ADDENDUM 2

ADDITIONAL PHASE I ARCHAEOLOGICAL SURVEY OF THE PROPOSED CPV VALLEY ENERGY CENTER PROPOSED UTILITIES CORRIDOR TOWN OF WAWAYANDA ORANGE COUNTY, NEW YORK

OPRHP Project Review Number:

07PR6587

Submitted to:

CPV Valley, LLC
35 Braintree Hill Office Park
Braintree, MA 02184

Submitted by:

TRC ENVIRONMENTAL CORPORATION
4425-B Forbes Boulevard
Lanham, MD 20706

January 2015
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Timothy R. Sara, Principal Investigator

Authored by Timothy R. Sara and Patrick Walters

January 2015
OPRHP MANAGEMENT SUMMARY

SHPO Project Review Number: 07PR6587

Involved State and Federal Agencies (DEC, CORPS, FHWA, etc): NYSDEC, NYSDOT, NYSPSC, U.S. Army Corps of Engineers

Phase of Survey: IB

Location: Project Area follows shoulder of US Route 6, NY and Route 17M, NY

Minor Civil Division: Town of Wawayanda and City of Middletown

County: Orange

Survey Area Dimensions:

Proposed Utilities Corridor: 8,335 linear feet (ft) (2,540 linear meters [m])

Number of Acres Surveyed: 8,335 linear ft. (2,540 linear m) within an average 25 ft. wide corridor = 4.78 acres

USGS 7.5 Minute Quadrangle Map: Middletown, NY

Archaeological Survey Overview

Number & Interval of Shovel Tests: 35 Shovel Test Pits (STPs) at 15-m interval and judgmentally placed

Number & Size of Units: Standard shovel tests (ca. 40 cm diameter)

Width of Plowed Strips: N/A

Surface Survey Transect Interval: N/A

Results of Archaeological Survey

Number & name of prehistoric sites identified: No sites recorded within Addendum survey area

Number & name of historic sites identified: N/A

Number & name of sites recommended for Phase II/Avoidance: None

Results of Architectural Survey: N/A

Report Author(s): Timothy R. Sara, M.A., RPA and Patrick Walters, B.A.

Date of Report: October 2009 (Phase IB and Addendum 1); January 2015 (Addendum 2)
ADDENDUM 2 SUMMARY

At the request of the New York Office of Parks, Recreation, and Historic Preservation (OPRHP), TRC Environmental Corporation (TRC) conducted additional Phase IB archaeological survey for a proposed utilities corridor associated with the CPV Valley Energy Center Project (Project) in the Town of Wawayanda, Orange County, New York. The original Project parcel was previously subjected to Phase IB survey in August of 2008 in support of environmental permitting associated with Project development (Sara and Schmidt 2008). An additional Phase IB survey was further conducted on two archaeological sites recorded during the 2008 survey, and was reported in an addendum to the original Phase I report (Addendum 1; Sara and Walters 2009).

As part of the additional Project design, a utilities corridor (water and electric) was proposed along the shoulders of Routes 6 and 17M to service the Energy Center. In its December 13, 2011 Project review letter, the OPRHP requested additional Phase IB survey to demonstrate the disturbance conditions along the proposed utilities corridor to ensure the installation of utilities will not impact archaeological resources. An additional OPRHP letter on February 1, 2012 concurred with the proposed archaeological testing of the utilities corridor.

This addendum to the original project report documents the results of the additional Phase IB archaeological survey along the proposed utilities corridor along Route 6 and 17M in Wawayanda and Middletown. The survey consisted of a combination of hand-excavated shovel tests and annotated street-level photography to document existing conditions and disturbance along the proposed route. In areas where disturbance was not apparent, shovel tests were manually excavated at 15-m intervals and at judgmental locations. All shovel testing was limited to the proposed utilities impact areas. In total, 35 STPs were excavated and areas of ground disturbance were photo-documented. Of the 35 STPs excavated, 20 STPS terminated in impenetrable fill. The impenetrable soil deposits encountered in shovel tests excavated along the road shoulders consisted of cut-and-fill deposits associated with prior utility and road construction. There is very low potential for undisturbed archaeological resources to be present at those locations. In the areas where natural soils were recorded, no cultural material was recovered during the survey and no further archaeological study is recommended.
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I. INTRODUCTION

