

Ticonderoga Chilson Water Transmission Main
Facility Hazard Mitigation Relocation Project

Appendix E

Cultural Resources Consultations and Studies

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island Resource Center, PO Box 189, Waterford, NY 12188-0189

FEMA PROJECT REVIEW COVER FORM

Please complete this form and attach it to the top of any **and all information submitted to this office** for review.
Accurate and complete forms will assist this office in the timely processing and response to your request.

PROJECT NUMBER **PR** (only if a project was previously submitted)

This is a new project (If checked, complete **ALL** the following)

Project Name: **Chilson Water Transmission Main Relocation (43.86023, -73.46908)**
 North of County Highway 48 and South of Chilson Middle Road

City/Town/Village: **Town of Ticonderoga (MCD 03115)**
County: **Essex County**

TYPE OF REVIEW REQUIRED/REQUESTED
This Project at a minimum is using federal funds (FEMA) AND state funds (New York State Emergency Management Office)

FEMA CONTACT FOR PROJECT

Name: Daria E. Merwin
Phone: 571-408-3144

Title: Historic Preservation Specialist
Fax: 518-464-6591

E-Mail address: Daria.Merwin@fema.dhs.gov

Send Correspondence to:
FEMA 4020-DR-NY
Donna Bolognino
EHP Team Lead
968 Albany Shaker Road
Latham, New York 12110-6401

With copy furnish to:
Mr. Rick Lord
Chief of Mitigation Programs
New York State Office of Emergency Management
1220 Washington Avenue, Building 22
Albany, New York 12226-2251

URGENCY OF REVIEW: **Immediate** (3 days) **Expedited** (14 days) **Regular** (30 days)
Comments:

FEMA Disaster Number: 4020-DR-NY
PW #06009

SIGNATURE: *Daria E. Merwin*
Daria E. Merwin, Historic Preservation Specialist, for
Megan Jadrosich, Regional Environmental Officer

DATE: August 16, 2012

4020-DR-NY
PW 06009, Ticonderoga Water Line

PW 06009 – Chilson Water Transmission Main, Ticonderoga, Essex County

Location and Resource:	Chilson Water Transmission Main located north of County Highway 48 and south of Chilson Middle Road (43.86023, -73.46908) in the Town of Ticonderoga (MCD 03115), Essex County (Figures 1-6).
Cause of Failure:	Heavy rains and flooding associated with Hurricane Irene resulted in damages to the underground Chilson water transmission main, a 12 inch diameter cast iron pipe likely installed in the 1890s to convey water from the Chilson Reservoir to the Town of Ticonderoga.
Description of Damage:	The damaged section of water line is located along and under Chilson Brook. During the storm, stream bank erosion and sediment movement impacted approximately 130 feet of the buried water line, leaving it within proper burial depth, exposing it in some locations, and breaking it in two places (43.86023, -73.46908 and 43.86038,-73.46868).
Undertaking:	The owner of the Chilson Water Transmission Main, the Town of Ticonderoga, made temporary repairs to the broken pipe sections (Figure 3), and is seeking to relocate the line out of Chilson Brook. Emergency temporary repairs to the two water main breaks were made using C-900 plastic pipe and Hymax couplers in order to restore water supply to affected Town residents until permanent repairs can be made. Under the proposed work scope, the water line will be relocated away from Chilson Brook in order to prevent future damages from a similar storm event. The western terminus of the new 12 inch ductile iron pipe (like the existing line) will be the Chilson Reservoir just north of County Highway 48. It will run to the north, with 326 feet of directional drilling under Chilson Brook, to the south side of Chilson Middle Road. From that point it will continue eastward with traditional trenching, following the south side of New York State Route 74 until the eastern terminus at the existing main where it crosses the highway (5,342 feet) (Figure 4).
APE:	The APE for relocation of the water line consists of 5,668 feet of new trench and pipe (326 of directional drilling under Chilson Brook, and 5,342 feet from the reservoir north to Chilson Middle Road then east along the south side of New York State Route 74) (Figure 4).
Archeology:	A review of SHPO records on August 13, 2012 indicated that the part of the APE is within an area of known archeological sensitivity (Figure 5). The files of the SHPO and NYS Museum indicate that the closest reported site to the western terminus of the APE is the historic Ives Lead Mine (SHPO 03115.000009), located roughly 2,700 feet to the northwest. In addition, there are one historic period (SHPO 03115.000010, the Arthur Lead Mine) and three prehistoric sites (SHPO 03115.000023, .000024, and .000025, TIP Loci 1-3), 750 to 2,400 feet north of the eastern terminus.
Standing Structures:	A review of SHPO records on August 13, 2012 indicated that the APE is not within or adjacent to any listed National Register properties (Figure 5). There do not appear to be any standing or map documented structures within or immediately adjacent to the APE on the 1876 <i>New Topographical</i>

4020-DR-NY
PW 06009, Ticonderoga Water Line

Atlas of Essex County, but the reservoir structure and possibly the extant house near the eastern terminus of the APE (south side of New York State Route 74) are illustrated on the 1902 topographic map of *Ticonderoga, New York* (Figure 7).

Findings: Emergency repairs were done in an area of previous soil disturbance, thus resulting in “no historic properties affected.” However, relocation of the water line away from Chilson Brook does have the potential to affect archeological resources. FEMA finds that the proposal to relocate the water line (approximately 5,342 feet from Chilson Brook to the south side of Chilson Middle Road then east along the south side of New York State Route 74) has “no adverse effect on historic properties” with the following condition: a Phase I (IA and IB) survey is to be conducted prior to any construction activity by a qualified professional archeologist following the guidelines and standards given by the New York State Office of Parks, Recreation, and Historic Preservation (<http://nysparks.com/shpo/environmental-review/documents/PhaseIReportStandards.pdf>).

Prepared by: Daria E. Merwin, FEMA Historic Preservation Specialist

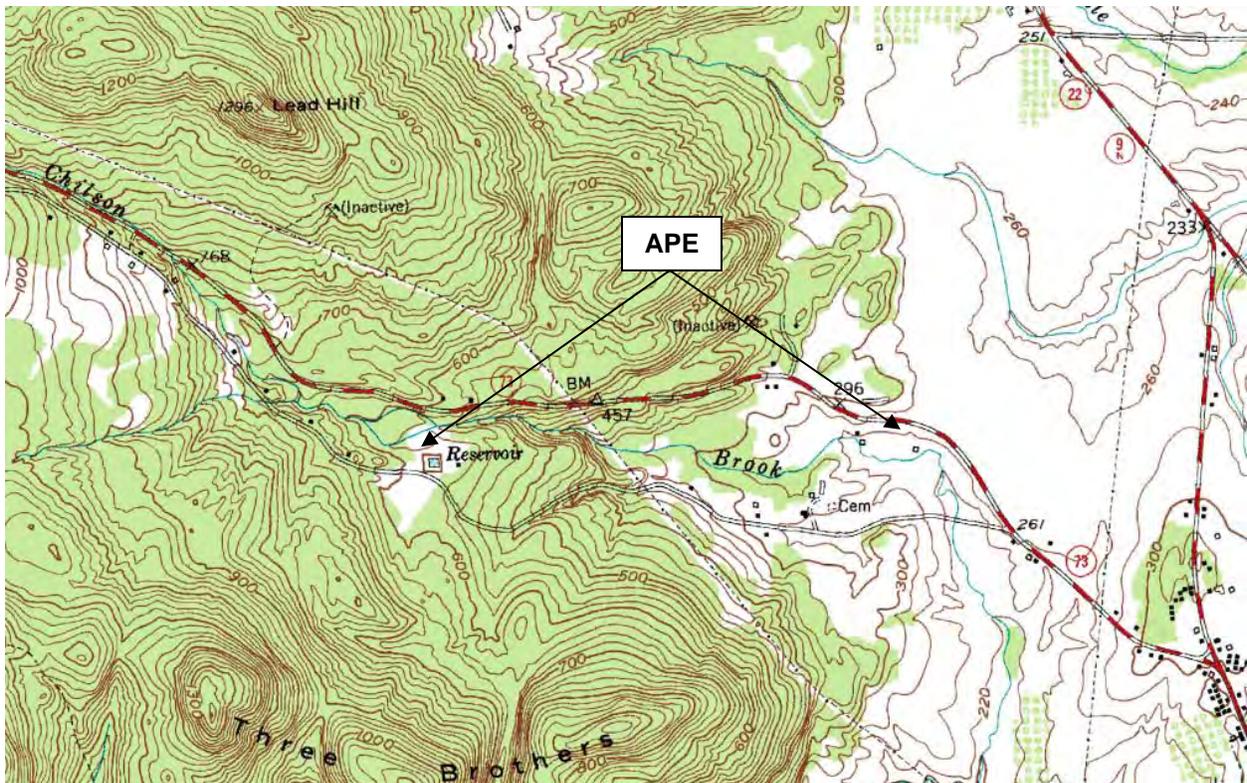


Figure 1. 1950 topographic map of *Ticonderoga, N.Y.-V.T.* (7.5 minute series).

4020-DR-NY
PW 06009, Ticonderoga Water Line



Figure 2. October 2011 aerial view of the APE, water line adjacent to Chilson Brook south of New York State Route 74.

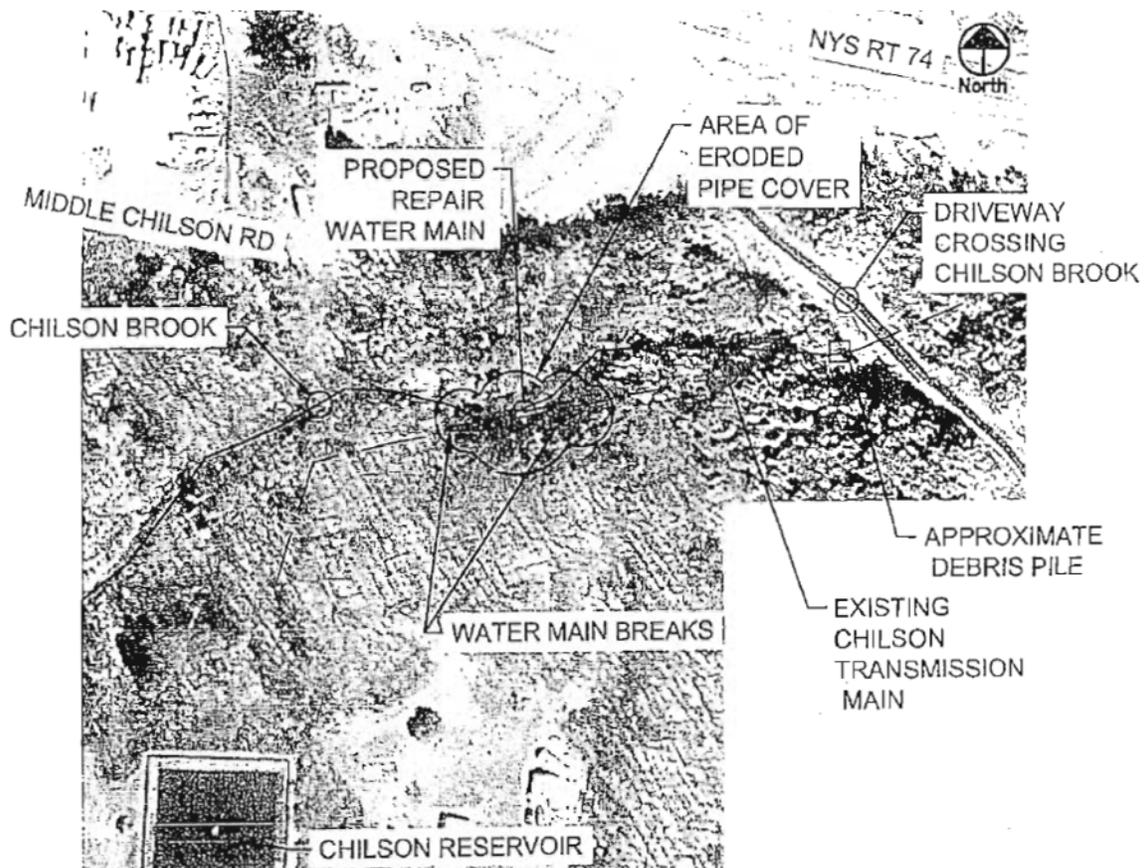


Figure 3. Chilson water main: break location and replacement on the same alignment.

