Appendix 8-F: Supplemental Cultural Resources Management Plan

CONTAINS REDACTED INFORMATION IN CASE 10-T-0139

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Supplemental Cultural Resources Management Plan (SCRMP)

Lake Champlain Marine Segment Cable Installation ("Segment 18B")

Case Number 10-T-0139

(OPRHP# 09PR03910)

New York State waters in Lake Champlain from the Village of Rouses Point, Town of Champlain, Clinton County, New York to the Hamlet of Putnam Station, Town of Putnam, Washington County, New York

March 2024

Champlain Hudson Power Express HVDC Transmission Line Project

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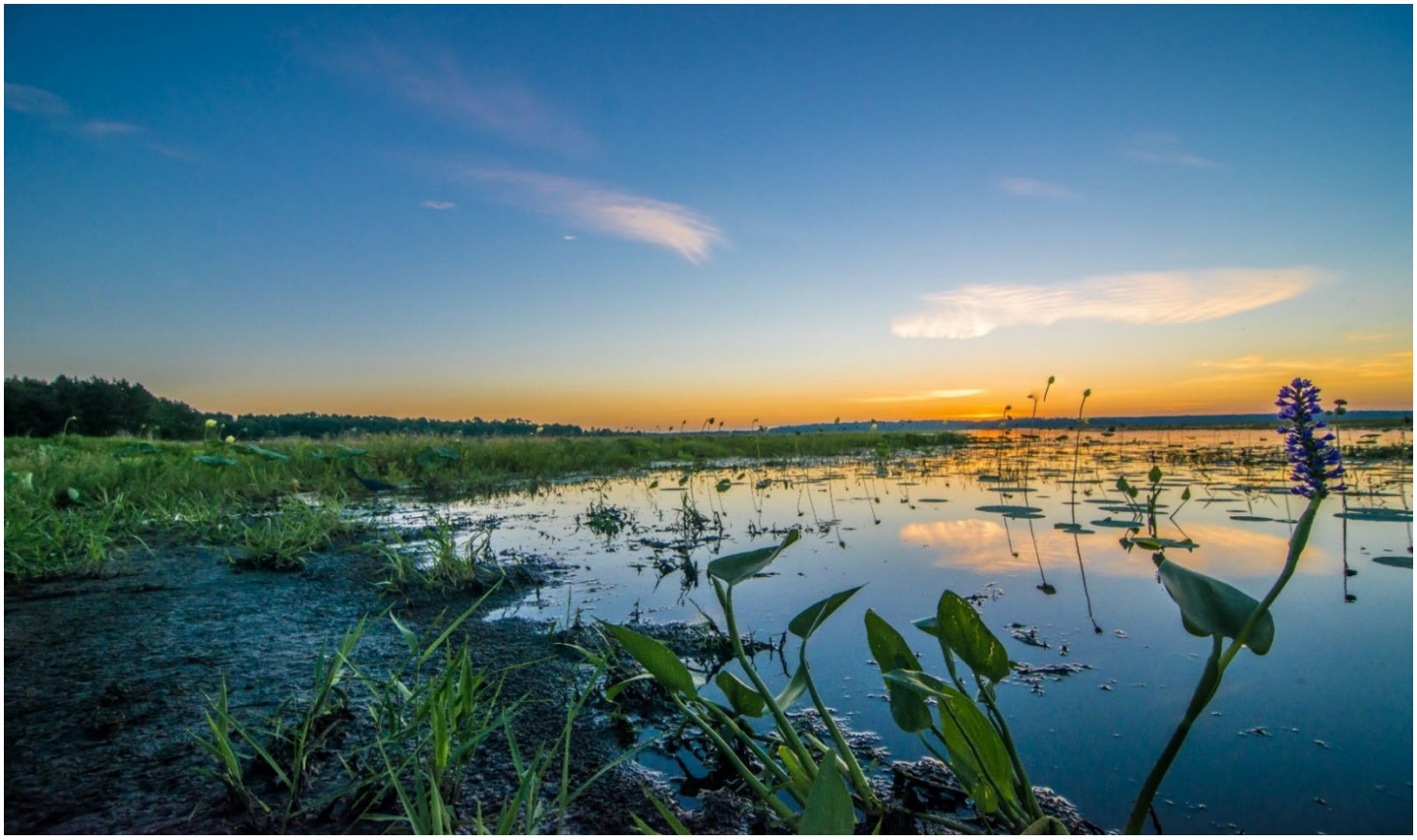

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MANAGEMENT SUMMARY

SHPO Number: 09PR03910

Involved Agencies: U.S. Department of Energy, U.S. Army Corps of Engineers (USACE), New York State Historic Preservation Office (NYSHPO)

Phase of Survey: Supplemental Cultural Resources Management Plan (SCRMP)

Location of Project: 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. This SCRMP covers the Lake Champlain Marine Segment ("Segment 18B") of the CHPE Project, which is approximately 96.5 statute miles long and begins at the US-Canadian border in the Village of Rouses Point, Town of Champlain, Clinton County, New York and ends in the Hamlet of Putnam Station, Town of Putnam, Washington County, New York.

Objective: The purpose of this Supplemental Cultural Resources Management Plan is to update previous versions of the Cultural Resources Management Plan (CRMP) with additional research applicable to these Segments that has been completed since the original CRMP drafted by TRC in 2015 and finalized in 2021.

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Date: March 2024

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APPENDICES

LIST OF ACRONYMS

APE	Area of Potential Effect
AWOIS	Automated Wrecks and Obstructions Information System
BMP	Best Management Practices
CA	Consulting Archaeologist
CC	Certificate Conditions
Certificate	Certificate of Environmental Compatibility and Public Need Issued
Certificate Order	Certificate of Environmental Compatibility and Public Need Order
Certificate Holders	CHPE, LLC and CHPE Properties, Inc
CHPE, LLC	Champlain Hudson Power Express, LLC
CHPE Project	Champlain Hudson Power Express Project
CRMP	Cultural Resources Management Plan
DOE	Department of Energy
DPS	Department of Public Service
EM&CP	Environmental Management and Construction Plan
GIS	Geographic Information System
Hartgen	Hartgen Archeological Associates, Inc.
HDD	horizontal directional drilling
HRG	high resolution geophysical
HVDC	high-voltage direct current
LCMM	Lake Champlain Maritime Museum
MRS	Marine Route Survey
MW	megawatt
NOAA	National Oceanic and Atmospheric Administration
NRHP	National Register of Historic Places
NRE	National Register of Historic Place Eligible
NRL	National Register of Historic Place Listed
NYAC	New York Archaeological Council
NYS CRIS	New York State Cultural Resource Information System
NYDEC	New York Department of Environmental Conservation
NYSRHP	New York State Register of Historic Places
NYSHPO	New York State Historic Preservation Officer
NYSM	New State York Museum
OPRHP	Office of Parks, Recreation and Historic Preservation
OSI	Ocean Surveys, Inc.
PPO	Project Preservation Officer
PSC or Commission	Public Service Commission
PSL	Public Service Law
TRC	TRC Environmental Corporation
USACE	United States Army Corps of Engineers

1.0 Introduction and Objectives

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, Canada to Queens, New York (hereafter referred to as the CHPE Project). It will bring 1,250 megawatts (MW) of renewable energy into New York by the year 2025 to replace the use of fossil fuels and reduce carbon emissions.

1.1 Introduction

TRC Environmental Corporation (TRC) has been retained to create a Supplemental Cultural Resources Management Plan (SCRMP) for the Lake Champlain underwater portions ("Segment 18B") of the proposed CHPE Project.

The Project has received approvals by the U.S. Department of Energy (DOE) and the U.S. Army Corps of Engineers (USACE), with consultation from the New York State Historic Preservation Office (NYSHPO). The CHPE Project began the permitting process on March 30, 2010, when Champlain Hudson Power Express, Inc. filed an Application for a Certificate of Environmental Compatibility and Public Need with the New York State Public Service Commission (PSC or Commission) pursuant to Article VII of the New York Public Service Law (PSL) to construct and operate the electric transmission facility known as the CHPE Project (PSC Case 10-T-0139). The CHPE Project includes two five-inch diameter cables to be installed underwater or underground along the approximately 339-mile-long route, with aboveground facilities to include a voltage source converter station located in Astoria, Queens, New York. An Order granting the Certificate of Environmental Compatibility and Public Need (Certificate Order) was issued by the Commission on April 18, 2013 (the Certificate).