This document consists of an addendum (Addendum 2) to the previously submitted Phase IA/IB report titled *Phase I Archaeological Survey of the Proposed CPV Valley Energy Center, Wawayanda, Orange County, New York*. The original Phase IA/IB survey was conducted as part of a permit application associated with construction of the proposed CPV Valley Energy Center located in the Town of Wawayanda, Orange County, New York (Figures 1 through 4). The work was conducted by TRC, on behalf of CPV Valley, LLC, in order to identify and record all archaeological sites located within the construction impact areas of the proposed project. The overall Project will consist of the construction and operation of a 630MW natural gas combined cycle electric generating facility and associated transmission line that will link to existing nearby utility infrastructure. The original study area consists of approximately 45 acres within a larger, irregularly shaped, 122-acre parcel of former agricultural land and forested areas.

As a result of the original Phase IB survey, four newly recorded prehistoric archaeological sites and five isolated finds were identified (Sara and Schmidt 2008). Additional Phase I work on two sites, requested by the OPRHP following the original survey, found the sites to be non-significant. The sites were recommended as ineligible for the National Register of Historic Places, and no further work was recommended (Addendum 1; Sara and Walters 2009). The OPRHP concurred with this recommendation in its letter dated November 5, 2009.

Following this work, the OPRHP requested additional documentation to demonstrate disturbance and the area/depth of the location of proposed utilities added to the Project design following the original surveys (OPRHP letter of December 13, 2011). OPRHP concurred with the proposed archaeological testing of the final utilities corridor alignment (OPRHP letter of February 1, 2012). The proposed utilities corridor will be located within an existing roadway right-of-way along Route 6 and Route 17M in Wawayanda and Middletown, Orange County, New York (Figure 2). The utilities will be installed to an average depth of 4 feet below ground surface. The following addendum report documents the results of the additional Phase IB archaeological survey within the proposed utilities corridor along Route 6 and 17M. The archaeological investigations were conducted in accordance with the Secretary of the Interior’s *Standards and Guidelines for Archaeology and Historic Preservation* and the *OPRHP Guidelines for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State* (Guidelines 1994).

This addendum report is organized as follows: Chapter 2 describes the field methods and results of the survey, Chapter 3 provides the conclusions and recommendations, references cited are provided in Chapter 4, and Appendix A contains the engineering drawing of the utilities corridor and locations of archaeological investigations. Appendix B provides the December 13, 2011 OPRHP correspondence that requested this survey.
Figure 2. 7.5-minute USGS Quadrangle showing proposed CPV Valley utilities corridor, shown on USGS 7.5-Minute Series, Middletown, NY Quadrangle map.
Figure 3. Aerial depiction of archaeological investigations in the southern half of the utilities corridor.
Figure 4. Aerial depiction of archaeological investigations in the northern half of the utilities corridor.
II. ADDITIONAL WORK - FIELD METHODS AND RESULTS

Field Methods

In December 2014, TRC conducted additional Phase IB fieldwork along a proposed utilities corridor leading from the Project parcel to a wastewater treatment plant on Route 17M in Middletown. Fieldwork consisted of a combination of hand-excavated shovel test pits (STPs) and annotated street-level photography to document existing conditions and disturbance along the proposed utilities corridor. In areas where disturbance was not evident, shovel tests were manually excavated at judgmental locations or at 15-m intervals along a single survey transect.

In total, 35 shovel tests were excavated during the Phase IB survey (see Figures 3 and 4). Table 1 at the end of this section provides the STP log for the project. Of the 35 STPs excavated, 20 STPs terminated in impenetrable fill. No cultural material was recovered and no archaeological sites were identified. The location of all STPs and surface features were mapped in the field, recorded by the use of GPS positioning using a Garmin GPSmap 60Cx handheld GPS unit, and plotted onto USGS topographic maps and engineering and aerial drawings. Shovel tests measured 40 cm in diameter and were excavated by natural or cultural horizons until sterile soils (Pleistocene-age deposits) were reached. All soil deposits were screened through ¼-in hardware cloth to examine for artifacts. Areas of ground disturbance, poorly drained, low-lying, and/or wetland areas were examined by pedestrian survey and recorded with annotated street-level photography. Appendix A provides engineering aerial drawings of the proposed utilities corridor with locations of all archaeological investigations.