4020-DR-NY
PW 06009, Ticonderoga Water Line

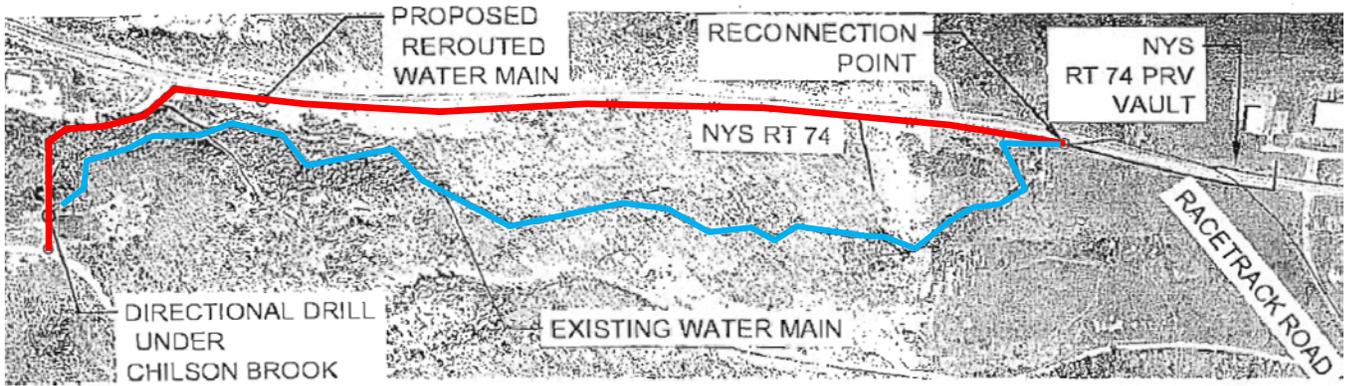


Figure 4. Chilson water main: proposed relocation (blue=existing, red=proposed).

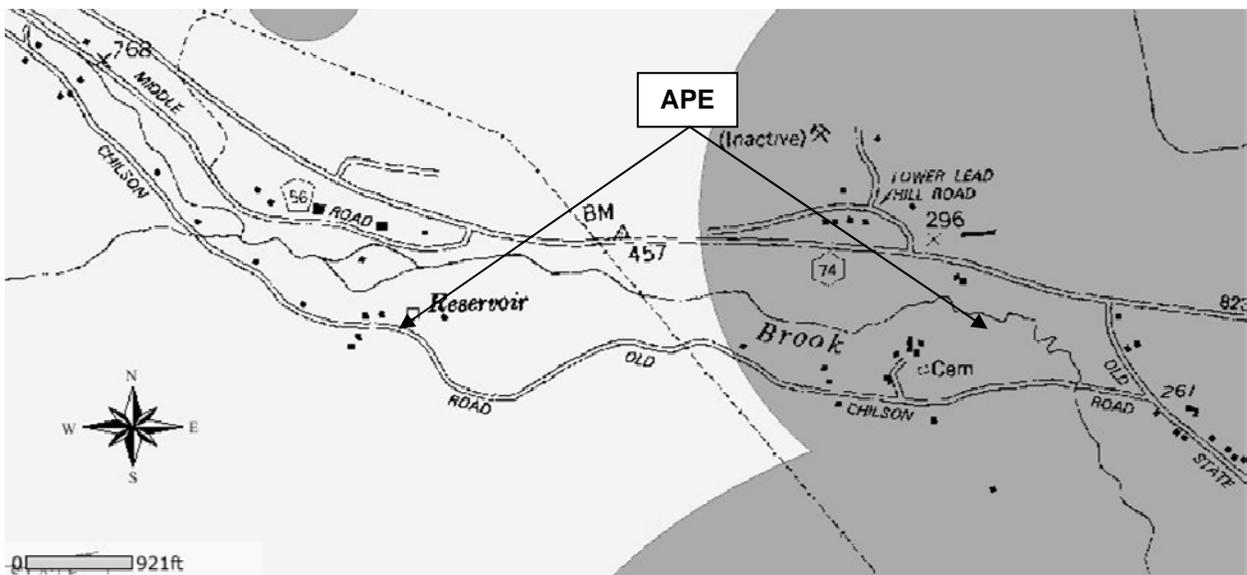


Figure 5. Archeological Sensitivity Area (gray circles); note there are no National Register listed properties in the vicinity (online SHPO GIS database, accessed August 13, 2012).

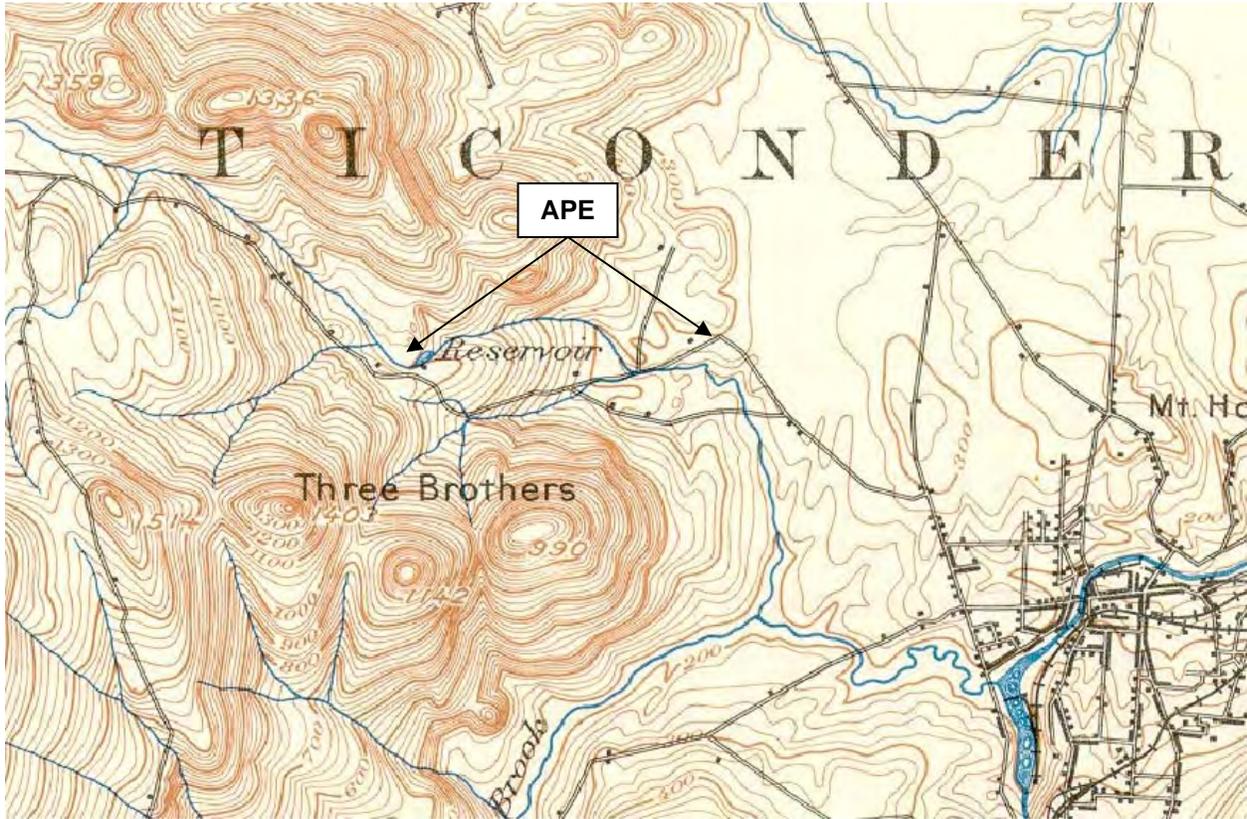


Figure 6. 1902 topographic map of *Ticonderoga, New York* (15 minute series)



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

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

August 23, 2012

Donna Bolognino
FEMA-Dept. of Homeland Security
10 Jupiter Lane
Albany, New York 12204
(via e-mail only)

Re: FEMA, SOEM
Emergency Mitigation/31 Projects
12PR03581

Dear Ms. Bolognino:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the projects in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO 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 projects. Such impacts must be considered as part of the environmental review of the projects pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

I have reviewed the materials submitted for each of these undertakings and our findings are attached. Our determinations are based on the submitted scopes of work for each undertaking.

If I can be of any further assistance do not hesitate to contact me at (518) 237-8643, ext. 3263.

Sincerely,

John A. Bonafide
Director, Bureau of Technical
Preservation Services

cc: Richard Lord, SOEM *(via e-mail)*
enc: Findings (2 pages)

Findings Attachment

PW #	Street/Vic	MCD	County	FEMA Finding	NYSHPO Finding
NY DR 4020 Project Worksheets					
06009	south of New York State Route 24	Town of Ticonderoga	Essex	No adverse effects to historic properties w/condition (archeological survey)	Concur
06447	Winston Lane near Arden Drive	Town of Philipstown	Putnam	No historic properties affected	Concur
08030	Glen Island Park	City of New Rochelle	Westchester	No adverse effects to historic properties	Concur
08236	300 Main St, Town Hall Repairs	Village of Schoharie	Schoharie	No historic properties affected	Concur
08279	Catskill Mountain RR MP 21.3, Catskill Railroad Bridge	Town of Olive	Ulster	No adverse effects to historic properties	Not NRE-No historic property affected
08306	Bonnie View Avenue and Mill Street over Alton Creek	Town of Shandaken	Ulster	No historic properties affected	Concur
08472	125 N. Ferry St, Schenectady Pump Station	City of Schenectady	Schenectady	adverse effect to historic properties	*No Adverse Effect w/Conditons
08505	Cole Hollow Road	Town of Blenheim	Schoharie	No adverse effects to historic properties w/condition (archeological survey)	Concur
08780	Delaware Ave, Peebles Island Roads	City of Cohoes	Albany	No adverse effects to historic properties	Concur
08807	Intersection of Ford Hill & Wright Rds, Jewett Culvert	Town of Jewett	Greene	No historic properties affected	Concur
08871	360 Shore Road, Cornwall WWTP	Town of Cornwall	Orange	No historic properties affected	Concur
07109	Gilboa Dam	Town of Gilboa	Schoharie	No Adverse Effect to Historic Properties	See 07PR02067
07349	Gilboa Dam	Town of Gilboa	Schoharie	No Adverse Effect to Historic Properties	See 07PR02067
08334	Hofstra University	Hempstead	Nassau	No Adverse Effect to Historic Properties	Concur
08360	Moffat Library	Blooming Grove	Orange	No Adverse Effect to Historic Properties	Concur
08440	Lasell Hall/DAR Building	Schoharie	Schoharie	No Adverse Effect to Historic Properties	See 12PR02812
08569	Friedburg Community Center	Long Beach	Nassau	No Adverse Effect to Historic Properties	Concur
08616	Black Brook water pipe realignment	Black Brook	Clinton	No Adverse Effect to Historic Properties	Concur
08730	SUNY Oneonta Biological Field Station, 5838 State Highway 80	Town of Otsego	Otsego	No Adverse Effect to Historic Properties	Concur
08797	Mill Road over Clove Creek	Town of Phillipstown	Putnam	No historic properties affected	Concur

