cable will be installed longitudinally within the roadway or its shoulder (BMP Document Section 10.1.3):

a. Owners/operators of other underground utilities in the area have been consulted during the EM&CP development and will be notified no less than 30 days prior to the start of construction. Notice provided after normal business hours or on weekends will not begin the notice period.
b. All existing underground facilities will be marked prior to the initiation of cutting or excavation.
c. Tree limbs, shrubs, cobble stones, or any other natural or man-made features that are at risk of damage will be temporarily moved, protected, or removed and stored. Where landscaping trees are affected, an arborist will be consulted. All vegetation and tree clearing will follow the procedures summarized in Section 8 of this EM&CP.
d. Detours, signage, and public notice will be posted no later than 24 hours prior to the initiation of construction.
e. All areas of open trench unable to be plated will be barricaded and lit with warning lights prior to the end of the construction day.
f. Driveways and drainage ditches will be temporarily restored at the end of each working day.
g. Access to driveways will be maintained to the maximum extent practicable.
h. Temporary patch of asphalt road cuts will begin immediately after backfilling.
i. Temporary patch of major road damage (i.e., ruts, potholes, grade loss, etc.) will begin immediately after backfilling.

13.0 CO-LOCATED INFRASTRUCTURE

During Project construction, minor and temporary impacts to existing utilities and/or co-located infrastructure (CI) may occur where they will be crossed or paralleled by the Project. CI consists of electric, gas, telecommunication, water, sanitary and storm sewers, and steam infrastructure, appurtenant facilities, and associated equipment, whether above ground, below ground, or submerged that are located within the Construction Zone approved in this EM&CP. (CC27abc).

13.1 CO-LOCATED INFRASTRUCTURE CONSULTATIONS

Section 12.0 summarizes Project construction associated with existing public roadways and highways. In areas where the Project crosses existing infrastructure such as buried utility lines and railroad ROWs, the Certificate Holders evaluated the construction activities associated with each infrastructure crossing to determine whether open trenching or a trenchless method is appropriate. The Overland Co-Located Utility Summation Matrix in Appendix R summarizes the locations of all utility crossings for Segment 12. The Certificate Holders have coordinated with state and local authorities and CI utility owners to minimize disruption of existing features to the greatest extent practicable. This coordination has and will demonstrate that no interference or adverse effects to CI will occur as a result of the Project (CC 162a and 162d). The Certificate Holders have consulted with all applicable CI owners and representatives when developing the construction schedule for the Project in order to coordinate system outage requirements and avoid any construction conflicts with these agencies (CC 28b). Section 12.1.2 summarizes the outreach and consultation efforts that have been performed by the Certificate Holders.

The Certificate Holders' Construction Contractor will join "Dig Safely New York" and DigNet and will coordinate with them for any underground construction work (BMP Document Section 10.0). The Certificate Holders will comply with all procedures identified by the CI owners and representatives including but not limited to obtaining relevant rights and permissions where applicable.

Utility and other infrastructure crossings will be executed consistent with site-specific design measures for each such crossing. These site-specific design measures are indicated on the Plan & Profile Drawings in Appendix C.

A Corrosion Study has been conducted by the Certificate Holders to determine if the Project may have corrosive effects on any CI that are crossed or occur within proximity to the Project cables (Appendix P). Additionally, Cable Ampacity and Thermal Calculations consistent with Certificate Condition 162(c) are included as Appendix Q.

13.1.1 Pre-Installation Outreach of Co-located Infrastructure

The Certificate Holders have conducted a pre-installation survey that has documented the locations and conditions of known CI within the Segment 12 and identified the parties owning and operating such CI and the agencies exercising regulatory jurisdiction over the same. The results of the pre-installation survey are included in Appendix R. The physical condition of CI within Segment 12 will be further evaluated prior to construction, during potholing in the area of each CI. The procedures that will be followed to avoid damages to the CI documented are described in the sections below.

13.1.2 Summary of Consultations with Co-Located Infrastructure

Commencing the week of September 26, 2022, the Certificate Holders notified owners of CI of its plans to develop detailed construction plans for this EM&CP. Appendix R lists the CI owners that were identified within Segment 12. Emails were sent to the CI owners listed who were identified through a variety of methods including Dig Safe record requests, computer search of available records and discussions with known and potential CI owners. An example email notification is included in Appendix R including the accompanying fact sheet describing the Project, construction timing and introduction of an EM&CP, an overview of CI crossings and CHPE construction, a route map for Segment 12, and typical engineering trench and crossing drawings.