Field Results

The proposed utilities corridor begins in an agricultural field approximately 300 m (985 ft.) north of the intersection of Interstate 84 and Route 6 east of the Town of Wawayanda (Figure 5, see Figure 3). In this area, the utilities corridor follows Route 6 approximately 9 m (30 ft.) south of the road bed and proceeds northeast for approximately 180 m (590 ft.) before shifting to within 3 m (10 ft.) of the Route 6 road bed. The agricultural field was fallow at the time of survey. Twelve (12) STPs were excavated at 15-m intervals in this area. A typical soil profile consisted of a dark yellowish brown (10YR 4/3) silt loam A horizon (plowzone) to an average depth of 25 cm bgs, overlying a yellowish brown (10YR 5/4) silt clay B horizon subsoil (Figure 6). The soil deposits in this area are undisturbed; excavation was terminated in sterile, Pleistocene-age subsoil.

Figure 5. Agricultural field in the far southwestern portion of the utilities corridor.
Proceeding to the northeast, the corridor shifts to the side of a steep embankment on the south side of Route 6 (Figure 7). A buried natural gas pipeline is present adjacent to Route 6 beneath a shallow storm water ditch in the eastern portion of the agricultural field as it approaches the intersection of Kirbytown Road. Eight (8) judgmentally placed STPs excavated in this area showed disturbed deposits associated with construction of the Route 6 road bed. As such, there is very low potential for undisturbed archaeological resources to occur in this area. From this point eastward, the proposed utilities corridor falls within the paved shoulder of Route 6 (see Figure 3).

As the corridor approaches the intersection with Route 17M, it crosses to the north side of Route 6 immediately east of Old State Route 17 and follows an on-ramp curve in a landscaped area west of Route 17M. Proceeding to the north, the corridor follows a 2.5 to 3-m (8-10 ft.) deep artificial drainage ditch between the Route 17M road grade and a paved parking lot (see Figure 4; Figure 8). Continuing north, the corridor crosses landscaped areas in the frontage of several businesses along Route 17M (Figure 9). Judgmentally placed STPs excavated in this area showed graded, landscaped fill deposits of varying depths; STPs 22 and 33 encountered a compact subsoil (Figure 10). There is very low potential for undisturbed archaeological resources to occur in this area due to the disturbances. North of Dolsontown Road, the corridor shifts to fall within the paved shoulder of Route 17. The corridor proceeds approximately 700 m (3000 ft.) within the paved shoulder of Route 17M before turning to the east at the intersection of an access road leading to the wastewater treatment plant (Figure 11).
Figure 8. Artificial drainage ditch along Route 17M.

Figure 9. Landscaped area showing marked utilities along Route 17M.
CPV Valley Energy Center, Wawayanda, New York
ADDENDUM 2 - Phase IB Archaeological Survey of Proposed Utilities Corridor