08819	Dearborn Ave. Sea Wall	Town of Rye	Westchester	No Adverse Effect to Historic Properties	Concur
08853	Grafton Lakes State Park, Dunham Dam Spillway	Town of Grafton	Rensselaer	No Adverse Effect to Historic Properties	Concur
08860	St. Anthony's Community Hospital roof repairs	Warwick	Orange	No Adverse Effect to Historic Properties	Concur
08883	Metro North RR, Metro North RR Repairs	Various Towns	Orange + Rockland	No Adverse Effect to Historic Properties	Concur
08884	Lasell Hall/DAR Building	Schoharie	Schoharie	No Adverse Effect to Historic Properties	See 12PR02812
08967	Awosting Falls Carriage Road washout	Minnewaska State Park and Preserve, Rochester	Ulster	No historic properties affected	Concur
NY DR 4031 Project Worksheets					
02309	Foster Valley Road bridge	Town of Owego	Tioga	No historic properties affected	Concur
02494	16 Church Street	Village of Owego	Tioga	No Adverse Effect to Historic Properties	Concur
02442	D&H Canal County Park, 58 Hoag Rd	Town of Deerpark	Orange	No adverse effects to historic properties	Concur
02467	56 Main Street	Village of Owego	Tioga	No adverse effects to historic properties	Concur
02534	Glen Aubrey Fire Hall	Glen Aubrey	Broome	No historic properties affected	Concur

***08472 - 125 N. Ferry St, Schenectady Pump Station, Schenectady, Schenectady County**

The proposed four foot encircling wall should be capped, stuccoed and painted to match the existing historic building. Mature landscaping (similar to the scale of what is in place now) should be reinstalled on the street façade to limit the visibility of the new partial wall.



FEMA

October 18, 2013

Arnold Printup, Jr.
Tribal Historic Preservation Officer
St. Regis Mohawk Tribe
412 State Route 37
Akwesasne, NY 13655
arnold.printup@srmt-nsn.gov –Electronic transmission only

Re: Federal Emergency Management Agency
Section 106 Consultation
Town of Ticonderoga, Chilson Water Transmission Main
From Chilson Reservoir to the southside of NYS Route 74 (new site)
Under the Chilson Brook south of NYS Route 74 (original site)
Town of Ticonderoga, Essex County, NY 12883
FEMA-4020-DR-NY, Project # PA-02-NY-4020-06009

Dear Mr. Printup, Jr.

The Federal Emergency Management Agency (FEMA) proposes to provide grant funding to the Town of Ticonderoga (Subgrantee), for the construction of a new underground water transmission main line from Chilson Reservoir (253 Old Chilson Road) along the southside of NYS Route 74 from Middle Chilson Road to Racetrack Road, Town of Ticonderoga, Essex County, NY 12883. This project will require ground disturbance in an archaeological sensitive area. In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470f), and its implementing regulation, 36 CFR 800, and as authorized by the U.S. Department of Homeland Security – FEMA, we are initiating consultation with you the Tribal Historic Preservation Officer, and Chief Randy Hart of the St. Regis Mohawk Tribe, regarding the proposed construction of the new water transmission main for the Town of Ticonderoga.

The Chilson Water Transmission Main, located under Chilson Brook south of NYS Route 74, between Middle Chilson Road to Racetrack Road, received damage when the brook flooded, removed the soil, exposed the transmission line, and debris broke the 1890's 12-inch cast iron line in two places during the incident period of August 26, 2011 to September 5, 2011. Extensive damage to the transmission line caused temporary disruption of service and allowed sand, gravel, and stones to enter the water main. This transmission main provides potable water from the Chilson Reservoir to 1,700 consumers in the Ticonderoga area. The Town of Ticonderoga initiated emergency repairs to temporarily remedy the problem and return water service to consumers. However, other problems emerged as water services were restored; water washed gravel and stones down the main caused new damage and storm debris deposited over a

section of the main making future access to the main for repairs difficult to reach without causing further damage. The damage to the transmission line was so extensive that replacement and relocation of the main has been determined to be more cost-effective than in-kind repairs under Chilson Brook. Permanent repairs to the main in the existing location have been ruled-out due repetitive damage from past flooding events. The Town of Ticonderoga proposes to relocate and construct a new water transmission main at a new location in order to prevent future damages from a similar event (Figures 1 and 2).

Area of Potential Effect:

The project would be located in the Town of Ticonderoga and re-route the existing iron water main away from the stream channel of Chilson Brook. The western terminus of the new 12-inch ductile iron pipe (like the existing line) will be the Chilson Reservoir site at 253 Old Chilson Road. It will run to the north, with 326 feet of directional drilling under Chilson Brook, to the south side of Chilson Middle Road. The Subgrantee owns the property where this section of the work would be conducted. From that point it will continue eastward with traditional trenching, following the south side of NYS Route 74 until reaching the eastern terminus at the existing main where it crosses the highway (5,342 feet) near Racetrack Road. This section where the work would be conducted is located in the New York State Department of Transportation (NYSDOT) roadway right-of-way.

Thus, the area of potential affect (APE) for relocation of the water line consists of 5,668 feet of new trench and pipe (326 of directional drilling under Chilson Brook, and 5,342 feet from the reservoir north to Chilson Middle Road then east along the south side of NYS Route 74). Per the Subgrantee, the existing damaged main would be buried in place and rendered safe and secure. No previous archeological work has been conducted in this area by FEMA for any past projects.

Description of Undertaking:

Work at Chilson Reservoir (253 Old Chilson Road):

- Directional bore 326 feet under Chilson Brook
- Install 12-inch nominal diameter Special Thickness Class 56 D.I. pipe with mechanical joints, coated & wrapped for corrosion protection in accord with code & standards in excavated trench and bore hole

Work along Middle Chilson Road and NYS Route 74 (NYSDOT right-of-way):

- Excavate trench for installation of 5,342 feet of 12-inch water main
- Furnish, place, and compact granular bedding under the pipe and granular backfill to the top of the pipe
- Install 5,342 feet of 12-inch nominal diameter Special Thickness Class 56 D.I. pipe with mechanical joints, coated & wrapped for corrosion protection in accord with code & standards
- Join new pipe to existing main at each end of the 5,342-foot section with expansion-contraction couplers
- Backfill remainder of trench with local native granular materials, selectively placing sand and gravel in a minimum one (1) foot thick layer over the pipe, then a mix of sand, gravel, and cobbles, capped in the upper two (2) feet with cobbles and boulders
- Test water main and backfill

FEMA initiated consultation with the New York State Office of Parks, Recreation and Historic Preservation – Historic Preservation Field Services Bureau (SHPO) on July 23, 2012. SHPO concurred with the finding of “no historic properties affected” with the following condition: A Phase I A and B Archeological Survey must be conducted for the presence of archaeological materials at the Ticonderoga Chilson proposed Mitigation Sites. Enclosed are copies of FEMA’s initial consultation and SHPO response letter (12PR03581).

The Subgrantee hired a consultant to work on the required Phase I A and B Archeological Survey. The Subgrantee has begun the Phase IA research component. To FEMA’s knowledge, the Subgrantee has not begun the shovel test pit component associated with Phase IB.

If you are aware of any significant prehistoric/historic archaeological resources that may be affected by this project, or have any information regarding the project area, please respond within 30 days or sooner of date of this letter. Please also indicate in your correspondence if there are other sources of information that should be checked, and if there are other parties, tribes, or members of the public you believe should be included in the consultation process. Please respond in writing or email to us (to either email addresses listed below). FEMA’s Region II mailing address is:

Dr. Kelly M. Britt
U.S. Department of Homeland Security/FEMA
26 Federal Plaza, 13th Floor
New York, NY 10278-0002

It is requested that the enclosed information be regarded as secure information and not be released to any external parties without prior consultation with FEMA. We look forward to your comments within 30 days of date of this letter. If you have any questions please contact me at 212-680-8816 or via email at Kelly.Britt@fema.dhs.gov, or Donna Bolognino, who is working directly on this project, at 518-396-3843 or via email at Donna.Bolognino@fema.dhs.gov

Sincerely,



for
Dr. Kelly Britt
Archaeologist

Enclosures:
Figures 1 and 2
Consultation to SHPO

cc Chief Hart

Town of Ticonderoga, Essex County New York: Chilson Water Transmission Main Figures 1 and 2

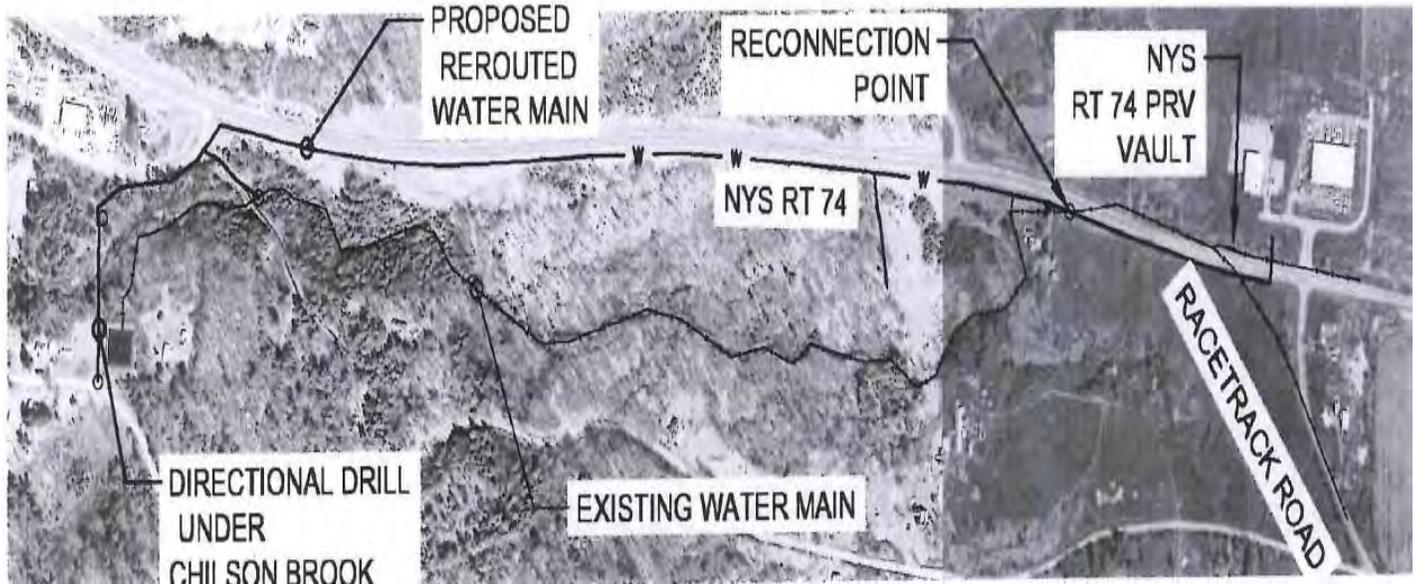


Figure 1: Location of the existing Chilson Brook water main line near Ticonderoga, along Chilson Brook between 253 Old Chilson Road and NYS Route 74. The Subgrantee provided the design plan where they would like to directional drill (bore) under Chilson Brook to place new water lines. The potential area of disturbance would include occur between 253 Old Chilson Road and Chilson Middle Road and along the NYS Route 74 (in the NYSDOT right-of-ways).