In August 2020, CHPE Hudson Power Express, 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. (collectively CHPE and Certificate Holders). The Certificate was amended nine times (March 20, 2020, August 13, 2020, September 21, 2020, January 26, 2021, May 14, 2021, February 17, 2022, March 16, 2022, December 15, 2022, and October 12, 2023)[1] to reflect revisions in the alignment and other Certificate Conditions (CC). The Article VII review and certification process included the development of numerous documents which identified natural resources within the CHPE Project area and best management practices (BMPs) to minimize impacts to those natural resources which might otherwise result from the

[1] An additional amendment, filed March 30, 2023 ("Catskill Reroute Petition"), was pending as of the time of this submission. To the extent this amendment is granted, the final EM&CP for this segment will be updated to reflect any revised Certificate Conditions resulting from that Amendment, though the requested amendment pertains primarily to overland routing.

construction or operation of the CHPE Project. Certificate Condition 6 permits the Certificate Holders to develop the CHPE Project facilities in segments to facilitate construction sequencing and scheduling. Each segment, or grouping of segments, may be the subject of an Environmental Management and Construction Plan (EM&CP) filed with the Commission for review and approval independent of other EM&CP's.

TRC created a draft comprehensive Cultural Resource Management Plan in 2015, finalized in 2021 to include three additional reports. This management plan is referred to throughout the current document as the original CRMP (Appendix A). In the event of a conflict between the 2024 SCRMP document and the original CRMP, the original CRMP will prevail.

The 2015 plan was enacted to comply with Section 106 of the National Historic Preservation Act and will be reviewed by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) as well as the aforementioned federal agencies. This plan was established according to the *New York Archaeological Council's Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* (1994), which are endorsed by OPRHP. Appendix B presents NYSHPO's Updated Human Remains Discovery Protocol (January 2021).

The *Programmatic Agreement Among The U.S. Department of Energy, And The New York State Historic Preservation Officer for Managing Historic Properties That May Be Affected By Authorizing The Construction, Operation, Connection And Maintenance Of The Champlain Hudson Power Express HVDC Transmission Line Project* (Programmatic Agreement), executed in 2021, stipulates completion of a CRMP to create procedures for the consideration and management of historic properties within the Project area.

Stipulation IV(B) within 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 the identification of historic properties (36 CFR Part 800.4), assessment of adverse effects (36 CFR Part 800.5), and resolution of adverse effects (36 CFR Part 800.6).

This SCRMP has been developed in response to Programmatic Agreement Stipulation IV(B) and Stipulation II(C)(8-11 and 19) and it builds upon the previously completed CRMP and all stipulations of the CRMP (TRC 2021) remain applicable.

1.2 Supplemental CRMP Objectives

This SCRMP covers the underwater Lake Champlain Marine Segment ("Segment 18B") of the CHPE Project. This segment is approximately 96.5 statute miles long and begins at the US-Canadian border in the Village of Rouses Point, Town of Champlain, Clinton County, New York and ends in the Hamlet of Putnam Station, Town of Putnam, Washington County, New York.

The goal of this SCRMP is to provide a framework in which potential impacts to relevant historical properties and archaeological sites (determined to be eligible for or listed in the National Register of Historic Places [NRHP]) known to exist or may be discovered are to be managed during construction. This management plan will also create a comprehensive framework for identifying and undertaking any additional archaeological work that may be required prior to and during the construction of the Project.

2.0 Project Information

The area of potential effects (APE) includes those portions of the Project that will be directly altered by the proposed undertaking. 36 CFR § 800.16(d) defines the APE as the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. Project activities, both temporary and permanent, have the potential to impact cultural resources during the construction and operation phases of the Project.

The overall APE, for the entire CHPE Project, encompasses 339 linear miles of transmission line. Installation of this transmission line will occur primarily beneath the ground within roadway and railroad right of way, as well as the underwater segments located within Lake Champlain and the Hudson River.

Several archaeological reports by TRC and Hartgen examined and detailed the sensitivity and potential of the APE to contain NRHP eligible archaeological resources along the terrestrial portion of the APE. The Lake Champlain Maritime Museum (LCMM) examined and detailed the potential of the underwater portion of the APE to contain NRHP eligible archaeological resources. These resources have been utilized in the creation of the original CRMP and the SCRMPs, including this one. The following is a list of reports completed and used to create the SCRMP.

- Hartgen. 2010a. Pre-Phase IA Archaeological Screening: Champlain Hudson Power Express.
- Hartgen. 2010b. Phase IA Literature Review and Archaeological Sensitivity Assessment: Champlain-Hudson Power Express.
- Hartgen. 2012. Phase IB Archaeological Field Reconnaissance and Phase II Archaeological Site Evaluation: Champlain Hudson Power Express, Canadian Pacific Railway Segment.
- Hartgen. 2013a. GIS Analysis: Archeological Sites within APE Archeological Sites Intersected by a 50-ft wide Construction Corridor Along the November 2012 CHPE/TDI Centerline.
- Hartgen. 2013b. GIS Analysis NRHP Properties within APE National Register of Historic Places Eligible (NRE) and Listed (NRL) Properties Intersected by a 50-ft wide Construction Corridor along the November 2012 CHPE/TDI Centerline.
- Hartgen. 2013c. GIS Analysis Underwater Resources within APE Underwater Anomalies and Sites within Lake Champlain and the Hudson River Intersected by a 50-ft wide Construction Corridor along the November 2012 CHPE/TDI Centerline.
- TRC. 2020a. Phase IA Archeological Assessment of Champlain-Hudson Alternative Routes, New York.
- TRC. 2020b. Phase IA Archeological Assessment of Champlain Hudson Astoria Converter Station and Astoria Preferred Alternative Route, Boroughs of Queens, New York.

- TRC. 2020c. Phase IA Archeological Assessment of Champlain-Hudson Power Express Project, Harlem Rail Yard Preferred Alternative, Boroughs of Queens, New York.
- TRC. 2021. Phase IA Archaeological Assessment of the Champlain-Hudson New Scotland Converter Station, New Scotland, Albany County, New York.
- TRC. 2022. Phase IA Archaeological Assessment of the Putnam Station Laydown Area for the Champlain Hudson Power Express Project, Putnam, Washington County, New York.
- TRC. 2022. Updated Information on the Champlain Hudson Power Express (CHPE) Project, Cementon HDD in the Town of Cementon, Greene County, New York.
- TRC. 2022. Updated Information on the Champlain Hudson Power Express (CHPE) Project, Congers HDD in the Town of Congers, Rockland County, New York.
- LCMM. 2023 (revised 2024). Final Report for the Underwater Cultural Resource Review of the Champlain Hudson Power Express, Lake Champlain Segment Investigations.
- LCMM. 2023 (Revised 2024). Final Report for the Underwater Cultural Resource Review of the Champlain Hudson Power Express, Hudson River Segment Investigations.

The APE that is relevant to this Supplemental CRMP is the Lake Champlain Marine Segment ("Segment 18B").

2.1 Description of the Project

The overall APE includes portions of the Project that will be directly altered by the proposed undertaking. The overall APE encompasses 339 linear miles; the width of the APE varies. For the overall cable route, the Project is divided into 14 Packages with their associated Environmental Management and Construction Plan (EM&CP) submittals (Table 1). The current SCRMP focuses on Segment 18B, the Lake Champlain Marine Segment, only.

This SCRMP further considers the currently proposed route and proposed deviations in relation to recommendations for additional archaeological mitigation measures. As such, more fine-grained recommendations relative to specific cultural resource locations are provided below.

Table 1. CHPE Packages, Segments, Locations and Dates.

EM&CP Construction Segment	EM&CP Design Package	Location Description	Segment Length (miles)	EM&CP Filings with DPS	PSC Approval Date	Anticipated Start of Construction
Overland Segments						
1, 2	1A/1B	Putnam to Dresden Dresden to Whitehall	17.6	April 15, 2022	October 13, 2022	December 2022
3	1C/2	Whitehall to Fort Ann Fort Ann to Kingsbury	20.8	December 23, 2022	May 18, 2023	June 2023
8	5A	Rotterdam to Selkirk	17.0	December 21, 2022	June 26.2023	September 2023
9	5B	Selkirk Bypass	5.3	December 21, 2022	June 26.2023	January 2024

Table 1. CHPE Packages, Segments, Locations and Dates.