Representative STP Soil Profiles—Landscaped Area along Route 17M

<table>
<thead>
<tr>
<th>STP 22</th>
<th>STP 34</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I</strong></td>
<td><strong>I</strong></td>
</tr>
<tr>
<td><strong>FILL</strong></td>
<td><strong>FILL</strong></td>
</tr>
<tr>
<td>10 cm</td>
<td>18 cm</td>
</tr>
<tr>
<td><strong>II</strong></td>
<td>II</td>
</tr>
<tr>
<td><strong>10 YR 4/3 Fill</strong></td>
<td><strong>10 YR 3/3 Fill</strong></td>
</tr>
<tr>
<td>Brown Silt Loam Fill</td>
<td>Yellowish Brown mottled with 10 YR 5/6 Silt Loam</td>
</tr>
<tr>
<td>Horizon with gravel inclusions</td>
<td>with large angular gravel inclusions</td>
</tr>
<tr>
<td>15 cm</td>
<td>28 cm</td>
</tr>
<tr>
<td><strong>BOE</strong></td>
<td><strong>BOE</strong></td>
</tr>
<tr>
<td><strong>II</strong></td>
<td><strong>II</strong></td>
</tr>
<tr>
<td><strong>10 YR 5/4 Subsoil</strong></td>
<td><strong>10 YR 6/6 Subsoil</strong></td>
</tr>
<tr>
<td>Compacted Yellowish Brown mottled with 10 YR 6/4 Dark Yellowish Brown Silt Loam</td>
<td>Compacted Light Yellowish Brown Silt Clay</td>
</tr>
</tbody>
</table>

Figure 10. Representative soil profiles in landscaped area along Route 17M.

Figure 11. Paved road bed portion of corridor along Route 17M.
From the intersection of the wastewater treatment plant access road and Route 17M, the corridor proceeds eastward in a landscaped area on the south side of the access road for approximately 80-m (265 ft.) before crossing a second-order unnamed tributary of Monhagen Brook. The landscaped area leading to the stream crossing has been previously disturbed by the installation of a buried storm water drainage pipe leading from Route 17M to the stream. The drainage pipe is four feet in diameter, and located between two and three feet beneath the ground surface. Two pipelines carrying wastewater to the treatment plant are also exposed at the stream crossing directly south of the access road (Figure 12). At the stream crossing, the corridor splits for a short distance with one branch proceeding directly into the paved parking lot of the wastewater treatment plant to the east and one branch skirting the outside of the plant fence for approximately 75 m (245 ft.) before entering the paved treatment plant and terminating at an intake pipe feeding several large holding tanks (Figure 13).

Eight (8) STPs were excavated in the open, grassy areas approaching the paved waste water treatment plant at 15-m intervals (see Figure 4). All STPs excavated in this area exhibited disturbed soil deposits including mottled fill and compacted gravel. Sterile subsoil was recorded in STP 25 (Figure 14). The ground disturbance was evidently the result of previous construction of the storm water and wastewater delivery infrastructure. Based on these disturbances, there is very low potential for undisturbed archaeological resources to occur in this area.
### Table 1.
**STP Log, CPV Valley Utilities Corridor Project**

<table>
<thead>
<tr>
<th>STP</th>
<th>Total Depth (cm)</th>
<th>Soil Description by Strata</th>
<th>Reason For Termination</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40 cm</td>
<td>0-27 Dk. Y Br, Si Lo w gravel inclusions 27-40 Y Br, Si Cl</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
<tr>
<td>2</td>
<td>30 cm</td>
<td>0-15 Dk. Y Br, Si Lo 15-30 Y Br, Si Cl</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
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<tr>
<td>3</td>
<td>15 cm</td>
<td>0-10 Dk. Y Br, Si Lo 10-15 Y Br, Si Cl w gravel inclusions</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
<tr>
<td>4</td>
<td>30 cm</td>
<td>0-20 Dk. Y Br, Si Lo 20-30 Y Br, Si Cl</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
<tr>
<td>5</td>
<td>33 cm</td>
<td>0-21 Dk. Y Br, Si Lo 23-33 Y Br, Si Cl</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
<tr>
<td>6</td>
<td>40 cm</td>
<td>0-28 Dk. Y Br, Si Lo w gravel inclusions 27-40 Y Br, Si Cl</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
<tr>
<td>7</td>
<td>31 cm</td>
<td>0-31 Dk. Y Br, Si Lo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>48 cm</td>
<td>0-11 Dk. Br, Si Lo 11-17 Y Br, Si Lo</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
</tbody>
</table>