This outreach and consultation was completed in early October 2022, at least 180 days prior to the filing of EM&CP for Segment 12 (CC28d).

Since the initial email notification, the Certificate Holders' representatives have had additional telephone and email communications with CI owners to discuss their processes and requirements for engaging in the review of the Project's construction plans, initial conditions for crossing the respective CI owner's infrastructure, providing as-built drawings, and fees for engaging in the review process. A summary of those activities and sample engagement materials are included in Appendix R.

13.1.3 Reimbursement of Costs to Co-located Infrastructure

The Certificate Holders will reimburse owners and/or operators of CI for the reasonable costs they incur in the following activities (CC 29a)

1. Consulting with Certificate Holders as described in Section 12.
2. Reviewing pre-construction activities, designs, construction methods, maintenance and repair protocols, and means of gaining access to Potential CI or CI proposed by Certificate Holders.
3. Reviewing studies and design proposals described by Certificate Condition 28d and 162.

4. Conducting or preparing such additional studies and designs as may be agreed to by Certificate Holders or approved by the Commission.
5. Coordinating with and monitoring the activities of the Certificate Holders during pre-construction activities, construction, maintenance and repair of the Project.
6. Conducting maintenance and repair work on CI property or facilities, but only to the extent of increases in such costs that result from the presence of the Project.
7. Repairing damage to CI or associated property caused by Certificate Holders or their representatives in connection with any studies, surveys, testing, sampling, preliminary engineering, pre-construction activities, construction, operation, maintenance or repair of the Project.
8. Scheduling and implementing electric system outages required by any studies, surveys, testing, sampling, preliminary engineering, pre-construction activities, construction, operation, maintenance, or repair of the Project.

Cost shall be deemed to be reasonable if in the case of each separate review of a study or design proposal described below, the total cost to be borne by the Certificate Holders is five thousand dollars ($5,000) or less (CC 29b).Any CI owners or operators who intends to incur costs as described above must provide the Certificate Holders with a written description of the scope of the planned studies or activities and a good faith estimate of the expected costs, except where such studies or activities are undertaken in a situation involving unscheduled electric outages or an imminent risk to health, safety, property, or the environment, in which case Certificate Holders' reimbursement obligations shall be limited to reasonably incurred costs. Within 60 days of the expenditure by the owners and/or operators of affected CI of any funds which are eligible for reimbursement by the Certificate Holders under this Certificate, the CI owner or operator shall present the Certificate Holders with a final invoice for the actual costs incurred, but not to exceed 25 percent over the good faith estimate unless approved by Certificate Holders in advance in writing or, in the case of a dispute between the Certificate Holders and the CI owners or operators, by the Commission. Certificate Holders shall pay the authorized invoice amount within 30 days of receipt (CC 29c).

To date, there have been no disputes concerning the Certificate Holders' cost reimbursement responsibility. Any disputes that arise will be brought to the PSC for resolution. The time required to resolve any dispute arising will not be counted for the purpose of any limitation on the time available for commencement or completion of construction of the Project (CC 29d).

13.2 RAILROAD CROSSINGS & PARALLEL RAILROAD CONSTRUCTION

Segment 12 construction will occur entirely within public road ROWs with no portion of the alignment within or directly crossing a railroad ROW. However, Route 9W, where Segment 12 is located, passes over a tunnel crossing of a railroad owned and operated by CSX Transportation (CSXT). The railroad tunnel is

approximately 80 feet below the Segment 12 alignment which will be located entirely within the NYSDOT ROW. This crossing occurs at Station 72833+75 (see Sheet C-123 of Appendix C). The current alignment avoids any interference with, interruption, or endangerment of any CSXT operations and facilities. Therefore, the railroad crossing procedures identified in BMP Document Section 10.2 do not apply.

Table 13-2 summarizes the pre-construction coordination with CSXT, and the Certificate Holders will continue to coordinate directly with CSX and DPS staff throughout construction.