EM&CP Construction Segment	EM&CP Design Package	Location Description	Segment Length (miles)	EM&CP Filings with DPS	PSC Approval Date	Anticipated Start of Construction
4, 5	3	Kingsbury to Milton	26.5	April 24, 2023	August 18, 2023	October 2023
10	6	Ravena to Catskill	20.9	October 2, 2023	December 18, 2023	January 2024
13, 14, 15	8	Bronx to Queens	2.1	August 11, 2023	October 13, 2023	January 2024
6	4A	Milton to Ballston	10.2	August 4, 2023	September 14, 2023	September2023
7	4B	Ballston to Schenectady/Rotterdam	9.6	August 4, 2023	September 14, 2023	September 2023
11	7A	Catskill to Germantown	8.6	March 30, 2023	August 18, 2023	January 2024
12	7B	Stony Point to Harverstraw	7.6	April 28, 2023	August 18, 2023	January 2024
Laydown Yards	3, 5B, 6	Fort Edward, Bethlehem, Coxsackie	N/A	November 11, 2022	February 21, 2023	March 2023
Marine Segments						
16	9	Transitional HDD (Stony Point)	N/A	September 29, 2022	March 20, 2023	June 2023
17	10	3 Transitional HDDs (Putnam, Catskill, Congers)	N/A	December 14, 2022	April 24, 2023	June 2023
18A	11A	Lake Champlain (Pre-Lay Mattressing)	96.8	April 4, 2023	July 20, 2023	April 2024
18B	11B	Lake Champlain (Cable Installation)	96.8	January 2024	TBD	2024
19A	12A	Hudson River (Pre-Lay Mattressing)	89.1	August 4, 2023	October 13, 2023	March 2024
19B	12B	Hudson River (Cable Installation)	89.1	March 2024	TBD	2024
20	13	Harlem River	6.3	TBD	TBD	2025
21	N/A	Astoria Annex/AC Interconnection	0.3	11/2024	TBD	April 2025
22	22	Converter Station, Astoria Complex, (Queens)	N/A	January 31, 2023	May 18, 2023	June 2023
23	16	Astoria Rainey Cable HVAC System, (Queens)	3.5	December February2023	TBD	March 2024

Changes in the APE, including those necessary to avoid known historic and archaeological resources, may be required to accommodate project implementation. Changes to the APE will follow methodology outlined in the CRMP (TRC 2021). The CRMP states: *If the corridor is changed or if a construction zone wider than 55 feet (terrestrial) or 50 feet (in-water) is required to build the Project, then the APE will be adjusted accordingly. All additional efforts to identify,*

assess, and manage cultural resources shall use the same guidance as that stipulated in the CRMP. It shall be the responsibility of the PPO and his/her designee to work with the appropriately trained archaeologist to ensure that survey and assessment of new APE construction areas is completed before construction takes place (TRC 2021). Changes in the APE and associated survey and reporting will be provided to Signatories of the Programmatic Agreement in conjunction with annual reporting requirements (Section 3.6 Reporting Requirements).

2.2 Phase I Archaeological Assessment of Lake Champlain Marine Segment Methodologies and Objectives

The final Phase IA archaeological assessment report built on previous work completed by Lake Champlain Maritime Museum (LCMM) which began 2009 continued in 2010 and 2011 and this work resumed in earnest with TRC in March 2023 with the primary goal of identifying potential underwater cultural resources along the Lake Champlain portion of the CHPE submarine cable transmission line route. The Marine Route Survey (MRS) investigation of the route was completed by Ocean Surveys, Inc. (OSI) along an approximate 96-statute mile (154 kilometer) path in Lake Champlain from the US-Canadian border at Rouses Point, Clinton County, New York in to Putnam Station, Washington County, New York. The MRS was conducted during the late summer and fall of 2022 to support the construction planning of the submarine power cable project, which includes both the Lake Champlain Marine Segment cable installation Segment 18B and Lake Champlain Marine Segment pre-lay mattressing Segment 18A.

The high resolution geophysical (HRG) survey data collection during the MRS focused on obtaining multi-sensor geophysical data. This data includes multibeam depth soundings, side scan sonar imagery, magnetometer, and subbottom profiling data in the MRS corridor. The width of the surveyed corridor is 300-feet (91 meters) except for the corridor located at the Putnam Station, New York landfall and in multiple reroute areas where the width was expanded due to obstructions or slopes to be avoided. Within the base MRS corridor, HRG data was acquired along five primary survey track lines oriented parallel to the route and spaced 75 feet (22 meters) apart, supplemented by tie lines (oriented perpendicular to the route) and multibeam fill lines (between the primary lines as needed) to achieve full bottom multibeam coverage in shallow water.

LCMM was provided with the processed HRG data from OSI along with their report for their MRS in Lake Champlain a series of pre-lay utility locations by TRC as GIS shp. files for LCMM to analyze and interpret. The initial set of pre-lay mattress utility locations represented known and unknown utilities on the bottom of Lake Champlain. The initial set was analyzed, and the results interpreted in the Memo report “Initial Review and Analysis of Potential Underwater Cultural Resources Along the Lake Champlain Segment of the Champlain – Hudson Power Express 2022 Lake Champlain Marine Survey Route.”

As the locational data of the utility locations were refined by CHPE, newer data sets of the pre-lay utility locations were provided to LCMM for review, analysis, and interpretation. A second set of data was analyzed and interpreted into another Memo submitted to TRC on April 11, 2023. Following the second set of data was a third and final set of revised pre-lay utility locations. LCMM conducted analysis and interpreted the results in a Memo submitted to TRC on September 21, 2023, for their final review.

An analysis and interpretation of potential underwater cultural resources was conducted for the overall submarine transmission line from its origin at the US-Canadian border in Clinton County, New York to Putnam Station, Washington County, New York. The data analysis was based on the Permitted Route and the Current Route of the Lake Champlain Marine Segment for the CHPE submarine power cable transmission line. The results of the data of the side scan sonar anomaly and the magnetometer anomaly data sets from OSI were uploaded to GIS and analyzed in comparison to the LCMM Lake Survey Data reports from 1996, 1997-1998, 1999-2000, 2001-2002, and 2003-2004 to determine the presence and absence of underwater cultural resources along the MRS. Additionally, the side scan sonar imagery, the multibeam depth soundings, and subbottom profiling data sets from OSI were reviewed in tandem with the side scan sonar and magnetometer anomalies.

The data analysis consisted of reviewing the work done for the Memo submitted on September 21, 2023, which included three significant underwater cultural resources found in New York state waters along the MRS. These resources include the remains of the Rouses Point Railroad Bridge, the Great Bridge at Fort Ticonderoga, and the Larrabees Point – Willow Point Railroad Trestle. GIS data generated from the LCMM Lake Survey Data reports from 1996, 1997-1998, 1999-2000, 2001-2002, and 2003-2004 listed these resources along with the Old Route 2 Toll Bridge. Wreck JJ, Wreck KK: the remains of what may potentially be the wreck of the Ella E. Bagley, Wreck YYY, Wreck G4: Railroad Drawboat, Wreck K7: Wreck B of the Mount Independence Survey, Wreck F4, Wreck P4, Wreck J4, Wreck K4, Wreck VT-AD-729, Wreck I4, Wreck P7, and Wreck Q7.

The identification and location of each resource was based off its proximity to both the Lake Champlain Marine Segment Current Route .shp file and the Lake Champlain Marine Segment Permitted Route .shp file provided by TRC. Any underwater cultural resources located in the Area of Potential Effect (APE) of the routes of the MRS were flagged for review, analysis, and interpretation. Additionally, any underwater cultural resources located within 500 feet (152 meters) buffer were included as part of the review process for resources outside of the MRS APE. Based on the available internal GIS data from LCMM, each potential resource was reviewed and analyzed based on its type (i.e., shipwreck, bridge remains, piers). Data for the resources includes wreck designations in letter and numeric form, site numbers assigned New York State Museum (NYSM) and the Vermont Division of Historic Preservation (VTDHP), general geographic locations, longitude and latitude, distances from the Lake Champlain Marine Segment Current Route and the Lake Champlain Marine Segment Permitted Route, along with notes from the LCMM Lake Survey

Reports were reviewed details of this review are provided in the Analysis section of the final Memo (LCMM 2024 in Appendix C).

Additional data provided from OSI was utilized in the review and analysis of the underwater cultural resources along the MRS. The data includes the survey vessel track lines, the sonar contacts, and the magnetometer targets from the HRG survey conducted by OSI in the summer of 2022. The additional .shp files are as follows:

- 22ES029-LC-Vessel-Tracklines;
- Lake Champlain OSI 2022 Side Scan Sonar Targets;
- 22ES029-LC-Mag-Targets;
- Geotiffs of Side Scan Sonar data; and
- Geotiffs of Multibeam bathymetry.