Figure 14. Representative soil profiles along approach to wastewater treatment plant.
<table>
<thead>
<tr>
<th>STP</th>
<th>Total Depth (cm)</th>
<th>Soil Description by Strata</th>
<th>Reason For Termination</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>30 cm</td>
<td>0-20 Dk. Br, Si Lo</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20-30 Y Br, Si Cl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>29 cm</td>
<td>0-19 Dk. Br, Si Lo</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19-29 Y Br, Si Cl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>29 cm</td>
<td>0-12 Dk. Br, Si Lo</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12-29 Dk. Gr Br, Si Cl,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>hydric soils</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>18 cm</td>
<td>0-12 Dk. Br, Si Lo</td>
<td>Impenetrable Gravel Fill</td>
<td>Road Shoulder Disturbance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12-18Y Br, Si Cl w compact gravel at base</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>20 cm</td>
<td>0-10 Dk. Br, Sa Lo w</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60% gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-20 Y. Br. Si mottled w</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B Y, Si Cl w 60% gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>36 cm</td>
<td>0-26 Dk. Br, Sa Lo w</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60% gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>26-36 Y. Br Sa Lo w 60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>gravel inclusions</td>
<td></td>
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</tr>
<tr>
<td>15</td>
<td>28 cm</td>
<td>0-9 Dk. Br, Sa Lo Fill w</td>
<td>Impenetrable Rock</td>
<td>Road Shoulder Disturbance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60% gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9-26 Y. Br, Sa Lo mottled w B Y w 60% gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>w B Y, Si Cl w 60% gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>26-28 P. Br, Sa Lo Fill w 60% gravel inclusions compact gravel at base</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>40 cm</td>
<td>0-17 Dk. Br, Sa Lo Fill w</td>
<td>Impenetrable Rock</td>
<td>Road Shoulder Disturbance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40% gravel inclusions</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>17-40 Y. Br, Sa Lo w 40%</td>
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<tr>
<td></td>
<td></td>
<td>gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>32 cm</td>
<td>0-20 Dk. Br, Sa Lo Fill w</td>
<td>Impenetrable Rock</td>
<td>Road Shoulder Disturbance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50% gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20-32 Y. Br, Sa Lo w 50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>22 cm</td>
<td>0-14 Dk. Br, Sa Lo Fill w</td>
<td>Impenetrable Rock</td>
<td>Road Shoulder Disturbance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30% gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>14-22 Y. Br, Sa Lo Fill w 30% gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>37 cm</td>
<td>0-27 Dk. Br, Sa Lo Fill w</td>
<td>Disturbed road grade</td>
<td>Road Shoulder Disturbance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40% gravel inclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STP</td>
<td>Total Depth (cm)</td>
<td>Soil Description by Strata</td>