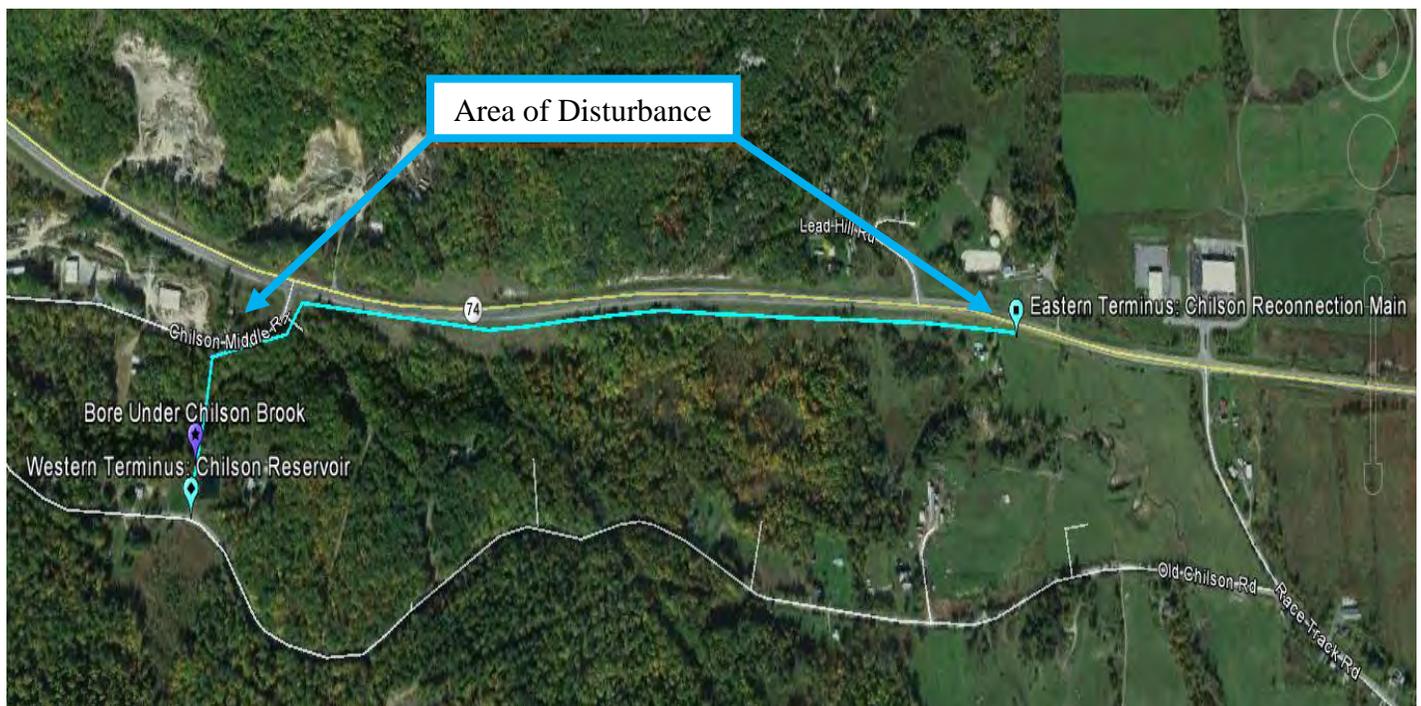


Figure 2: The blue line indicate where the proposed water main line would be located and potential area of disturbance. The main line would begin at Chilson Reservoir, go north parallel to an existing power line corridor to Chilson Middle Road, east along the NYSDOT right-of-way to NYS Route 74, and continue east on NYS Route 74 following the right-of-way to reconnection point near Race Track Road.

**Phase I Cultural Resources Survey
Chilson Road Water System Improvements
Town of Ticonderoga, Essex County
New York**

prepared for

AES Northeast, PLLC
Plattsburgh, New York



prepared by

Andrew T. Black

Black Drake Consulting
1188 Route 9B
Champlain, New York 12919

June 2012

BLACK DRAKE REPORT No. 319

Phase I Cultural Resources Survey, Chilson Road Water System Improvements Town of Ticonderoga, Essex County, New York

Prepared for

AES Northeast, PLLC
Plattsburgh, New York

Prepared by

Andrew T. Black

Black Drake Consulting
1188 Route 9B
Champlain, New York 12919

June, 2012

Management Summary

SHPO Project Review Number:

Involved State and Federal Agencies (DEC, CORPS, FHWA, etc.): DEC, Health Dept.

Phase of Survey: Phase I

Location Information:

Location: Old Chilson Rd, Chilson Middle Road, NYS Route 74
Minor Civil Division: 03115
County: Essex

Survey Area (Metric and English)

Length: ~ 2,300 m / 7,500 ft (plus 3.5 acres)
Width: 3 m / 10 ft
Depth:
Number of Acres Surveyed: ~ 5
Number of Square Meters and Feet Excavated (Phase II and III only): n/a
Percentage of Site Excavated (Phase II and III only):

USGS 7.5 Minute Quadrangle Map: Ticonderoga

Archaeological Survey Overview

Number and Interval of Shovel Tests: 38 @ 15 and 30 m (depending on disturbance)
Number and Size of Units: 0
Width of Plowed Strips: n/a
Surface Survey Transect Interval:

Results of Archaeological Survey

Number and name of prehistoric sites identified: 0
Number and name of historic sites identified: 0
Number and name of sites recommended for Phase II/Avoidance: 0

Results of Architectural Survey

Number of buildings/structures/cemeteries within project area: 1 (modern)
Number of buildings/structures/cemeteries adjacent to project area: 0
Number of previously determined NR listed or eligible buildings/structures/cemeteries/districts: 0
Number of identified eligible buildings/structures/cemeteries/districts: 0

Report Author(s): Andrew T. Black

Date of Report: June 2012

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Introduction

Black Drake Consulting was contracted by AES Northeast, PLLC to conduct a Phase I cultural resources survey for proposed improvements to the Chilson Road Ticonderoga Water system. The overview had been requested to assess the potential that significant cultural resources may be located within the project area. The investigation was performed in compliance with 63 CFR Part 800 of the Federal Code, and Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law.

The project runs from the current reservoir on Old Chilson Road to Chilson Middle Road, then along NYS Route 74 to the intersection with Race Track Road (Figures 1 and 2). The proposed project will include installation of new water mains (Figures 3-8). In addition, the area around the existing reservoir was surveyed. A second parcel off of Chilson Middle Road was also surveyed. The area of proposed development will impact approximately 7,500 linear feet.

Background research was conducted to assess the potential for prehistoric and historic resources on the parcel (see Part I: Documentary Research). Field investigations were conducted by the principal investigator and crew members to identify any cultural deposits in the project area (see Part II: Field Reconnaissance).

Part I: Documentary Research

Documentary sources and collections were consulted to gain an overview of the prehistory, history, and environmental setting of the project area and surrounding region. A search was also conducted to locate known archaeological sites, historic structures, and National Register properties within two miles of the project area. Sources of information that were consulted included:

- Office of Parks, Recreation and Historic Preservation (OPRHP) site files and survey reports
- New York State Museum site files (copies at OPRHP)
- National Register of Historic Places
- New York State Museum Archives and Special Collections
- Feinberg Library, SUNY Plattsburgh
- Plattsburgh City Library
- NYS GIS Data Depot (on line)
- University of New Hampshire online archives

Specific documentary references that were consulted are listed in the References Cited.

Environmental Setting

Ticonderoga lies on the western shore of Lakes Champlain and George at the eastern edge of the Adirondack Mountains, in the Champlain lowlands physiographic zone. The eastern portion of the town is characterized by a gently rolling lacustrine plain; towards the west the land rises steeply into the Adirondack mountains (Cressy 1977). The project is located at the eastern edge of the Adirondack foothills with relatively steep topography. The project crosses Chilson Brook. Elevations within the project ranges from about 260-810 feet above sea level.

Soils

Five soils have been mapped within the project; these range from the loamy sands of the Windsor group to very gravelly Chatfield-Hollis complex to the clay and silty clay of Covington, Kingsbury and Vergennes soils. None of the soils appear to have deeply buried topsoil deposits. In sandy soils such as the Windsor loamy sand, artifacts may end up being displaced downward into the subsoil through bioturbation (Van Nest 2002). In some areas we have found prehistoric artifacts displaced up to 40 cm (about 16 inches) below the topsoil/plowzone. When such soils are

encountered it is appropriate to test deeper than normal in order to find any artifacts that have been vertically displaced. However, in our investigations the areas mapped as Windsor loamy sand proved to be more gravelly than described.

Table 1. Soils Within Project Area (NRCS 2008)					
Name	Soil Horizon Depth cm (in)	Texture, Inclusions	Slope %	Drainage	Landform
CoD—Chatfield-Hollis complex	0-18 (0-7) Topsoil 18-48 (7-19) Subsoil 48-69 (19-27) Subsoil 69-81 (27-32) Subsoil 81-183 (32-72) Subsoil	Gravelly fine sandy loam Gravelly fine sandy loam Fine sandy loam Fine sandy loam Unweathered bedrock	15-35 %	Well drained	Hills
CvA—Covington clay	0-23 (0-9) Topsoil 23-48 (9-19) Subsoil 48-61 (19-24) Subsoil 61-91 (24-36) Subsoil 91-183 (36-72) Subsoil	Clay Clay Clay Clay Clay	0-3%	Poorly drained	Lake plains
KyA— Kingsbury silty clay loam	0-23 (0-9) Topsoil 23-36 (9-14) Subsoil 36-53 (14-21) Subsoil 53-86 (21-34) Subsoil 86-165 (34-65) Subsoil 165-236 (65-93) Subsoil	Silty clay loam Clay Clay Silty clay Clay Silty clay	0-3 %	Somewhat poorly drained	Lake Plains
VeB, VeC — Vergennes silty clay loam	0-20 (0-8) Topsoil 20-25 (8-10) Subsoil 25-56 (10-22) Subsoil 56-74 (22-29) Subsoil 74-94 (29-37) Subsoil 94-114 (37-45) Subsoil 114-183 (45-72) Subsoil	Silty clay loam Clay Clay Silty clay Silty clay Silty clay Silty clay	3-15 %	Moderately well drained	Lake plains
WnB, WnC, WnE— Windsor loamy sand	0-25 (0-10) Topsoil 25-36 (10-14) Subsoil 36-48 (14-19) Subsoil 48-61 (19-24) Subsoil 61-183 (24-72) Subsoil	Loamy sand Loamy sand Sand Sand Sand	3-45 %	Excessively drained	Deltas

Note: The NRCS online soil descriptions do not include a color.

Current/Past Land Use

The southern portion of the project has been used for a reservoir and utilities since the later half of the 20th century. Prior to this, this land appears to have been undeveloped.

The portion of NYS Route 74 along the current project was constructed in the 1970s. Construction of the road included deep grading and re-contouring the land along a very wide corridor. The road erased portions of Chilson Middle Road and Race Track Road (Old State Road).

Previous Surveys

Eight cultural resources surveys have been conducted within a mile of the project area (Table 2). The survey for the industrial park identified several small prehistoric lithic scatters and an isolated chert flake was found on the Crammond Farm. Other surveys in the area have not identified archaeological resources, however the greater area around Ticonderoga is known for many prehistoric sites, as well as historic sites related to various military campaigns.

Table 2: Previous Cultural Resource Surveys Within Two Miles of Project Area.