Several other data sets were reviewed to aid in determining the presence or absence of underwater cultural resources. The data sets include the National Oceanic Atmospheric Administration's (NOAA) Automated Wreck and Obstruction Information System Database, data from the LCMM Lake Survey Data reports from 1996, 1997-1998, 1999-2000, 2001-2002, and 2003-2004, results from work conducted by the Lake Champlain Maritime Museum for Transmission Developers, Inc. in 2010-2011, and the New York State Cultural Resource Information System.

2.2.1 Additional Studies

Additional studies were conducted at Rouses Point. The methodology used for the Rouses Point Dive Operations is also included in LCMM's final report (2024) in Appendix C. The goal of the operation was to characterize the historic significance or insignificance of the numerous features identified during survey activities located in the narrow opening of the Rouse's Point Railroad Trestle and to determine if there was a path through which the transmission cable could pass without impacting any historic remains identified. LCMM worked from the detailed data provided in the OSI Survey Report (2022) and established a list of targets to be further characterized and assessed for their historical significance. Working from this list of features the team determined the number and sequence of dives needed to properly assess these targets. The target list was subdivided into 3 distinct "tasks" including:

1. Characterize targets in the center of the channel;
2. Characterize targets in the eastern portion of the channel;
3. Characterize targets in the western portion of the channel.

Each of these targets was assessed through direct diver observation by LCMM archaeologists. When deemed necessary, measurements of feature components were taken using fiberglass tape measures and clipboards fitted with mylar drafting film and mechanical pencils. Video

documentation of the features examined was captured with a GoPro Hero 9 camera outfitted with underwater housing and two 12,000 lumen Big Blue lights.

The work was accomplished over the course of 9 dives with a total bottom time of 2-hours and 19-minutes. This work was aided by decent underwater visibility in the 10-15ft range (3-4.5-meter), which allowed for a thorough assessment of each feature examined.

2.3 Summary and Recommendations

LCMM's Phase IA report (2024) details the findings on underwater cultural resources present in the APE and outside of the APE, along with the abbreviated results from the Memo submitted on September 21, 2023 (see Appendix C). The abbreviated results include detailed information for the identified underwater cultural resources within the utility crossing pre-lay mattress locations. Supporting data is provided for both the side scan sonar and magnetometer targets in the Excel files submitted to TRC on September 21, 2023. The data includes locational information for each type of anomaly, descriptive data on each anomaly, anomaly analysis, a significance assessment of each anomaly, along with additional information on their locations.

In summary, underwater cultural resources are present in several current pre-lay utility crossing areas and within previous pre-lay utility crossing areas. Additionally, several underwater cultural resources are in proximity to the CHPE Lake Champlain Segment Current Route and the CHPE Lake Champlain Segment Permitted Route.

The current pre-lay utility crossing areas consist of the following: [redacted] Several side scan sonar and magnetometer anomalies are associated with the historical archaeological remains of the Old Route 2 Toll Bridge [redacted] and the Rouses Point Railroad Bridge [redacted]. The remains of the old Route 2 toll bridge are potentially significant. However, it is uncertain if they are considered eligible to the NRHP as a historic district. The Rouses Point Railroad Trestle is significant and considered eligible to the NRHP as a historic district.

Significant underwater cultural resources are present south of the current pre-lay utility crossing areas [redacted]. These resources are associated with the historical archaeological remains of the Larrabees Point – Willow Point Railroad Trestle. Several side scan sonar and magnetometer anomalies were found in the previous pre-lay utility crossing area [redacted] associated with the railroad trestle. The Larrabees Point – Willow Point Railroad Trestle is significant and considered eligible to the NRHP as part of larger historic district.

The Great Bridge at Fort Ticonderoga and Mount Independence is an archaeologically sensitive and historically significant area located within the APE of the Lake Champlain route corridor of the CHPE submarine power cable transmission line. The most prominent archaeological features are the caissons used in the construction of the bridge, which are associated with several side scan sonar anomalies. As a note, unidentified scatter of other archaeological material is likely

present in the APE and outside of the APE. Other caissons associated with the Great Bridge are located outside of the APE as well. The Great Bridge is listed as a site with the VTDHP (VT-AD-0731) and is eligible for inclusion in the NRHP.

Additional underwater cultural resources are noted in proximity to the Lake Champlain route corridor for the CHPE submarine power cable transmission line. Located just outside of the APE, they include several wrecks located near the CHPE Lake Champlain Segment Current Route and the CHPE Lake Champlain Segment Permitted Route. The wrecks include the following: Wreck JJ, Wreck KK, a wreck that may potentially be the Ella E. Bagley, Wreck YYY, Wreck G4: Railroad Drawboat, Wreck K7, Wreck F4, Wreck P4, Wreck J4, Wreck K4, Wreck VT-AD-729, Wreck I4, Wreck P7, and Wreck Q7. Many of these wrecks are eligible to the NRHP and local state historic preservation offices (NYSHPO and VTDHP) while some have already been assigned site numbers either by NYSM or by the VTDHP. All of these resources are located outside of the Project APE and will be avoided.

Table 2 below summarizes the results and recommendations of the Phase IA report. Additional detail regarding the Phase IA results and recommendations can be found in Appendix C.

Table 2. Lake Champlain Cultural Resource Recommendations

Identified Resource	Location	Approx. Location Relative to CHPE Route	LCMM Finding	LCMM Recommended Action	CHPE Planned Action
Old Route 2 Bridge	[redacted]	Crossing	1 potential resource present	Avoid remains	The cable route has been designed to avoid this cultural resource to the greatest extent feasible. Micro-routing may be performed as needed just prior to or during installation, based on conditions encountered, to further avoid Old Route 2 Bridge remains.
Rouses Point Railroad Bridge (Wreck TT)		Crossing	NRHP eligible; State register eligible	Avoid remains	The cable route has been designed to avoid this cultural resource to the greatest extent feasible. Micro-routing may be performed as needed just prior to or during installation, based on conditions encountered, to further avoid Railroad Bridge remains.
Wreck WW		Approx. 541 feet east of route	NRHP eligible; State register eligible	Avoid remains	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.
Wreck JJ		Approx. 374 feet west of route	NRHP eligible as part of a larger multi-property site	Avoidance	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.
Wreck KK		Approx. 240 feet east of route	Technically NRHP eligible due to age	Avoidance	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.
***Ella E. Bagley* (not confirmed)**		Approx. 195 feet northeast of route	Standard canal boat proximate to route	Avoidance	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.

Identified Resource	Location	Approx. Location Relative to CHPE Route	LCMM Finding	LCMM Recommended Action	CHPE Planned Action
Wreck YYY	[redacted]	Approx. 288 feet east of route	NRHP eligible under Criterion D (Information Potential) and VT register eligible	Avoidance	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.
Larrabees Point – Willow Point Railroad Trestle		Crossing; point approx. 257 feet east of route	Significant resources in the area	Avoidance	The cable route has been designed to avoid this cultural resource to the greatest extent feasible. Micro-routing may be performed as needed just prior to or during installation, based on conditions encountered, to further avoid Railroad Trestle remains. Establish 50-meter (164 FT) vessel and anchor avoidance area.
Wreck G4 (Railroad drawboat)		Approx. 111 feet east of route	Significant resources in the area	Avoidance	Cable route avoids but is within 160 feet of resource; establish 50-meter (164 FT) vessel and anchor avoidance area.
Wreck K7: Wreck B of the Mount Independence Survey		Wreck K7 point approx. 267 feet east-southeast of route; Wreck B point approx. 304 feet east-southeast of route.	Unidentified standard canal boat	Outside of project corridor	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.