<td>Reason For Termination</td>
<td>Interpretation</td>
</tr>
<tr>
<td>-----</td>
<td>------------------</td>
<td>----------------------------</td>
<td>------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>20</td>
<td>17 cm</td>
<td>0-15 Dk. Br, Sa Lo Fill w 40% gravel inclusions 15-17 Y. B, Sa Lo</td>
<td>Impenetrable Rock</td>
<td>Road Shoulder Disturbance</td>
</tr>
<tr>
<td>21</td>
<td>15 cm</td>
<td>0-7 B. Si Lo disturbed Fill w pebble inclusions 7-15 Y. B, mot. w L. Y. Br Si Lo Compact Fill w pebble inclusions</td>
<td>Impenetrable Soil</td>
<td>Road Shoulder Disturbance</td>
</tr>
<tr>
<td>22</td>
<td>15 cm</td>
<td>0-10 B, Si Lo disturbed Fill w pebble inclusions 10-15 Y. B, mot. w L. Y. Br Si Lo disturbed w pebble inclusions</td>
<td>Sterile subsoil</td>
<td>Road Shoulder Disturbance over Natural Soil Deposits</td>
</tr>
<tr>
<td>23</td>
<td>11 cm</td>
<td>0-8 B, Si Lo Fill w pebble inclusions 8-11 Y. Br, mot. w L. Y. Br Si Lo w pebble inclusions</td>
<td>Impenetrable Compact Fill</td>
<td>Road Shoulder Disturbance</td>
</tr>
<tr>
<td>24</td>
<td>14 cm</td>
<td>0-8 B, Si Lo Fill w pebble inclusions 8-11 Y. B, mot. w L. Y. B Si Lo w pebble inclusions</td>
<td>Impenetrable Compact Fill</td>
<td>Road Shoulder Disturbance</td>
</tr>
<tr>
<td>25</td>
<td>45 cm</td>
<td>0-35 Dk. Br, Si Lo Fill w 70% gravel inclusions 35-45 Br. Y Si Low</td>
<td>Sterile Subsoil</td>
<td>Natural Soil Deposits</td>
</tr>
<tr>
<td>26</td>
<td>37 cm</td>
<td>0-37 Dk. Br, Si Lo Fill</td>
<td>Impenetrable Rock</td>
<td>Infrastructure Related Disturbance</td>
</tr>
<tr>
<td>27</td>
<td>10 cm</td>
<td>0-10 Dk. Br., Si Lo Fill w 80% gravel inclusions</td>
<td>Impenetrable Gravel Fill</td>
<td>Infrastructure Related Disturbance</td>
</tr>
<tr>
<td>28</td>
<td>12 cm</td>
<td>0-12 Dk. Br, Si Lo Fill w 80% gravel inclusion</td>
<td>Impenetrable Gravel Fill</td>
<td>Infrastructure Related Disturbance</td>
</tr>
<tr>
<td>29</td>
<td>10 cm</td>
<td>0-10 Y. Br, Si Lo Fill mot. w S. Br, w/ 70% gravel inclusions</td>
<td>Impenetrable Gravel Fill</td>
<td>Infrastructure Related Disturbance</td>
</tr>
<tr>
<td>30</td>
<td>11 cm</td>
<td>0-10 Y. Br, Si Lo Fill mot. w S. Br, w/ 70% gravel inclusions</td>
<td>Impenetrable Gravel Fill</td>
<td>Infrastructure Related Disturbance</td>
</tr>
<tr>
<td>31</td>
<td>10 cm</td>
<td>0-10 Y. Br, Si Lo Fill mot. w S. Br, w/ 70% gravel inclusions</td>
<td>Impenetrable Gravel Fill</td>
<td>Infrastructure Related Disturbance</td>
</tr>
<tr>
<td>STP</td>
<td>Total Depth (cm)</td>
<td>Soil Description by Strata</td>
<td>Reason For Termination</td>
<td>Interpretation</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------</td>
<td>---------------------------</td>
<td>------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>32</td>
<td>14 cm</td>
<td>0-14 Y. Br, Si Lo Fill mot. w S. Br, w/ 70% gravel inclusions</td>
<td>Impenetrable Gravel Fill</td>
<td>Infrastructure Related Disturbance</td>
</tr>
<tr>
<td>33</td>
<td>23 cm</td>
<td>0-13 Dk. Br, Si Lo Fill mot w Dk. Y Br. 13-23 Y. B Compact Si Cl</td>
<td>Sterile Subsoil</td>
<td>Graded Fill Overlying Natural Soil Deposits</td>
</tr>
<tr>
<td>34</td>
<td>20 cm</td>
<td>0-20 Y Br, Si Cl Lo Fill mot w Str. Br</td>
<td>Impenetrable Gravel Fill</td>
<td>Road Shoulder Disturbance</td>
</tr>
<tr>
<td>35</td>
<td>12 cm</td>
<td>0-12 Dk. Y Br, Si Cl Lo Fill w large gravel inclusions</td>
<td>Impenetrable Gravel Fill</td>
<td>Road Shoulder Disturbance</td>
</tr>
</tbody>
</table>