Project Name	Reference	No. of sites identified
Crammond Farm Project	Black 1998	0
Sears Dealership Store	Curtin 1997	0
Glens Falls National Bank	Hartgen 1998	0
Murray Subdivision	Black 2000	0
Pinnacle Street Sewer Expansion	Moyer 2005	0
Ticonderoga Industrial Park	Collamer 1993, Hartgen 1994	3
Ticonderoga Commerce park	Hartgen 1999a, 1999b	0
Route 9N, Wicker St. Road Reconstruction	Collamer 1995	0

Prehistoric And Historic Background

Prehistoric archaeological sites of all time periods, from Paleo-Indian times (circa 10,000 years ago) to the contact period with Euro-Americans (1600's) have been recorded in Essex County. Many of the prehistoric sites are adjacent to larger rivers or to lakes (Ritchie 1994; Ritchie and Funk 1973; Snow 1980).

The history of Ticonderoga began in 1609 when on July 29th, Samuel de Champlain battled against the Iroquois Indians on the land that is now known as Ticonderoga. Later, the spot was chosen by the French military engineer Michael Chartier (later known as the Marquis de Lotbiniere) to build a fortification that would be closer to the English outposts. The original fort was built in 1755-1758 and was called Carillon (later changed to Ticonderoga) (Hough 1873; Smith 1885; Stanley 1885).

In 1758 British General Abercrombie and 15,000 troops traveled to the area via Lake George with the threat of attacking the fort. The Commander of Carillon at that time was Marquis de Montcalm. In response to the British arrival, Montcalm and his men built a breastwork 1000 paces from the fort. A battle ensued and on July 26th, 1758, two-thousand Englishmen lay dead and the rest of the troops had retreated.

Lord Amherst was sent by the King of England in 1759 to replace General Abercrombie at Fort Edward. During this same time, Montcalm had taken most of his troops with him into Quebec and had left the Fort in the charge of Commander Boullamarque. Amherst attacked the fort when French troops were scant and after a four day stand-off, Boullamarque set the fort on fire and he and his men retreated to Crown Point (Stanley 1885).

Under the command of Lord Amherst, Fort Carillon was renamed Fort Ticonderoga and along with Fort Frederic at Crown Point, was strengthened and enlarged. The English had control over the fort from 1759 to 1775. Captain de la Place was put in charge of Ticonderoga and in May of 1775, a troop of eighty-three continentals known as the Green Mountain Boys, led by Ethan Allen, took the fort from de la Place without battle or bloodshed. The next day, Fort Frederic was taken by continentals in much the same manner (Smith 1885; Stanley 1885).

The continentals held the fort for two years under the command of St. Clair. In 1777, the English General Burgoyne embarked on a widely publicized attack on Ticonderoga. With the threat of the impending attack and without provisions or adequate forces, St. Clair knew retreat was inevitable. In coming upon Ticonderoga, the British found that St. Clair and his men had retreated to Mt. Independence (Hough 1873; Smith 1885; Stanley 1885).

Essex County was formed from a part of Clinton County in 1799. The village of Ticonderoga was formed from Crown Point in 1804 (Hough 1873).

Ticonderoga's first forge started in the village of Upper Falls around 1800. Because of the available water-power, mills seemed promising and many were opened, especially in the Trout Brook (later changed to Lord Howe Brook)

Valley. The mills were mostly grist mills and saw mills (Smith 1885).

For many years, Ticonderoga's top occupation was lumbering, and reached its peak between 1834 and 1836. At its peak, there were over 20 saw mills in town and Ticonderoga had become an important shipping port. The business began to diminish during the 1840's and by 1853, all but three of the mills had been burned down (Smith 1885).

Mining was also an important economic enterprise in the town. In 1815, a hill known as "Grassy Hill" was discovered to hold extensive graphite deposits, and began to be referred to as "Lead Mountain." As the graphite began to be mined, Greg C. Baldwin started his pencil company in 1833 in the upper village; another company had been started in the lower village. The American Graphite Company of New York City later bought out several of the small graphite companies and erected a large factory in the area. The Horicon Iron Company began a graphite mill in 1864, using Lake George for the transport of materials. The forge had six fires, and two miles away, it also had five large kilns for burning wood into charcoal. Several more mines were opened through the 1860's (Smith 1885).

The iron mining industry began in the early 1800s, and iron mines, furnaces, and forges sprinkled the area throughout the 19th century.

The rural areas surrounding Ticonderoga village were exploited for the extraction of natural resources (lumber, iron, graphite), and/or turned into subsistence farms. By the middle of the 19th century, many of the subsistence farms were turned into dairy farms to feed the growing commercial markets. Yet due to the proximity of the Adirondack Mountains, and the short growing season, farming has been in a decline since the early 20th century (Van Wagner 1922).

Figures 9-15 show the historical development of the area surrounding the project from the mid-1800s to present. Maps prior to 1858 do not show sufficient detail of the project to indicate any historic features.

Known Archaeological Sites

A check of site files of the Office of Parks, Recreation, and Historic Preservation and the New York State Museum indicated that five archaeological sites or loci are known within a mile of the project area (Table 3). Three small prehistoric lithic scatters were identified within the industrial park property across from Old State Road during a survey in the 1990s.

NYS OPRHP Site #	Additional Site#	Distance from APE m (ft)	Time Period	Site Type
A03115.000010	Lead Hill/Arthur Lead Mine	200 m / 750 ft	1870s	Mine
A03115.000023	TIP Locus 1	425 m / 1,400 ft	Unk. prehistoric	Small lithic scatter
A03115.000024	TIP Locus 2	300 m / 1,000 ft	Unk. prehistoric	Small lithic scatter
A03115.000025	TIP Locus 3	275 m / 900 ft	Unk. prehistoric	Small lithic scatter
	NYSM 7737, ACP Essex 4B	1,200 m / 4,000 ft	Unk. prehistoric	Camps

Structures

The only structure within the current project is the existing reservoir and a small control building; both are modern (Photo 5). There are no map documented structures within or immediately adjacent to the project area. As this is an underground utility, buildings on adjacent properties will not be physically or visually affected by the project.

Assessment of Sensitivity for Cultural Resources

An assessment of whether significant cultural resources are likely to be present within a project area must consider what is known of the prehistory of the area, including likely locations of archaeological sites and proximity to known sites; and the history of the immediate area, including whether any historic structures or features are known to exist

within the project boundaries. An assessment must also consider that if cultural resources *are* located on a parcel, will they likely retain *integrity* (without which they would not be considered significant). Modifications to the land may serve to destroy all or portions of any cultural deposits that may exist.

Prehistoric Sensitivity

Sites of all cultural time periods are known to exist in Essex County. Many larger sites are located in proximity to larger streams and rivers, while small sites are often associated with smaller streams and wetland areas. Three prehistoric sites are known within a mile of the project area, attesting to cultural activity in the immediate area.

Given the three prehistoric sites to the north and an isolated prehistoric flake to the south, there would be a reasonable chance of finding additional prehistoric loci within the eastern part of the current project if it were not substantially disturbed.

Historic Sensitivity

There is no indication that any historic structure nor deposits were ever within the project area. Much of the project has also been substantially disturbed. The project thus has a poor sensitivity for historic cultural deposits.

Disturbance

The eastern part of the project, along NYS Route 74 exists within a highly disturbed corridor created from the construction of Route 74 and a commercial/industrial park just north of Race Track Road. Much of the roadside has been graded down several feet, then re-contoured.

Where the new line runs immediately adjacent to Chilson Middle Road, it will be placed below an existing drainage ditch; while this ditch now appears only 1-2 feet deep, testing next to it showed that it was originally dug down several feet, then re-contoured (or silted in).

The area around the existing reservoir was found to be highly disturbed with no intact topsoils or upper subsoils remaining. Some of the area that was considered for the new tank site was also found to be disturbed.

Testing Recommendations

In accordance with OPRHP guidelines of 2005, all areas that cannot be documented as substantially disturbed should be tested at a standard interval (15 meters/50 feet). When areas are found to be disturbed in testing, the interval can be lengthened through the disturbed areas. Areas of steep slopes (greater than 15 percent) are examined in a walkover but are not tested unless there is specific features or outcrops that would indicate cultural deposits may be present.

Part II: Field Reconnaissance

Field investigations were conducted to identify any historic or prehistoric cultural resources that may be impacted by the proposed project. Due to changes in plans, fieldwork was conducted sporadically in 2010 and 2011. The crew consisted of Andrew Black, acting as both Principal Investigator and field crew. Testing was conducted on generally sunny days, and no impediments to my testing were encountered.

Methodology

The entire project area was initially examined by the principal investigator through a walkover examination designed to identify visible features and artifact scatters, areas of disturbance, and the general terrain and ground cover. The project area was not plowed, so subsurface testing was used to identify cultural deposits.

Subsurface testing

Standard shovel test pits (STPs) were used to test for buried cultural deposits. STPs are small (about 40 cm or 16 inch diameter) holes excavated with a shovel; sediments are screened through 1/4 inch mesh to look for artifacts. STPs are excavated in natural soil layers, as much as possible, and are dug through the topsoil to at least 15 cm (~ 6

inches) into culturally sterile subsoils. Cultural material is retrieved and generally saved for laboratory analysis. The two exceptions are for material that is clearly less than 50 years old, and for certain classes of material such as coal and cinders. If material is discarded in the field, it is first recorded in field notes, so the presence of the artifacts can be incorporated into the final analysis. If prehistoric or a moderate amount of historic material is recovered from an STP, additional shovel tests are excavated in order to test for artifact concentrations.

STPs were placed at 15 m (~50 foot) intervals within the project area (Figures 4-8) using compass and tape. When an STP is placed in an area that was obviously disturbed (e.g., in a ditch along side the road), an attempt is made to move the shovel test beyond the area of disturbance, to a maximum distance of 10 meters from its original location.

A list of the STPs and their soil profiles is given in Appendix C. Appendix D contains the artifact catalog. No artifacts were collected for curation.

Results

No archaeological deposits were found.

Surface Inspection

The only surface features observed in the walk-over inspection were the areas of clear prior disturbance (e.g. along NYS Route 74). No historic features were observed.

Visual Impacts

The project consists of underground utilities which will not create any new visual disturbances to any historic property within view.

Subsurface Examinations

Approximately 2 acres, plus about 500 feet of the new water line were surveyed using subsurface testing. The remainder of the project was substantially disturbed from road and utility construction. A total of 38 STPs were excavated; four contained bits of modern cultural material. No prehistoric or clearly historic material was recovered. STPs ranged in depth from 31-71cm (12-28 inches) and averaged 48cm (19 inches). In the western part of the project, the soils were gravelly and sandy; when present the topsoil was a thin layer of dark brown sandy loam; the subsoil was generally a gravelly sand. In the lower, eastern part of the project the soils were heavy clay loams. The upper layer was found to be disturbed throughout this part of the project, although it is clearly within the construction envelope of NYS Route 74.

Part III: Summary and Recommendations

A Phase I survey has been completed for improvements to the water system in the Chilson Road area of Ticonderoga. No archaeological deposits were identified. The project will create no physical nor visual impacts to any historic structure or property.

Based on these findings, we recommend that no further cultural resources work be required for the project. These recommendations are subject to the review and concurrence of the Office of Parks, Recreation and Historic Preservation.

References Cited

Black, Andrew T.