Identified Resource	Location	Approx. Location Relative to CHPE Route	LCMM Finding	LCMM Recommended Action	CHPE Planned Action
The Great Bridge at Fort Ticonderoga and Mount Independence	[redacted]	Crossing	NRHP eligible under Criterion D (Information Potential)	Mitigation may be required. Propose metal detection survey is suggested between the two caissons where cable route is planned as part of any mitigation that takes place after installation. If this is impossible, mitigation for the destruction of a portion of this site should include a larger metal detection survey of the bottomlands surrounding the Great Bridge remains. Archaeological monitoring recommended during cable installation	The cable route has been designed to avoid this cultural resource to the greatest extent feasible. Micro-routing may be performed as needed just prior to or during installation, based on conditions encountered, to further avoid Great Bridge remains. Establish 50-meter (164 FT) anchor avoidance area.
Wreck F4		Approx. 230 feet southeast of route	Unidentified standard canal boat	Outside of project corridor	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.
Wreck P4		Approx. 688 feet northeast of route	Unidentified standard canal boat	Outside of project corridor	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.
Wreck J4		Approx. 293 feet southwest of route	Unidentified standard canal boat	Outside of project corridor	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.
Wreck K4		Approx. 333 feet southwest of route	Unidentified standard canal boat	Outside of project corridor	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.
VT-AD-729		Approx. 297 feet northeast of route	Fragment of canal boat	Outside of project corridor	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.

Identified Resource	Location	Approx. Location Relative to CHPE Route	LCMM Finding	LCMM Recommended Action	CHPE Planned Action
Wreck I4	[redacted]	Approx. 305 feet northeast of route	Unidentified standard canal boat	Outside of project corridor	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.
Wreck P7		Approx. 353 feet west of route	Unidentified 1873 class canal boat	Outside of project corridor	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.
Wreck Q7		Approx. 205 feet west of route	Unidentified standard canal boat with significant research potential	Outside of project corridor	Cable route avoids resource; establish 50-meter (164 FT) cable, vessel, and anchor avoidance area.

3.0 Cultural Resources Management Plan

TRC created a Final CRMP for the permitting process, with an overall permitting CRMP created in 2015, and revised in 2021. Hartgen and TRC have created SCRMPs since 2021 address construction activities various Segments of the CHPE Project. This SCRMP addresses proposed construction activities in Segment 18B associated with the Lake Champlain Segment.

3.1 Project Preservation Officer (PPO)

As the original CRMP states, the Permittee will designate a PPO to oversee all cultural resources management issues related to the construction and post-construction of the Project. The PPO will coordinate the implementation of the CRMP and ensure that all requirements and conditions of the CRMP are met. The PPO's responsibilities will include review of Project activities to determine the potential effect to historic properties and consultation with the NYSHPO regarding potential effect to historic properties. Other activities of the PPO will include CRMP/SCRMP updates and notifications, preparation of an annual monitoring report to the NYSHPO, and construction personnel training. As the PPO is not a technical position, it is not required that the PPO be a cultural resource professional; the PPO Coordinator, however, will receive training in the Section 106 process, and will work closely with the archaeologist whom the Permittee employs to assist the PPO in the execution of his/her responsibilities.

TRC will act as the Consulting Archaeologists (CA) for the purpose of this effort. The CA will work closely with the PPO, who will be present for all ground disturbing activities, and will have “stop-work” authority. The PPO will be part of the primary construction management team, NKT, Inc.

It is the responsibility of the CA to train this individual as a PPO and to provide a hands-on workshop for construction personnel, as designated by the PPO. The PPO and the construction team should have an understanding of cultural resources present in different areas, as well as understanding the potential for unknown cultural deposits. It is the responsibility of the PPO to implement the CRMP and ensure that all requirements and conditions of the CRMP are met. Table 3 in Section 4.0 includes all the necessary contact information.

The PPO and CA shall follow the procedures outlined in the Unanticipated Cultural Resource Discovery Plan, attached as Appendix D to this SCRMP. 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 case of human remains the PPO and CA will follow the State Historic Preservation Office/New York State Office of Parks, Recreation and Historic Preservation Human Remains Discovery Protocol (January 2021) provided in Appendix B.

The PPO shall in turn notify the Certificate/Permit Holder (TDI/CHPE), who shall notify NYSHPO, the USACE, Department of Public Service (DPS), other stakeholders and Tribal Nations, as

appropriate within 24 hours of the initial reporting of the finds, per the Certificate Conditions 110 and 111 and USACE Permit NAN-2009-01089-M7, General Conditions C.

During this time, work in the immediate vicinity of the find must halt and the area of concern fenced or otherwise protected from construction activities. Once the area is secured, activity adjacent to the find may continue during the consultation process. Per 36 CFR Part 800.13(b)(3), NYSHPO, other stakeholders and Tribal Nations will have 48 hours from the time of notification to respond.

In the event of these discoveries, the CA will coordinate the mitigation cultural resources from the APE before the construction continues. The CA, 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 archaeologists to ensure that the survey and assessment of any change in the APE is completed prior to construction taking place.

For additional information regarding unanticipated cultural resource encounters, please refer to the complete Unanticipated Cultural Resource Discovery Plan in Appendix D.

3.2 Project Measures

Table 2 in Section 2.3 above summarizes cultural resource avoidance and minimization efforts. Four identified archaeological resources fall within the Project APE and the following mitigation measures will be taken to limit impacts to the cultural resources. These measures have been developed in consultation with NYSHPO. Avoidance is the mitigation measure of choice whenever possible. In the case of the Old Route 2 Toll Bridge the cable route has been designed to avoid this cultural resource to the greatest extent feasible. Micro-routing may be performed as needed just prior to or during installation, based on conditions encountered, to further avoid Old Route 2 Toll Bridge remains. Similarly for the Rouses Point Railroad Bridge the cable route has been designed to avoid this cultural resource to the greatest extent feasible. Micro-routing may be performed as needed just prior to or during installation, based on conditions encountered, to further avoid Railroad Bridge remains. For the Larrabees Point – Willow Point Railroad Trestle the cable route has been designed to avoid this cultural resource to the greatest extent feasible. Micro-routing may be performed as needed just prior to or during installation, based on conditions encountered, to further avoid Railroad Trestle remains and a 50-meter (164 FT) vessel and anchor avoidance area will be established. For the Great Bridge at Fort Ticonderoga and Mount Independence the cable route has been designed to avoid this cultural resource to the greatest extent feasible. Micro-routing may be performed as needed just prior to or during installation, based on conditions encountered, to further avoid Great Bridge remains and a 50-meter (164 FT) vessel and anchor avoidance area will be established. A metal detection survey between the two caissons prior to installation is recommended to assist with micro-routing as well as archaeological oversight is recommended during cable installation.

3.3 Metal Detection Survey Methodology

The proposed archaeological marine metal detecting survey for the Great Bridge at Fort Ticonderoga and Mount Independence will be conducted between the two caissons identified by OSI from the CHPE Lake Champlain 2022 Marine Route Survey. These caissons are [redacted]. The purpose of the marine magnetometer survey is to determine the presence or absence of any metallic artifacts in the path of the current revision for the CHPE marine transmission route.

The archaeological marine magnetometer survey will be carried out according to the principles and standards established by the Secretary or the Interior's Standards and Guidelines[2] and the New York Archaeology Council.[3] The methods and procedures used to survey the site are standards in the field and can be found in any underwater archaeological manual.[4] The archaeological conservation techniques that will be used for any recovered archaeological materials are practiced by most archaeological conservators.[5] The methods and procedures to be employed during this project have been developed through the training and experience of the LCMM's staff over the past 25 years.

[redacted]

[2] National Park Service, "Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines," Federal Register 48, no. 190 (1983). https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeology-historic-preservation.pdf. (Accessed March 22, 2024).

[3] New York Archaeological Council, "Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State," https://nysarchaeology.org/wp-content/uploads/2013/12/NYACStandards.pdf. (Accessed March 22, 2024).

[4] Richard Kerfoot Anderson, Jr., Guidelines for Recording Historic Ships (Washington, DC: Historic American Buildings/Historic American Engineering Record, National Park Service, U.S. Department of the Interior, 1988); Martin Dean et al., eds., Archeology Underwater: The NAS Guide to Principles and Practice (Portsmouth and London: Nautical Archeology Society and Archetype Publications, 1992); Jeremy Green, Maritime Archeology: A Technical Handbook (San Diego, CA: Academic Press, 1990); Paul Lipke, Peter Spectre, and Benjamin A. G. Fuller, eds., Boats: A Manual for Their Documentation (Nashville, TN: American Association for State and Local History, 1993); and J. Richard Steffy, Wooden Shipbuilding and the Interpretation of Shipwrecks (College Station, TX: Texas A&M University Press, 1994).