**III. CONCLUSIONS AND RECOMMENDATIONS**

In December 2014, TRC conducted a Phase IB archaeological survey of a proposed utilities corridor associated with the development of the CPV Valley Energy Center Project in the Town of Wawayanda, Orange County, New York. At the request of the OPRHP, the survey was conducted as follow-on work to the overall Project located in the western portion of the Town of Wawayanda. The utilities corridor measures approximately 8,335 linear ft. (2,540 linear m), averages 25 ft in width, and is located along Route 6 and 17M ROW in Wawayanda and Middletown.

The survey consisted of a combination of hand-excavated shovel tests and annotated street-level photography to document existing conditions and disturbance along the proposed utilities. STPs were manually excavated at judgmental locations or at 15-m intervals along a single transect in areas where disturbance was not apparent. All soil deposits were screened through ¼-in hardware cloth. The only undisturbed soils identified during the survey were in an agricultural field in the southwestern portion of the survey area where the utilities corridor extends approximately 9 m (30 ft.) away from the Route 6 road bed. The remainder of the utilities corridor corresponded to areas of previous ground disturbance, including artificial road berms along Route 6, landscaped areas and drainage ditches along Route 17M, or within the paved road beds of Route 6 and Route 17M.

In total, 35 STPs were excavated judgmentally and at 15-m intervals and areas of ground disturbance along the proposed route were photo-documented. Of the 35 STPs excavated, 20 STPS terminated in impenetrable fill. The impenetrable soil deposits encountered in shovel tests excavated along the road shoulders consisted of cut-and-fill material associated with prior utility and road construction. There is very low potential for undisturbed archaeological resources to be present at those locations. In the areas where natural soils were recorded, no cultural material was recovered during the survey and no further archaeological study is recommended.
IV. REFERENCES CITED

New York Archaeological Council (NYAC)

Sara, Timothy and Patrick Walters
2009 Phase I Archaeological Survey of the Proposed CPV Valley Energy Center and Transmission Corridors, Town of Wawayanda, Orange County, New York. TRC Environmental Corporation. Submitted to CPV Valley, LLC. On file at OPRHP.

Sara, Timothy and Patrick Walters
2009 Additional Phase I Survey of the Proposed CPV Valley Energy Center and Transmission Corridors, Town of Wawayanda, Orange County, New York. TRC Environmental Corporation. Submitted to CPV Valley, LLC. On file at OPRHP.
APPENDIX A: ENGINEERING AERIAL DRAWINGS OF CPV VALLEY UTILITIES CORRIDOR DEPICTING LOCATION OF ARCHAEOLOGICAL SURVEY
CPV Valley Energy Center, Wawayanda, New York
ADDENDUM 2 - Phase IB Archaeological Survey of Proposed Utilities Corridor

Drainage Ditch

ARCHAEOLOGY KEY
- Proposed CPV Valley Utilities Corridor
- Negative STP Corridor Located in Paved Road Bed
APPENDIX B: OPRHP CORRESPONDENCE ON CPV VALLEY UTILITIES CORRIDOR
December 13, 2011

Laura Lefebvre, P.E.
Senior Project Manager
TRC-Wannamocoit Mills
650 Suffolk Street
Lowell, MA 01854

Re: DEC/PSC
CPV Valley Power Plant
Revised Route alternatives
Wawayanda, Orange County
07PR06587

Dear Ms. Lefebvre:

Thank you for requesting the comment of the Field Services Bureau of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law). These comments are those of the Field Services Bureau and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon our review of the recently submitted information regarding possible alternative routes, we offer the following comments:

1. OPRHP concurs that there are no concerns for the newly proposed building;

2. OPRHP concurs that the northern portion of alternative 2 from Dolsortown Road to the Sewage treatment plant has already been considered as part of a previous project, so we have no concerns.

3. OPRHP can not concur at this point that alternative routes which run along several roads are already disturbed since they fall within those road Right of Ways. Two factors lead to this conclusion. First, just because an area is considered Right of Way does not mean that it has been previously disturbed. Second, even for Right of Way areas where the surface appears to have been modified, this does not mean that the full depth of potential impact area which may have contained cultural deposits has been modified. Therefore, OPRHP request that you provide more detailed information along these corridors. This information should document the existing conditions and how they were created. Assess the potential for intact deposits to remain along the length of the corridor and include details on the depth of proposed construction to compare against the documented extent.
of disturbance. For any areas where the full depth of disturbance can not be verified, OPRHP is likely to recommend Stage 1B testing to help verify disturbance (use or increased testing interval could be appropriate) or to test those areas where significant disturbance levels are not indicated.

Please address the issues identified in comment 3 and provide the results for our review.