Table 13-2. CSX Rail Coordination Summary

Coordinating Parties	Description	Current Status
Certificate Holders, DPS Staff, CSX Rail Staff	All plans and work to be performed in ROW under CSX Rail's supervision and management.	Ongoing throughout
Certificate Holders, DPS Staff, CSX Rail Staff	Certificate Holders shall provide DPS Staff and CSX Rail staff with a preliminary design marked to avoid conflict with potential conflicting construction or maintenance projects that CSX Rail Staff may seek to undertake in the future and shall offer to consult with CSX Rail Staff concerning any comments it may offer and shall use reasonable efforts to accommodate any CSX Rail concerns (CC 68).	Prior to filing any Segment EM&CP involving any such ROW.
Certificate Holders, CSX Rail Staff, Agency crossed by project	Certificate Holders will consult with each transportation department or agency having jurisdiction over any roads, related structures, and components that will be crossed by the Facility or used for direct access to the Construction Zone. If the access road takes direct access from, or lies within the limits of, such roads, the Certificate Holders will notify each relevant transportation department or agency of the approximate date when work will begin (CC 69a).	During preparation of the EM&CP and when work begins.
Certificate Holders, CSX Rail Staff, DPS Staff, NYSDEC	The Certificate Holders will provide status reports summarizing construction and indicating construction activities and locations scheduled for the next month (CC 47).	Bi-weekly.

13.2.1 Parallel Railroad Construction Locations Within Segment 12

There are no railroad parallels within Segment 12, therefore the CCs and BMPs related do not apply.

13.3 UTILITY CROSSINGS

All known utilities such as water, storm and sanitary sewers, electric, gas, and telecommunication facilities and infrastructure that occur within Segment 12 and where they are crossed by the Project are indicated on

the Plan and Profile Drawings in Appendix C. The Overland Co-Located Utility Summation Matrix Table in Appendix R summarizes the utility crossings for Segment 12. The procedures that will be followed to minimize impacts on any utilities that may be crossed by Segment 12 are described in the sections below.

Existing utility owners have been contacted and will continue to be consulted throughout the construction process as detailed in Appendix R. Consultations will include protection measures and specifications for existing utility facilities.

13.3.1 Water Supply Intakes

The Certificate Conditions concerning water supply intakes apply to marine segments of the Project and are not applicable to the upland segments of the Project.

13.3.2 Overhead Electric Facilities

Segment 12 will cross many overhead electric facilities. Impacts to these facilities are expected to be minimal given the underground installation of the CHPE transmission cable.

The following specifications will apply where construction or pre-construction activities are undertaken in an overhead electric line ROW (i.e., a perpendicular crossing) (BMP Document Section 10.3.1.1):

1) The utility responsible for the operation and maintenance of the overhead line will be contacted and consulted throughout the siting and construction process concerning the proposed work within the ROW. This interaction is described in the Upland Co-located Utility Summation Matrix of Appendix R.
2) The responsible utility will be consulted concerning "safe minimum clearance" for construction machinery. A minimum 5-foot offset from electric poles was included in the design for trenching activities.
3) All guy wires, ground lines, and other surface or subsurface supports or facilities were located and added to the plans in Appendix C; and
4) Depending on the length of cable to be installed, the voltage of the electric line to be crossed, and existing weather and topography, the cable and the associated construction equipment may need to be temporarily grounded. This activity will be performed in compliance with the National Electrical Safety Code (NESC), as applicable.

The following specifications will apply where the cable will parallel an overhead electric line ROW (BMP Document Section 10.3.1.2):

1) The Certificate Holders have contacted the owner of the overhead utility to determine appropriate safety precautions and minimum clearance requirements.

2) As described in the Upland Co-located Utility Summation Matrix of Appendix R, if voltages warrant, no ungrounded vehicle will be allowed within 200 feet of the electric line.
3) All vehicles on the ROW will be grounded, if necessary, by use of grounding strips or chain devices.
4) Vehicles parked overnight on the right-of-way will be grounded to an embedded ground rod by a cable.
5) Fuel trucks will have sufficient ground cables and clamps to complete an electrical bond with every vehicle to be refueled.
6) The Safety Inspector will monitor construction equipment and warn operators if the safe minimum clearance zone is entered.

13.3.3 Underground Crossings and Parallel Subsurface Utilities

The Segment 12 Project Corridor was surveyed for the presence of existing underground utilities to be crossed or run parallel to, and the results of this survey are included on the plans and profile drawing in Appendix C and Table 13-1.