- 1998 *Report of Phase 1A and 1B Cultural Resources Survey, Bruce Crammond Farm Project, Town of Ticonderoga, Essex County, New York.* Black Drake Consulting, Champlain, New York. Submitted to USDA Natural Resources Conservation Service. On file at Office of Parks, Recreation, and Historic Preservation, Waterford, New York.
- 2000 *Phase 1A/1B Cultural Resources Survey, Murray Subdivision, Town of Ticonderoga, Essex County, New York.* Black Drake Consulting, Champlain, New York. Submitted to Neil Murray, Ticonderoga, New York. On file at Office of Parks, Recreation, and Historic Preservation, Waterford, New York.

Collamer and Associates Inc.

- 1993 *Limited Stage 1A and Stage 1B (SEQR) Cultural Resource Investigations for the Ticonderoga Industrial Park, Town of Ticonderoga, Essex County, New York.* Collamer and Associates Inc., East Nassau, New York. Submitted to Tectonic Engineering Consultants, P.C., Highland Mills, New York. On file at Office of Parks, Recreation, and Historic Preservation, Waterford, New York.
- 1995 *Phase 1 and Stage 2 (SEQR) Cultural Resources Investigations for the Route 9N-Wicker Street Road Construction, Town of Ticonderoga, Essex County, New York.* Collamer and Associates Inc., East Nassau, New York. Submitted to DeLuca-Hoffman Associates, Inc. On file at Office of Parks, Recreation, and Historic Preservation, Waterford, New York.

Cressy, George B.

- 1977 Land Forms. In *Geography of New York State*, edited by J. H. Thompson, pp. 19-53. Syracuse University Press, Syracuse.

Curtin, Edward V.

- 1997 *Phase 1A/1B Archaeological Survey, Proposed Sears Dealership Store, Town of Ticonderoga, Essex County, New York.* E. V. Curtin. Submitted to Mr. Willis Sears, Ticonderoga. On file at Office of Parks, Recreation, and Historic Preservation, Waterford, New York.

de Laubenfels, David J.

- 1977 Vegetation. In *Geography of New York State*, edited by J. H. Thompson, pp. 90-103. Syracuse University Press, Syracuse.

French, J. H.

- 1858 Map of Essex County, New York. E. A. Balch, Philadelphia.

Gray, O. W.

- 1876 *New Topographical Atlas of Essex County, New York.* O. W. Gray & Son, Philadelphia.

Hartgen Archaeological Associates

- 1994 *Stage II Archaeological Field Investigations, Ticonderoga Industrial Park, Essex County, New York.* Hartgen Archaeological Associates Inc., Troy, New York. Submitted to Essex County Development Corporation, Elizabethtown, New York. On file at Office of Parks, Recreation, and Historic Preservation, Waterford, New York.
- 1998 *Phase 1A Literature Review and Phase 1B Archaeological Field Reconnaissance, Proposed Glens Falls National Bank, Route 9N, Town of Ticonderoga, Essex County, New York.* Hartgen Archaeological Associates Inc., Troy, New York. Submitted to Prepared for Rist Frost Associates, P.C., Glens Falls, New York. On file at Office of Parks, Recreation, and Historic Preservation, Waterford, New York.
- 1999a *Phase 1A Literature Review and Archaeological Sensitivity Assessment, Ticonderoga Commerce park Off-Site Sanitary Sewer Project, Town of Ticonderoga, Essex County, New York.* Hartgen Archaeological Associates, Rensselaer, New York. On file at Office of Parks, Recreation, and Historic Preservation, Waterford, New York.
- 1999b *Phase 1B Archaeological Survey, Ticonderoga Commerce park Off-Site Sanitary Sewer Project, Town of Ticonderoga, Essex County, New York.* Hartgen Archaeological Associates, Rensselaer, New York. On file at Office of Parks, Recreation, and Historic Preservation, Waterford, New York.

Hough, Franklin B.

- 1873 *Gazetteer of the State of New York.* Research Publications, Inc., New Haven, Connecticut.

New York Statewide Orthoimagery Program

- 1995 *Orthoimage: **.sid. Image date 1995. 1 meter resolution.* Internet source: <http://www.nysgis.state.ny.us>.
- 2003 *e_**_24_14400_cir_2003.sid. Image date April 2003. Color infra-red, 2 foot resolution.* Internet source: <http://www.nysgis.state.ny.us>.

- 2009 *e_**_12_14400_col_2009.jp2*. Image date April 2009. Digital 4-Band color, 2 foot resolution. Internet source: <http://www.nysgis.state.ny.us>.
- NRCS
2011 *National Cooperative Web Soil Survey*. Internet source: <http://websoilsurvey.nrcs.usda.gov/app/>.
- NYS Department of Transportation
1992 Ticonderoga 7.5' Quadrangle. NYS DOT.
- Ritchie, William A.
1994 *The Archaeology of New York State, revised edition*. Purple Mountain Press, Fleischmanns, New York.
- Ritchie, William A. and Robert E. Funk
1973 *Aboriginal Settlement Patterns in the Northeast*. New York State Museum and Science Service Memoir 20. The State Education Department of the University of the State of New York, Albany, New York.
- Smith, H. P. (editor)
1885 *History of Essex County*. D. Mason and Company, Syracuse, New York.
- Snow, Dean R.
1980 *The Archaeology of New England*. Academic Press, New York.
- Stanley, Kate E.
1885 *The Stone's Story: Fort Ticonderoga from 1609 to Present*. R. R. Stevenson, Ticonderoga, New York.
- USGS
1902 Ticonderoga 15' Topographic Quadrangle. Surveyed 1894, reprinted 1945. U.S. Geological Survey.
- Van Nest, Julieann
2002 The Good Earthworm: How Natural Processes Preserve Upland Archaic Archaeological Sites in Western Illinois, U.S.A. *Geoarchaeology* 17(1):53-90.
- Van Wagner, Edith
1922 Agricultural Manual of New York State, Arranged by Counties. *State Of New York Department of Farms and Markets, Division of Agriculture, Bulletin 133*.

Appendix A. Figures

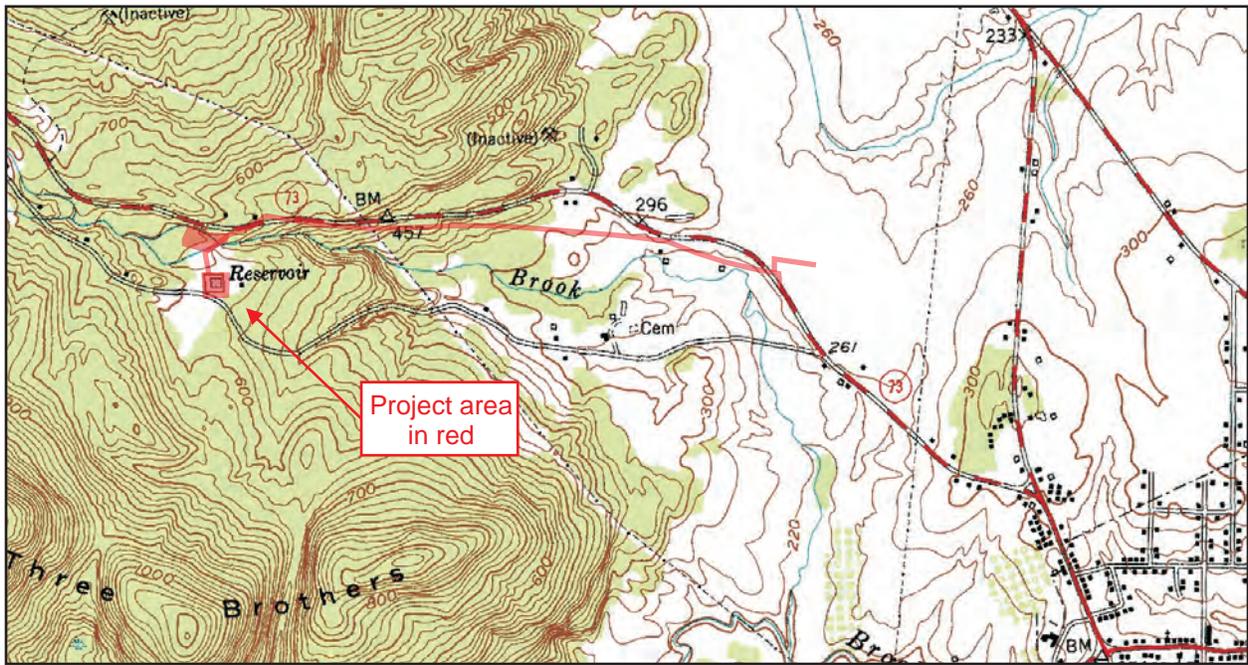


Figure 1. Portion of 1950 Ticonderoga 7.5' Topographic Quadrangle showing project area (USGS 1950).

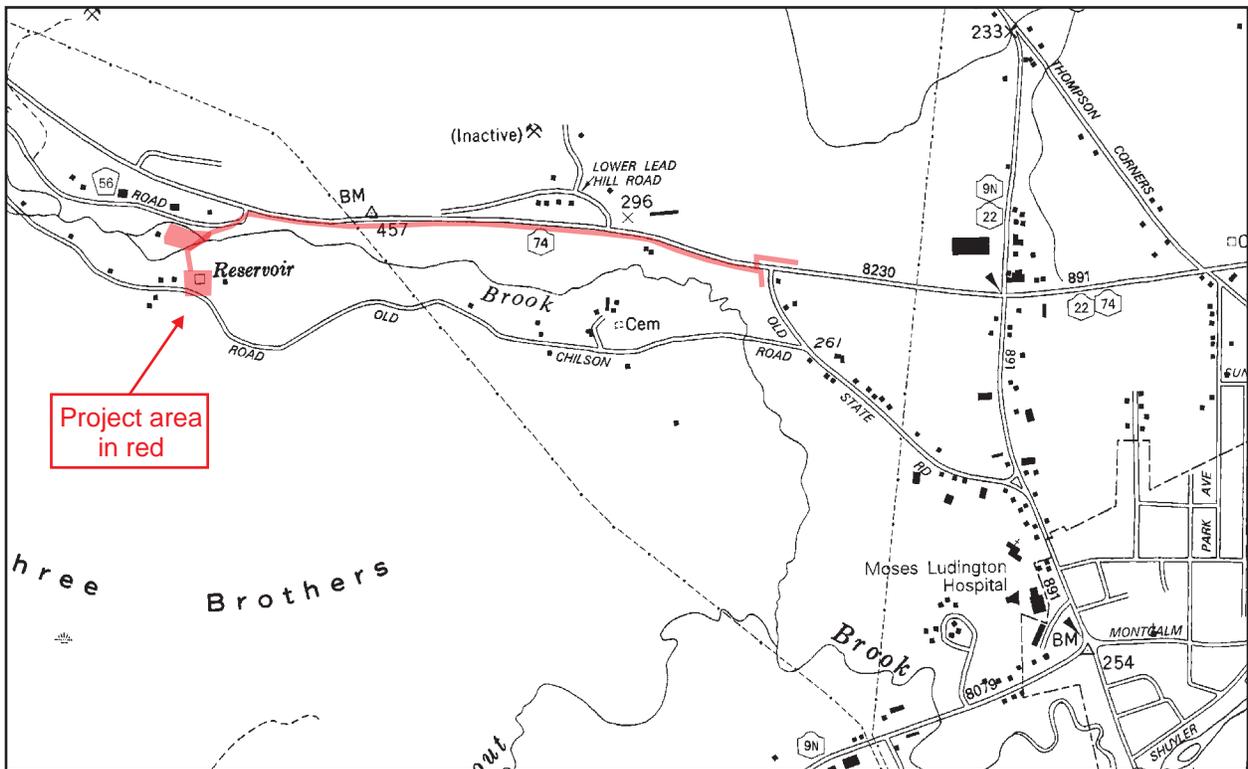


Figure 2. Portion of 1992 NYSDOT Ticonderoga 7.5' Topographic Quadrangle showing project area (NYSDOT 1992).