Please contact me at extension 3291, or by e-mail at douglas.mackey@parks.ny.gov, if you have any questions regarding these comments.

Sincerely,

Douglas P. Mackey
Historic Preservation Program Analyst
Archaeology
January 9, 2012

Mr. Douglas P. Mackey  
Historic Preservation Analyst  
Historic Preservation Field Services Bureau  
New York State Office of Parks, Recreation and Historic Preservation  
Peebles Island  
PO Box 189  
Waterford, New York 12188-0189

RE: Project Review No. 07PR06587, Proposed CPV Valley Energy Center, Wawayanda, Orange County, New York

Dear Mr. Mackey:

We are writing in response to your letter dated December 13, 2011 which provided comments of the Field Services Bureau Office of Parks, Recreation and Historic Preservation (OPRHP) with respect to information submitted in our November 4, 2011 letter describing refinements in the CPV Valley project.

First, thank you for your concurrence that no further historical or archeological review is necessary with respect to the new building adjacent to the Marcy South line or with respect to the northern portion of water supply/return line Alternative 2 from Dolsontown Road to the Middletown Sewage Treatment Plant.

Second, in response to your comments with respect to the other portions of the water supply/return alternative routes, CPV Valley is willing to commit to provide additional information and to carry out a supplemental cultural resources investigation of the routing options (or if selected the preferred alternative) along the route 17M right-of-way and Dolsontown Road right-of-way. The objective will be to ascertain the extent of previous ground disturbance in the areas proposed to be utilized for the routing alternatives to determine whether installation of the water line has the potential to impact archeological resources. The work will consist of a pedestrian walk-over of each route alternative, collection of street-view photographs to document disturbance along the routes, and, in areas where disturbance is not apparent, judgmental manual shovel tests to document soil profiles. The work will be conducted by a two-person team of archeologists. Field observations will be reported in a letter to OPRHP, and will include annotated figures and photographs documenting conditions and showing the disturbance. Available mapping of existing conditions will also be provided. CPV Valley would complete this supplemental investigation prior to commencing construction of the water lines.
In addition, CPV Valley would be willing to accept a condition in any freshwater wetlands and/or stream disturbance permits issued by the New York State Department of Environmental Conservation (NYSDEC) with respect to the project water lines and other interconnections requiring completion of the supplemental program described above, and OPRHP’s review and approval of the investigation report, prior to commencement of construction.

On behalf of CPV Valley, please advise as to whether OPRHP agrees that conduct of the supplemental investigation, and inclusion of the type of permit condition described above will adequately resolve your comment. Your concurrence letter will be provided to Chris Hogan of NYSDEC. Please feel free to contact me at (978) 656-3517 or L.Lefebvre@tresolutions.com if you have any questions or need any additional information. Thank you for your cooperation.

Sincerely yours,

[Signature]

Laura Lefebvre, PE
Senior Project Manager

cc: Steve Remillard
    Mike Bruno
New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643 www.nysparks.com

February 1, 2012

Laura Lefebvre, P.E.
Senior Project Manager
TRC-Wannamunet Mills
650 Suffolk Street
Lowell, MA 01854

Re: DEC/PSC
CPV Valley Power Plant
Revised Route alternatives
Wawayanda, Orange County
07PR06597

Dear Ms. Lefebvre:

Thank you for requesting the comment of the Field Services Bureau of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law). These comments are those of the Field Services Bureau and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

We have received and reviewed your recent submission of January 9th, 2012, in which you have identified potential revisions to the route of the project and committed to archaeological testing of whichever alternative is eventually chosen prior to construction of the water line.

OPRHP has no objections to your proposal, or to the SEQRA process being allowed to proceed with the understanding that such testing in advance of any actual construction be made a condition of any SEQRA finding or DEC permit.

Please contact me at extension 3291, or by e-mail at douglas.mackey@parks.ny.gov, if you have any questions regarding these comments.

Sincerely,

Douglas P. Mackey
Historic Preservation Program Analyst
Archaeology

CC: Chris Hogan, DEC
Town of Wawayanda

An Equal Opportunity/Affirmative Action Agency

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