Owners of CI were consulted as described in Table 13-1 and documented in Appendix R.

Whether CI is privately or publicly owned, standards for "Good Engineering Practices" will be followed and levels of investigative Subsurface Utility Engineering (SUE) efforts performed per ASCE 38-02 and as set forth in 16 NYCRR Part 753, entitled "Protection of Underground Facilities." The basis of design for paralleling or crossing any CI by the proposed duct bank will be used throughout the entire alignment, unless otherwise revised based on:

1) CI owner specific requirements
2) Site conditions
3) Utility condition
4) Material compatibilities.

In general, and as shown on Typical Separation Details presented on Sheets C-901, the horizontal and vertical separation standards used within the proposed design is 5′ (H) and 2′ (V). To date, no additional guidelines have been received for Segment 12. The established process and continued communications with CI owners leave the discussion open for possible additional crossing guidelines to be provided and included within the developed Plan and Profile Drawings. Separations proposed outside these standards will be highlighted on the Plans (Appendix C) and conditions warranting the variance will be documented.

At least 30 days prior to construction, CI owners will be contacted and will be given all reasonable opportunity to be present during excavation and construction (BMP Document 10.3.2). The CI owners will identify and mark their facilities in the field. The Certificate Holders' Construction Contractor will join "Dig

Safely New York" and DigNet and will coordinate with them for any underground construction work (BMP Document Section 10.0).

The following specifications will apply where the cable will parallel to an underground electric line ROW (BMP Document Section 10.3.2):

1) In situations where Segment 12 will parallel an underground electric line ROW, the Certificate Holders will contact the owner or operator of the underground utility to determine appropriate safety precautions and minimum clearance requirements.
2) Owners/operators of other underground utilities in the area will be consulted and notified no less than 30 days prior to the start of construction.

13.3.4 Underwater Utility Crossings

There will be no underwater construction required during the upland segment of the Project, and therefore no underwater utilities will be crossed.

13.4 CULVERTS

A total of 116 culverts occur within or adjacent to Segment 12, as identified in Appendix R and as shown on the Plan and Profile Drawings (Appendix C). The Certificate Holders shall be responsible for checking all culverts and assuring that they are not crushed or blocked during construction and restoration of the Facility and, if a culvert is blocked or crushed, taking immediate steps to replace or repair the culvert in accordance with applicable state or local standards (CC73). Section 4.12 details requirements for culvert replacement.

14.0 CLEANUP AND RESTORATION

Timely cleanup and restoration will assist in minimizing potential environmental impacts associated with the Project. Procedures for cleanup and restoration are described in the following sections (BMP Document Section 11.0). Within 10 days of the completion of final restoration activities, the Certificate Holders will notify the PSC Secretary that all restoration has been completed in compliance with the Certificate and the Order(s) approving this EM&CP (CC48).

14.1 CLEANUP STANDARDS AND PRACTICES

In accordance with the BMP Document, clean-up, restoration, and revegetation procedures will be ongoing during construction as each Segment is completed. During construction, road and construction ROWs will be kept free of debris and discarded material to the greatest extent possible. As construction continues, each Segment of the ROW will be thoroughly cleaned after construction is completed on that section. Vegetation clearing and disposal methods are summarized in Section 8.0 of this EM&CP as well as indicated on the Plan & Profile Drawings in Appendix C. All cleared vegetation will be disposed of in accordance with the appropriate disposal techniques described in Section 8.4 (BMP Document Section 11.1).

At the end of all construction, the construction and road ROWs and respective work areas will be thoroughly cleared of debris such as nuts, bolts, spikes, wire, pieces of steel, and other assorted items (CC 88). All man-made debris including piping, fencing, wiring, and any other materials used during construction, will be disposed of at an approved disposal site in compliance with all appropriate environmental regulations. No man-made debris will be burned or buried, and all trucks leaving the construction area will be loaded and covered in accordance with applicable regulations as needed (BMP Document, Section 11.1).

14.2 RESTORATION AND PLANTING

The final stage of construction will consist of restoring the ROW to its original condition and character to the extent practicable, unless doing so would interfere with the safe or reliable operation and maintenance of the Project. Restoration activities may vary with the specific area to be restored but will consist predominantly of restoring topography to original gradients and reseeding excavated areas over the trench as identified herein (BMP Document, Section 11.2).