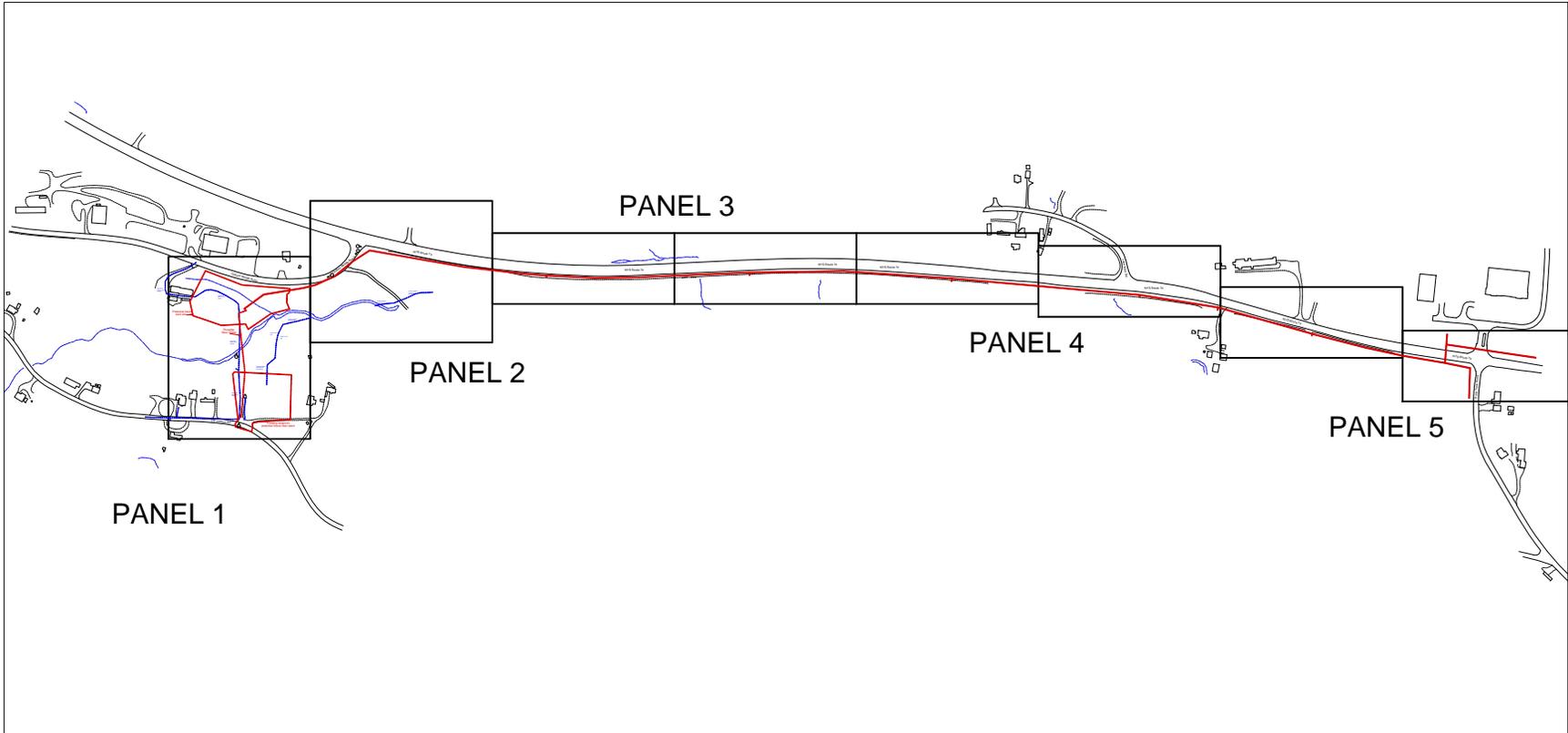


Figure 3. Overview of project showing map panels.

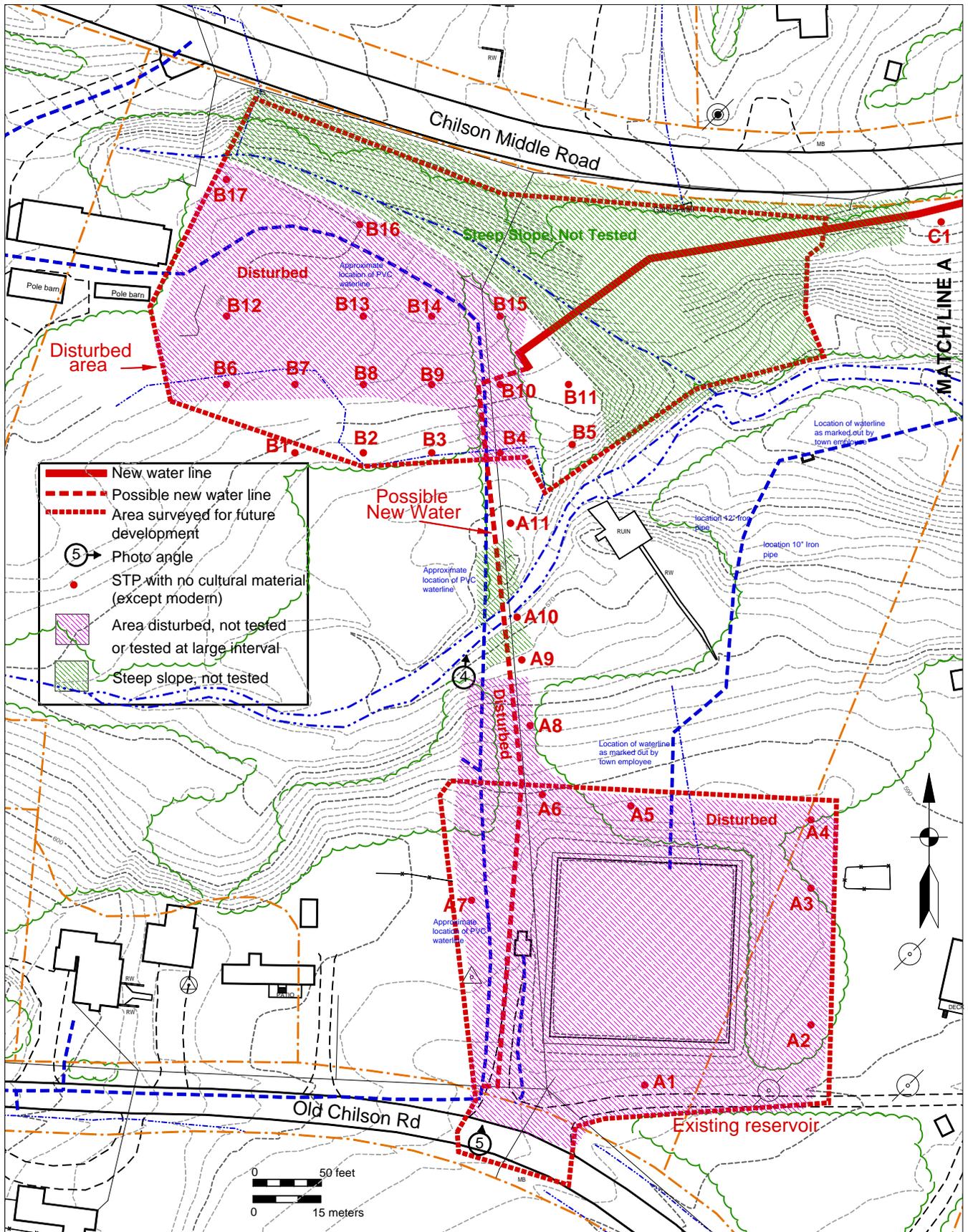


Figure 4. Map Panel 1.

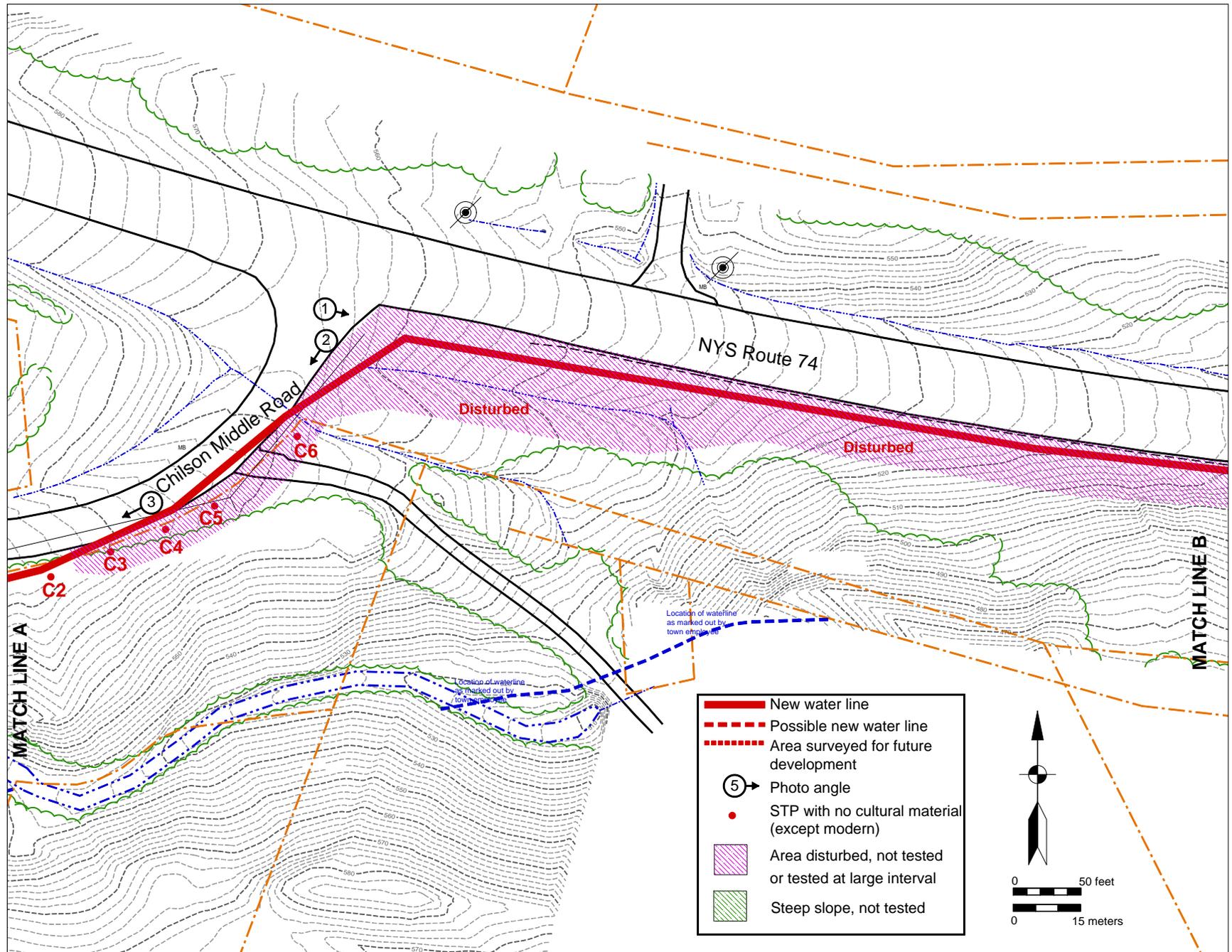


Figure 5. Map Panel 2.