[5] J. M. Cronyn, The Elements of Archaeological Conservation (London, New York: Routledge, 1990); D.L. Hamilton, Basic Methods of Conserving Underwater Archaeological Material Culture, Legacy Resource Management Program (Washington, D.C.: U.S. Department of Defense, 1996); Rodgers, Bradley A. The Archaeologist's Manual for Conservation: A Guide to Non-Toxic, Minimal Intervention Artifact Stabilization (New York, New York: Kluwer Academic/Plenum Publishers, 2004), and K. Singley, Conservation of Archaeological Artifacts from Freshwater Environments (South Haven, Michigan: Lake Michigan Maritime Museum, 1988).

[redacted]

The methodology for the archaeological marine magnetometer survey will focus in between [redacted]. Based on the locations of [redacted] from Google Earth Pro GIS, a proposed primary survey area was delineated by a survey polygon of approximately 0.1 acres (0.04 hectares) with a perimeter of approximately 300 feet (91 meters) bordered by the northern location of [redacted]. The proposed main survey area is bounded by the following WGS 84 coordinates:

- [redacted]
- [redacted]
- [redacted]
- [redacted]

The extents of the primary survey polygon were decided by extending the measuring tool in Google Earth Pro to a length of approximately 75 feet (22.8 meters) to the east and west from the locations of [redacted]. This distance was also used for measurements from the approximate north and south distance between the caissons. This extension was chosen by the Research & Archaeology team at LCMM to provide the best coverage of the area that extends beyond the locations of the caissons needed to be surveyed via underwater metal detecting. Archaeological data interpreted from one of the surviving caissons from surveys completed in the 1990s denotes that its dimensions are approximately 25 feet (7.6 meters) in length by 25 feet (7.6 meters) in width.[6] Contemporary engineering accounts also interpret the general dimensions as the same based on the archaeological survey data recovered from the Great Bridge caissons.[7]

[6] Scott A. McLaughlin, "History Told From the Depths of Lake Champlain: 1992-1993 Fort Ticonderoga-Mount Independence Submerged Cultural Resource Survey, Volume II" (MA Thesis., Texas A&M University, 2000), 330.

[7] Michael Sullivan, "Historic New England Infrastructure: Fort Ticonderoga," Boston Society of Civil Engineers, accessed March 18, 2024, https://www.bsces.org/news/org/historic-new-england-infrastructure-fort-ticonderoga-3893.

The extent of approximately 40 feet (12.2 meters) to the northeast and southeast of both [redacted] ensures that an appropriate amount of area is surveyed beyond the extent of the dimensions of the Great Bridge Caissons. This is to ensure the area is thoroughly covered as archaeologically recovered material has been recorded around one of the caissons when the bridge was still extant.[8] There is the potential that artifacts related to the American Revolution may still be present in the vicinity of the caissons identified by OSI or within the construction corridor of the CHPE transmission line corridor.

Within the survey polygon, there will be a total of 18 transect "lanes" measured in feet and meters laid northeast to southwest between caissons [redacted]. Archaeologists will metal detect to each side of marked lanes using a J. W. Fischer Pulse 8X Underwater Metal Detector. Transect lanes will measure approximately 73 feet (22 meters) in length, and each lane will be cleared to a width of approximately 4 feet (1.2 meters) to each side of a transect lane. Within each transect lane, the archaeologist will metal detect using a gradual sweeping motion of the metal detecting machine across the transect to each side, providing some overlap between the transect lanes to ensure best coverage.

When a magnetic target anomaly is identified, the target will be flagged with a plastic pin flag on its location along the transect lane, and distance to either side will be recorded. Individual targets will be given sequential target numbers. A GPS point will also be taken using a handheld unit to mark the latitude and longitude of each end of the transects. Using a sheet of mylar affixed to a clipboard, field logs will be taken on the transect location, the distance the target was located along the transect lane and what direction, target description (if applicable), date, time, and any relevant information such as observed bottom conditions. All magnetic anomaly targets will be ground-truthed after all metal detecting is completed so as to not (further) degrade visibility during the survey part of the process.

If any archaeological material is recovered, it will be given a temporary artifact number and be sealed in a plastic bag with water to preserve it. Any larger artifacts such as cannon(s) or anchors will have to be recovered using heavy lift gear such as a winch on the support vessel or using underwater air lifts. All recovered artifacts will be documented appropriately through the conservation process. They will also be appropriately conserved based on their material type (wood, iron, ceramics, etc.) and a repository and curation plan for them will be decided upon by LCMM, Fort Ticonderoga, and the OPRHP.

[8] McLaughlin, "History Told from the Depths of Lake Champlain," 322.

3.4 Archaeological Oversight Methodology

Archaeological monitoring is recommended for the installation of the Lake Champlain route corridor for the CHPE submarine power cable transmission line within the area of the Great Bridge. Specifically, the area identified for archaeological monitoring is located between the two caissons identified by OSI as [redacted]. The purpose of the monitoring is to verify that no impacts occur to the underwater cultural resource. Archaeological monitoring is defined by the New York Archaeology Council as "the observation of construction excavation activities by an archaeologist in order to identify, recover, protect and/or document archaeological information or materials."[9] The standards from the New York Archaeological Council and the OPRHP Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State address archaeological monitoring may be acceptable under certain circumstances during Phases II and III as a "supplemental" technique. The Standards caution, however, that "due to the complexities often characterizing projects and sites located in urban settings, [the] guidelines apply primarily to projects situated in non-urban environments."[10]

Based on these standards, the following plan was developed for archaeological monitoring for the Lake Champlain route corridor for the CHPE submarine power cable transmission line. Archaeological monitoring will consist of a maritime archaeologist to be present on the cable installation vessel during construction activities between the caissons identified as OSI [redacted]. The maritime archaeologist will be observing the sonar and video feeds of the installation of the CHPE transmission cable from the installation tool within this area to ensure that no unintended impacts occur to these underwater cultural resources. While the proposed construction activities will avoid both caissons, there is the potential that artifacts related to the American Revolution may still be present in the vicinity of the caissons identified by OSI or within the construction corridor of the CHPE transmission line corridor. Unintended impacts may consist of disturbance or destruction to the artifacts through deviation of the maintained distances between the two caissons and the current route of the transmission line.

If any unintended impacts occur to potential underwater cultural resources, or artifacts, then construction activities may potentially need to halt. NKT, TRC, and LCMM will identify authority to be given to the archaeologist(s) to be able to halt construction activities, if necessary, to allow for investigation. This stop-work authority will be clearly communicated to all levels of the contractor's on-site construction team, including the equipment operator(s). The protocol for consultation and decision making required in order to slow down or halt construction activities (e.g., consultations

[9] New York Archaeological Council. "Monitoring Guidelines. https://nysarchaeology.org/nyac/monitoring-guidelines/. (Accessed March 18, 2024).
[10] New York State Office of Parks, Recreation, and Historic Preservation. "Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State." https://nysarchaeology.org/wp-content/uploads/2013/12/NYACStandards.pdf/. (Accessed March 13, 2024).

with construction, engineering, and agency personnel), including identification of specific persons to be contacted, and the amount of halt time needed, will be communicated to all on-site personnel.

The actions to be taken by maritime archaeologist on the impacted remains of the underwater cultural resources, or artifacts, will require further study and will include having the construction team in operation of the cable laying tool record the impacted section of the underwater cultural resources, or artifacts, with its video and sonar system. Using a notebook and pencil, the maritime archaeologist will work to record what part of the underwater cultural resources, or artifacts, was impacted and the extent of impact based on the sonar and video imagery. These notes will be augmented by the sonar and video imagery and will be made available to TRC and LCMM for further study and research.

Based on the New York Archaeological Councils Professional Standards and the nature of the Project, any impacted remains of the underwater cultural resources, or artifacts, are to be left in situ (in place) and will not be removed. The impacted remains will be recorded to the best extent by the maritime archaeologist. Analysis and interpretation will be done on the impacted remains while construction is halted. A professional addendum report on the impacted remains of the underwater cultural resources, or artifacts, will be prepared by LCMM and TRC afterwards and provided to TRC, NKT, and TDI for review before submission to the OPRHP and any other agencies involved on the Project. The purpose of the addendum report is to address the nature of the unintended impact. The addendum report will also describe the procedures followed before, during, and after the unintended impact on the underwater cultural resources, or artifacts. The analysis and interpretation of the unintended impact on the underwater cultural resources, or artifacts, will be detailed followed by a conclusion.

4.0 Communication

Table 3 has been created to facilitate efficient contact and communication for the implementation of this SCRMP.