14.2.1 Restoration in Non-Agricultural and Non-Urban/Residential Areas

14.2.1.1 Grading

Upon completion of the installation of the overland transmission cable, the surface of the ROW disturbed by construction activities will be graded to match the original topographic contours and to be compatible

with surrounding drainage patterns, except at those locations where permanent changes in drainage will be required to prevent erosion that could lead to possible exposure of the cable. Where the trench areas have settled below ground level, it may be necessary to import topsoil to return an area to grade. HDD entry pits will be backfilled, and the disturbed ground surface will be similarly graded (BMP Document Section 11.2.1.1).

14.2.1.2 Lime Application

Lime will be applied to the soil surface where necessary to achieve conditions favorable for seed establishment and development. Lime will be applied under the direction and supervision of the Environmental Inspector (BMP Document Section 11.2.1.2).

14.2.1.3 Fertilizing

In areas where construction has affected the soil nutrient levels, fertilizer will be applied to restore soil productivity. Fertilizer will be applied under the direction and supervision of the Environmental Inspector (BMP Document Section 11.2.1.3).

14.2.1.4 Aerating and Raking

Soil compaction in construction areas frequently occurs as a result of the movement of heavy equipment over soil. Soil compaction in the right-of-way is expected to be minimal because most vehicles and equipment will either be mounted on the track or operating from existing access roads or fill associated with the railroad embankment. However, if compaction occurs, soils will be aerated. Aeration in grassy areas will be accomplished using a mechanical power aerator. Following use of the aerator, the area will be thoroughly raked. If soil is compacted below trees, the area below the tree canopy will be aerated by probing holes in the soil, which then will be backfilled with clean sand (BMP Document Section 11.2.1.4).

14.2.1.5 Seeding and Planting

Seeding operations will commence only after an acceptable seedbed has been established, as described above. Seed will be applied by hand, cyclone seeder, drill, or culti-packer-type seeder at a depth of 0.25 to 0.5 inch. The seedbed will be firmed following seeding operation with a roller or light drag, except where culti-packer-type seeders or hydroseeders are used. The entire seeded area will be watered with a fine spray until a uniform moisture depth of 1 inch has been obtained. Mulching and anchoring of the mulch may be necessary in some areas unless a hydromulch/seed slurry is used. On steep slopes, jute net will be used to provide stabilization. Fertilizer will be added at the appropriate rates after seed is applied. Seeding will take place under the supervision of the Environmental Inspector (BMP Document Section 11.1.2.5).

The seed mixture and rate of application will depend on the soil type, land use, available moisture, and season at the time of application. Seedbed preparation (final tillage, fertilizing, liming) and seeding will follow recommendations as contained in New York State Farmland: Seeding, Fertilizing and Lime Recommendations for Gas Pipeline ROW Restoration in Farmlands (revised 4-27-2011) if applicable or as specified by the landowner. All seed mixes will be free of invasive species. All seed bag tags will be provided to the Environmental Inspector as either original tags or scanned copies. The seed mixtures will follow the technical specifications included on the Plan and Profile Drawings in Appendix C for uplands and wetland buffer zones. Seeded areas will be monitored following restoration until a minimum vegetative cover of 80% is achieved (BMP Document Section 11.1.2.5).

Where tree or shrub plantings are prescribed in the EM&CP, a post construction survival survey will be performed one year after the plantings. If any tree or shrub has not survived or is in poor health, the tree/shrub will be replaced (BMP Document Section 11.1.2.5).

Vegetation throughout the temporary ROW will be cut to ground level and root systems will remain intact to allow for resprouting following construction, unless resprouting would interfere with the safe and reliable operation of the Project.

All trees over two inches in diameter at Breast Height or shrubs over four feet in height damaged or destroyed by activities during construction, operation, or maintenance, associated urban or residential, will be replaced within the following year by the Certificate Holders with the equivalent type of trees or shrubs except if (CC 66):

a) equivalent type replacement trees or shrubs would interfere with the proper clearing, construction, operation, or maintenance of the Project or would be inconsistent with State-invasive species policy; or
b) replacement would be contrary to sound ROW management practices, or to any approved long-range ROW management plan applicable to the Project or adjoining ROW; or
c) the owner of land where the damaged or destroyed trees or shrubs were located (or other recorded easement or license holders with the right to control replacement) declines replacement.