Table 3. Project Contacts

Agency/Organization	Role	Contact Name	Contact information
NKT, Inc.	Project Preservation Officer	Jonas Carlson	Jonas.Carlson@nkt.com
TRC Environmental Corp.	Consulting Engineer	Kevin Bodenhamer	kbodenhamer@trccompanies.com
U. S. Department of Energy	Stakeholder	Melissa Pauley	melissa.pauley@dhq.doe.gov
U.S. Army Corps of Engineers	Stakeholder	Stephan Ryba	Stephan.a.ryba@usace.army.mil
New York State Historic Preservation Office	Stakeholder	Nancy Herter	Nancy.heter@parks.ny.gov
New York DPS	Stakeholder	Matthew Smith	Matthew.smith@dps.ny.gov
TRC Environmental Corp.	Consulting Archaeologist	Karen E Mack	Kemack@trccompanies.com 207-215-2872
Transmission Developers Inc.	Applicant /Owner	Ayokunle “Kunle” Kafi, PE, CEM	Ayokunle.kafi@tramsmissiondevelopers.com 347-920-6550

5.0 Deliverables

5.1 Periodic Updates

The PPO in coordination and under the guidance of the CA will provide periodic updates on the progress of cable installation via email to the stakeholders. The communication will include project progress, discussion of unanticipated cultural resources, and the schedule for future work.

5.2 Annual Report

The PPO will prepare an annual report to the U.S. Department of Energy and the NYSHPO (and any of the other signatory or consulting parties listed in the Programmatic Agreement), which will summarize activities conducted under this CRMP on an annual basis for as long as this CRMP is in effect (i.e. through post-construction monitoring). The report will be completed and submitted on or before January 10 of each year. The CRMP may be updated and/or revised as appropriate to improve its implementation so long as concurrence is reached by the parties involved. The annual report will include a summary of all historic properties and archaeological resources that may have been encountered during construction and how they were treated. Post-construction reports will identify which cultural resources were monitored and provide a summary of resource conditions and whether looting or other forms of ground disturbances were noted.

6.0 References

Lake Champlain Maritime Museum
2024 Final Report for the Underwater Cultural Resource Review of the Champlain Hudson Power Express Lake Champlain Segment Investigations.

New York Archaeological Council. “Monitoring Guidelines.” Accessed March 18th, 2024. https://nysarchaeology.org/nyac/monitoring-guidelines/.

New York Archaeological Council (NYAC)
1994 *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*. NYAC, n.p.

Appendix A – Cultural Resource Management Plan

CHAMPLAIN HUDSON POWER EXPRESS HVDC TRANSMISSION LINE PROJECT

Cultural Resources Management Plan

Confidential

FINAL

PREPARED BY
TRC
OCTOBER 2015

REVISED FEBRUARY 2021

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CHAMPLAIN HUDSON POWER EXPRESS HVDC TRANSMISSION LINE PROJECT

Cultural Resources Management Plan

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LIST OF ACRONYMS

ACHP – Advisory Council on Historic Preservation
APE – Area of Potential Effect
CA – Consulting Archaeologist
CHPE, LLC – Champlain Hudson Power Express, LLC
CRMP – Cultural Resources Management Plan
DOE – U.S. Department of Energy
GIS – Geographic Information System
Hartgen – Hartgen Archaeological Associates, Inc.
HVAC – high-voltage alternating current
HVDC – high-voltage direct current
MW – megawatt
NHPA – National Historic Preservation Act
NYAC – New York Archaeological Council
NYSHPO – New York State Historic Preservation Officer
NYSM – New York State Museum
PPO – Project Preservation Officer
ROW – Right-of-Way
TRC – TRC Companies, Inc.

CHAMPLAIN HUDSON POWER EXPRESS HVDC TRANSMISSION LINE PROJECT

Cultural Resources Management Plan

1.0 INTRODUCTION

This document is intended to serve as the Cultural Resources Management Plan (CRMP or Plan) for the Champlain Hudson Power Express HVDC Transmission Line Project (Project). The Programmatic Agreement for the Project, which was signed by the New York State Historic Preservation Officer (NYSHPO) and the U.S. Department of Energy (DOE) as signatory parties and the Champlain Hudson Power Express, LLC (CHPE, LLC or Permittee[1]) and the U.S. Army Corps of Engineers as concurring parties, sets forth an outline for this Plan. The goal of the CRMP is to provide the framework within which potential impacts to all relevant historic properties (those properties eligible for or listed in the National Register of Historic Places) known to exist or may be discovered to exist within the Project are to be managed. It additionally establishes a framework for identifying and undertaking additional archaeological work that may be required prior to and during construction of the Project.

The development of the CRMP for the Project is authorized under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. The CRMP takes into consideration the Advisory Council on Historic Preservation (ACHP) guidance on conducting archaeology under Section 106 (ACHP 2009); the ACHP's February 23, 2007 *Policy Statement Regarding the Treatment of Burial Sites, Human Remains, and Funerary Objects* (ACHP 2007); NYSHPO's *Human Remains Discovery Protocol* (NYSHPO 2021); the New York Archaeological Council's (NYAC) *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State* (1994, as adopted by the NYSHPO in 1995); the *Secretary of the Interiors Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44742, September 29, 1983; as amended and revised); the DOE's *American Indian and Alaska*

[1]In August 2020, Champlain Hudson Power Express, Inc. (CHPEI) converted from a corporation to a limited liability company (CHPE, LLC). For the purposes of this filing, "Permittee" represents both past and current holders of federal and state permits and approvals.

Native Tribal Government Policy (DOE 2006); and the DOE's *Policy 141.1: Management of Cultural Resources* (DOE 2011).

The CRMP is organized in the following manner: Section 2 provides general background information regarding the Project, including a description of the Project facilities, its location, and the definition of the Area of Potential Effect (APE). The historic context(s) within which all known historic properties are understood and evaluated are then presented. This is followed by a summary of past cultural resource studies for the Project and their results. Section 2 of the CRMP concludes with a description of known and potential historic properties and details their significance. Section 3 outlines the basic historic preservation standards and the project management goals which will guide the development and implementation of the CRMP. Section 4 outlines the range of Project effects upon historic properties known to fall or suspected of falling within the APE and measures that might be taken to manage those effects over the course of the construction period. It also provides details regarding the process by which consultation with the NYSHPO and Tribal Historic Preservation Officers and other consulting parties will take place; the manner in which any human remains encountered will be treated; and how provision will be made to foster public interpretation. The final section, Section 5, describes the CRMP implementation procedures, including the designation of a CRMP Coordinator and a consulting archaeologist (CA); periodic reporting requirements; periodic review of the CRMP; and dispute resolution procedures, all with a view towards facilitating consultation among the DOE, the NYSHPO, the ACHP, or other concurring parties.

Appendix B - State Historic Preservation Office/New York State Office of Parks, Recreation and Historic Preservation Human Remains Discovery Protocol (January 2021)

State Historic Preservation Office/
New York State Office of Parks, Recreation and Historic Preservation
Human Remains Discovery Protocol
(January 2021)

If human remains are encountered during construction or archaeological investigations, the New York State Historic Preservation Office (SHPO) recommends that the following protocol is implemented.

- Human remains shall be treated with dignity and respect. Should human remains or suspected human remains be encountered, work in the general area of the discovery shall stop immediately and the location shall be secured and protected from damage and disturbance.

- If skeletal remains are identified and the archaeologist is not able to conclusively determine if they are human, the remains and any associated materials shall be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist shall assess the remains in situ to help determine if they are human.

- If the remains are determined to be human, law enforcement, the SHPO, the appropriate Indian Nations, and the involved state and federal agencies shall be notified immediately. If law enforcement determines that the burial site is not a criminal matter, no skeletal remains or associated materials shall be removed until appropriate consultation takes place.

- If human remains are determined to be Native American, they shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO and the Indian Nations. The involved agency shall consult SHPO and the appropriate Indian Nations to develop a plan of action. Photographs of Native American human remains and associated materials should not be taken without consulting with the involved Indian Nations.

- If human remains are determined to be non-Native American, the remains shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO. The involved agency shall consult SHPO and other appropriate parties to develop a plan of action.

- The SHPO recommends that burial information is not released to the public to protect burial sites from possible looting.

Appendix C - Final Report for the Underwater Cultural Resource Review of the Champlain Hudson Power Express, Lake Champlain Segment Investigations

CHPE EM&CP Supplemental CRMP
Lake Champlain Marine Segment Cable Installation (“Segment 18B”)
March 2024
Confidential Material

FINAL REPORT FOR THE UNDERWATER CULTURAL RESOURCE REVIEW OF THE CHAMPLAIN HUDSON POWER EXPRESS, LAKE CHAMPLAIN SEGMENT INVESTIGATIONS

Prepared for:
TRC Environmental Corporation
404 Wyman Street, Suite 375
Waltham, MA 02451

Contract No. 200749

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October 2023

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EXECUTIVE SUMMARY

The following Memo presents the review, analysis, and results of the underwater cultural resource work carried out in support of the Lake Champlain segment of the Champlain-Hudson Power Express (CHPE) project as a Phase IA Report. The goal of the work is to identify potential underwater cultural resources within the Marine Route Survey (MRS) of the Lake Champlain segment. The investigations were carried out at the request of, and under contract order from TRC Environmental Corporation (TRC) (CO 200749). The work discussed in detail below for the Project, utilized underwater archaeologists who meet the *Secretary of the Interior Professional Qualifications Standards* as defined and officially adopted in 1983 (48 FR 44716, September 29) and the *National Historic Preservation Act* (NHPA) Section 112 and the Section 106 regulations, at §800.2(a)(1) for archaeological resources investigations. The investigation was conducted in accordance with the requirement of the New York State Historic Preservation Office (NYSHPO). Assessment of cultural resources and historic properties adhered to the definition in the NHPA, and per regulations issued by the Advisory Council on Historic Preservation (ACHP).

In this Report, an overall evaluation of the underwater cultural resources identified in the CHPE Lake Champlain MRS characterized the resources identified along with a thorough discussion of their archaeological and historic significance. This Report will aid in the clearance of the entire line from its start in New York state waters of Lake Champlain at the US-Canadian border to where the submarine line connects on-land at Putnam Station, New York. Additionally, it will aid in the review and analysis of potential underwater cultural resources identified in the utility crossings for pre-lay mattress locations along the Lake Champlain segment of the CHPE submarine power cable transmission line.

Work on this Project began in the winter of 2022 when the Lake Champlain Maritime Museum (LCMM) was contracted by TRC to evaluate several pre-lay utility crossing locations along the Lake Champlain segment of the CHPE submarine power cable transmission line. This work continues from previous work done by LCMM in 2010 and 2011 for the initial evaluation of the CHPE project, which includes a desktop review of Global Information Systems (GIS) databases using datasets collected from Lake Champlain and the Hudson River. The current work will assist in preparation of the Environmental Management and Construction Plan (EM&CP) filings required for the CHPE Project.

Underwater cultural resources have been determined to be present in several current pre-lay utility crossing areas and within previous pre-lay utility crossing areas. Additionally, several underwater cultural resources are in proximity to the CHPE Lake Champlain Segment Current Route and the CHPE Lake Champlain Segment Permitted Route. Generally, for the underwater cultural resources located within the Area of Potential Effect (APE) of the Lake Champlain route corridor for the CHPE submarine power cable transmission line, avoidance is recommended. For avoidance, LCMM recommends the Project use an avoidance buffer of 50 meters (164 feet) around the submerged cultural resources identified in this Report for cable routing and during construction activities. Consultation with the NYSHPO is advised to discuss the planned

avoidance measures for the underwater cultural resources located at the Rouses Point Railroad Trestle, Old Route 2 Bridge, Larrabees Point – Willow Point Railroad Trestle, Great Bridge at Fort Ticonderoga and Mount Independence, and for any of the wrecks identified in this Report where of the cable installation activities would occur within the 50 meter (164 feet) avoidance buffer.

Appendix D - Unanticipated Cultural Resource Discovery Plan

Champlain Hudson Power Express

Unanticipated Cultural Resource Discovery Plan

EM&CP Segment 18B

January 2024

INTRODUCTION

This Unanticipated Cultural Resource Discovery Plan (UCRDP) outlines the procedures to be implemented during underwater cable installation in Lake Champlain ("EM&CP Segment 18B") should potential cultural resources be incidentally discovered.

This UCRDP is based on government agency and industry standard UCRDPs developed for Underwater Cultural Resource Management and offshore projects. The UCRDP addresses the manner of how the inadvertent discovery of underwater cultural resource(s), unmarked burials, or human remains during pre-installation, installation, and post-installation activities (collectively referred to as installation activities) for the proposed Project will be managed. The specific procedures for the unanticipated discovery of these resources during Project construction were developed in consultation with the necessary State, Federal, and Local agencies as described in the Cultural Resources Management Plan (CRMP).

UNANTICIPATED DISCOVERY OF IN-WATER ARCHAEOLOGICAL OR HISTORIC RESOURCES

Designated Project team members have the responsibility to monitor development and post-development procedures for the inadvertent discovery of underwater cultural resource(s), unmarked burials, or human remains. As stated in the BMP Document provided in the Joint Proposal for the Project, 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 (BMPs, Section 17).

Examples of potential underwater cultural resources may include the following:

- Anomalous and distinct mounds of lithic material, which could represent ballast material from a shipwreck.
- Intact articulated wooden ship timbers or sections of iron, steel, or metal-clad hulls.
- Substantial cargo remains, which may be scattered or closely grouped, and which may include armaments, ammunitions, wooden crates and barrels, ceramics, glass, and other cultural materials, some of which may be heavily concreted and readily identifiable.
- A widely scattered debris field comprised of ship's rigging and other structural components, as well as cargo.
- Anomalous mounds of mollusk shells that may include prehistoric lithic or worked shell material.

- Human skeletal remains.

If, during any of installation activities, evidence of prehistoric or historic cultural remains is encountered, any bottom disturbing activity in the immediate area will cease immediately to preclude any further contact or damage to the resources in that area.

An avoidance/buffer zone of at least 164 feet (50 meters) or another radius measurement for an avoidance/buffer zone determined by the New York State Historic Preservation Office (SHPO) for further work in that area will be established.

If the cultural resource is discovered during any installation activities, work in the immediate vicinity will cease and at no time will the operators of installation equipment be permitted to disturb or pick up any artifacts, features, or components of the site.

The Project Preservation Officer (PPO) must be notified immediately upon discovery of cultural resources and the PPO must notify the consulting archaeologist (CA). Within twenty-four (24) hours of such discovery, the Certificate Holder will notify and seek to consult with Department of Public Service (DPS) Staff and the Office of Parks, Recreation, and Historic Preservation (OPRHP) Field Services Bureau to determine the best course of action. No ground-disturbing activities will be permitted in the immediate vicinity of the archaeological or historic materials until such time as the significance of the resource has been evaluated and the need for and scope of impact mitigation has been determined.

Any mitigation and avoidance measures will be conducted using methods approved by OPRHP under the direction of the PPO and CA. Such measures will use equipment and techniques deemed reasonably necessary to determine the type of underwater cultural resource(s) and confirm unmarked burials or human remains.

Additionally, confirmed underwater cultural resource(s) may be subsequently evaluated to determine eligibility for inclusion in the National Register of Historic Places (NHRP). If the underwater cultural resource(s) is determined to be historically significant, additional work that may include formal data recording and analysis may be required and approved by the appropriate agencies. Further work at the immediate location of the discovery will be suspended until clearance to proceed is granted by the appropriate agencies.

UNANTICIPATED DISCOVERY OF HUMAN REMAINS

As described in the CRMP, should human remains or evidence of human burials be encountered during the conduct of archeological data recovery, fieldwork, or during construction, all work in the immediate 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 Holder

will notify the DPS Staff and OPRHP/SHPO Staff. 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, updated in 2023); and OPRHP/SHPO'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. The following measures will be implemented in accordance with the BMP Document (BMPs, Section 17):

a) Any human remains discovered will be treated with the utmost dignity and respect.

b) 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.

c) 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.

d) The Certificate Holder will contact local law enforcement, the county coroner's office, the SHPO, 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.

e) Within twenty-four (24) hours of any such discovery, the Certificate Holder will notify the DPS Staff and OPRHP/SHPO Staff. Treatment and disposition of any human remains that may be discovered will be managed in a manner consistent with the NAGPRA, the Council's Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects (February 2007, updated in 2023), and OPRHP/SHPO'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.

f) 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 Holder will notify the SHPO and Native tribes within twenty-four (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 Holder will consult with the SHPO 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/SHPO's Human Remains Discovery Protocol. Avoiding further disturbance of the remains is the preferred option.

g) 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 SHPO and other appropriate parties to determine a plan of action.

h) Work will resume only after the completion of the necessary consultation and treatment.

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