14.2.2 Restoration in Urban/Residential Areas

Construction in urban or residential areas may require a variety of restoration activities. Aboveground and underground structures (e.g., those related to water and gas services), street pavements, curbs, sidewalks, and other features may require repair or replacement as a result of construction (BMP Document Section 11.2.2, CC 74).

Curbs, sidewalks, and streets damaged by construction will be restored to pre-existing condition or better. The Certificate Holders will consult, where applicable, the municipal road or highway department and/or the Regional Office or County Engineer of the NYSDOT in order to identify and incorporate applicable specifications for curb, sidewalk, or street restoration (BMP Document Section 11.2.2). Guide Rails will be removed and replaced in accordance with NYSDOT Standard Sheet 606-01.

Except where replacement would inhibit or impair the safe operation of the cables, shade trees and ornamental shrubs disturbed or damaged by construction will be repaired or replaced, following construction. All vegetation replaced will have a minimum two-year survival guarantee. Limbs damaged by construction activities will be pruned to arboricultural specifications. Root loss or damage due to construction or construction-related soil compaction will be addressed by a trained arborist, and any prescribed treatments will be followed (BMP Document Section 11.2.2).

Groundcover will be restored in areas such as yards and lawns. Restoration work will include the spreading of topsoil, planting of native grass mixtures, and replacement of any damaged extant vegetation, if necessary (BMP Document Section 11.2.2).

14.2.3 Restoration of Railway Ballast

There is no construction proposed within railroad ROWs in Segment 12. Therefore, the BMPs associated with restoration of the railway ballast do not apply.

14.2.4 Restoration of Recreational Areas

Following construction, the Certificate Holders will reseed the construction area within recreational areas such as the canals using the procedures and methods specified in the sections above where needed. If necessary, additional revegetation and tree planting may be performed depending on the impact of construction. Recreational areas are described in Section 7.2.

14.3 LANDSCAPING

The Certificate Holders will, on completion of construction of all segments of the Project, provide an assessment of the need for landscape improvements (CC 89a). If deemed necessary, these improvements may include vegetation planting, earthwork, or installed features to screen or landscape with respect to road crossings, residential areas, parks, and highways. Additionally, if deemed necessary, the Certificate Holders will prepare plans for any visual mitigation such as removal, rearrangement, and supplementation of existing landscape improvements or planting (CC 89b). If needed, the Certificate Holders will consult with DPS Staff on the content and execution of their landscape improvement assessment, resultant landscaping plan specifications, and materials list (CC 89c). The Certificate Holders will assure the reduction or

elimination of net storm water runoff within or immediately adjacent to the Construction Zone and any contribution to sources of non-point pollution resulting from the finished condition (CC 89d). If deemed necessary, the assessment and plans for landscaping improvements will be submitted to DPS staff within one year of the date the Project is placed in service (CC 89e).

14.3.1 Plant Inspection, Guarantee and Maintenance

Vegetation restoration also includes the maintenance of plantings for specified time periods and the replacement of unsuccessful plantings. Prior to planting, the Environmental Inspector will inspect all plants in containers. Plantings will be performed by a qualified landscape or nursery contractor. The Environmental Inspector will also inspect all plants after competition of planting to ensure proper planting procedures and the correct plant species were used. Additionally, the Environmental Inspector will conduct a final inspection of all revegetated areas after the end of the monitoring period to ensure final stabilization. All vegetation replaced will have a minimum two -year survival guarantee (BMP Document Section 11.2.2). Where tree or shrub plantings are needed, a post construction survival survey will be performed one year after the plantings. If any tree or shrub has not survived or is in poor health, the tree/shrub will be replaced (BMP Document Section 11.2.1.5).

SWPPP inspections will be performed by the Environmental Inspector on a weekly basis until all disturbed areas have achieved the 80% revegetation required for final restoration. Following final restoration, erosion and sediment control measures will be removed from the site and disposed of appropriately.

14.4 RESTORATION OF WETLANDS AND WATERBODIES

There are no impacts to wetlands or waterbodies within Segment 12; therefore, the CCs and BMPs related to the restoration of waterbodies do not apply to the construction of Segment 12.

14.5 CLEANUP AND RESTORATION OF AGRICULTURAL LANDS

There are no agricultural lands within Segment 12; therefore, the CCs and BMPs related to the restoration of agricultural lands do not apply to the construction of Segment 12.