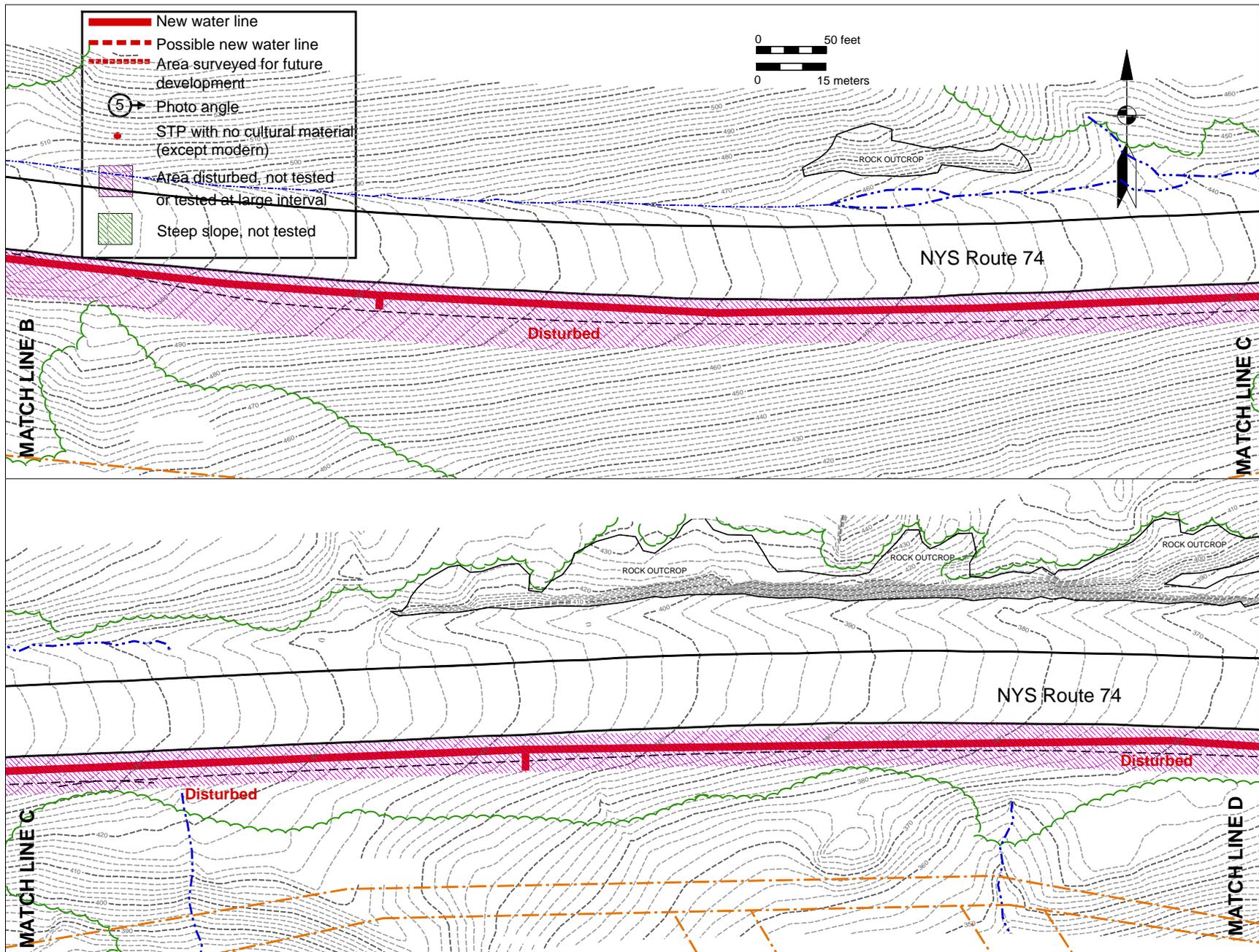


Figure 6. Map Panel 3.

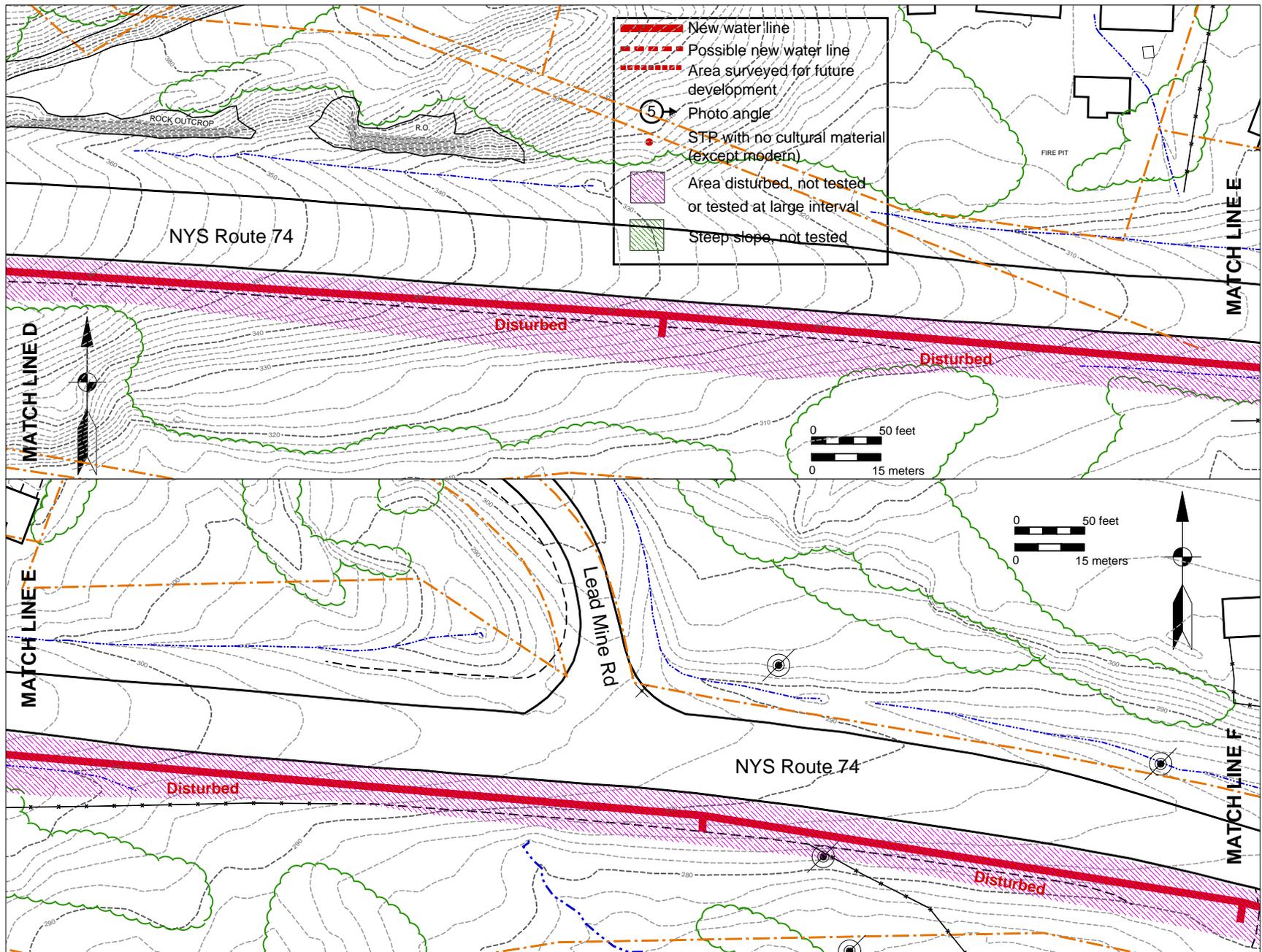


Figure 7. Map Panel 4.

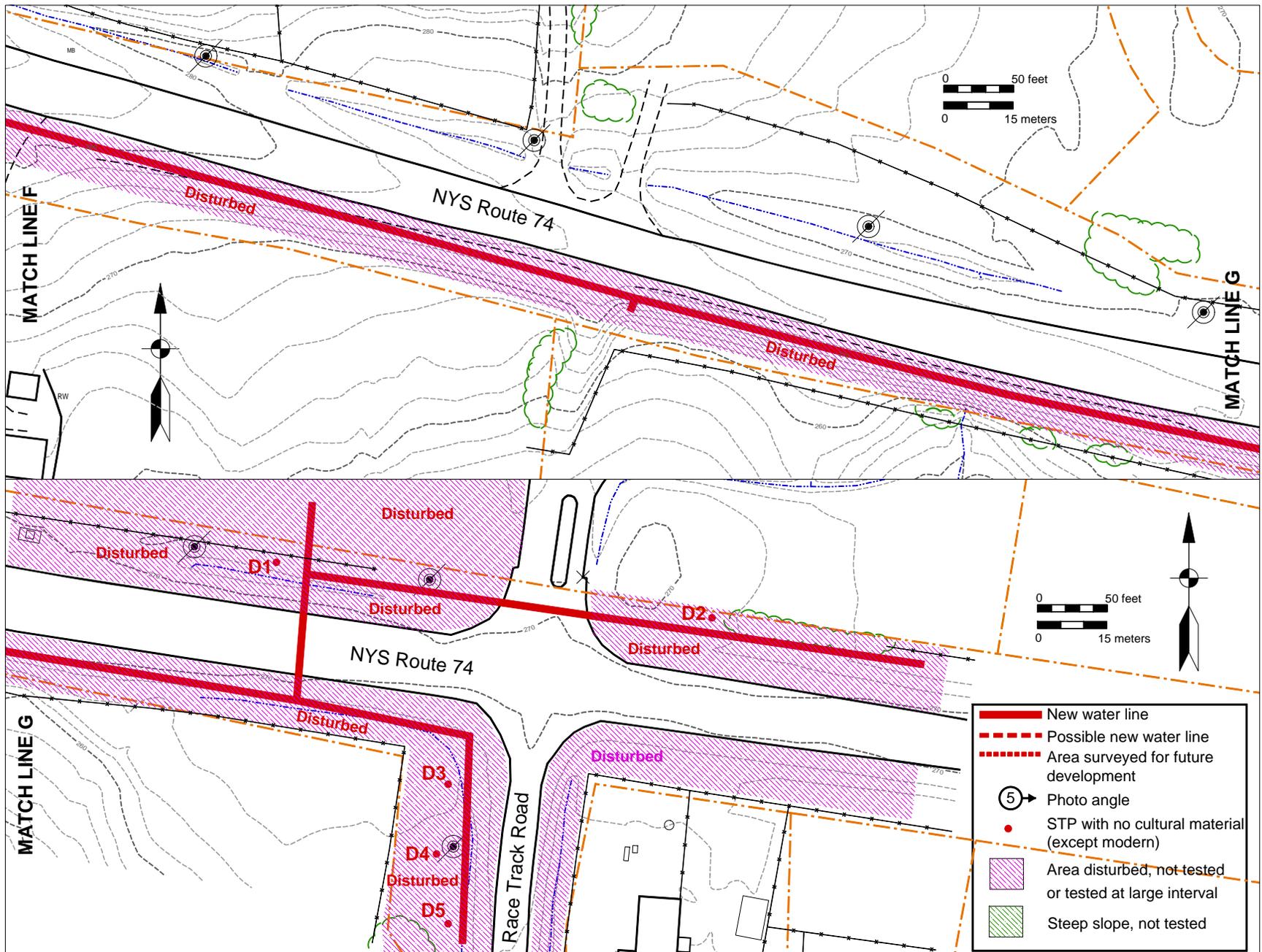


Figure 8. Map Panel 5.

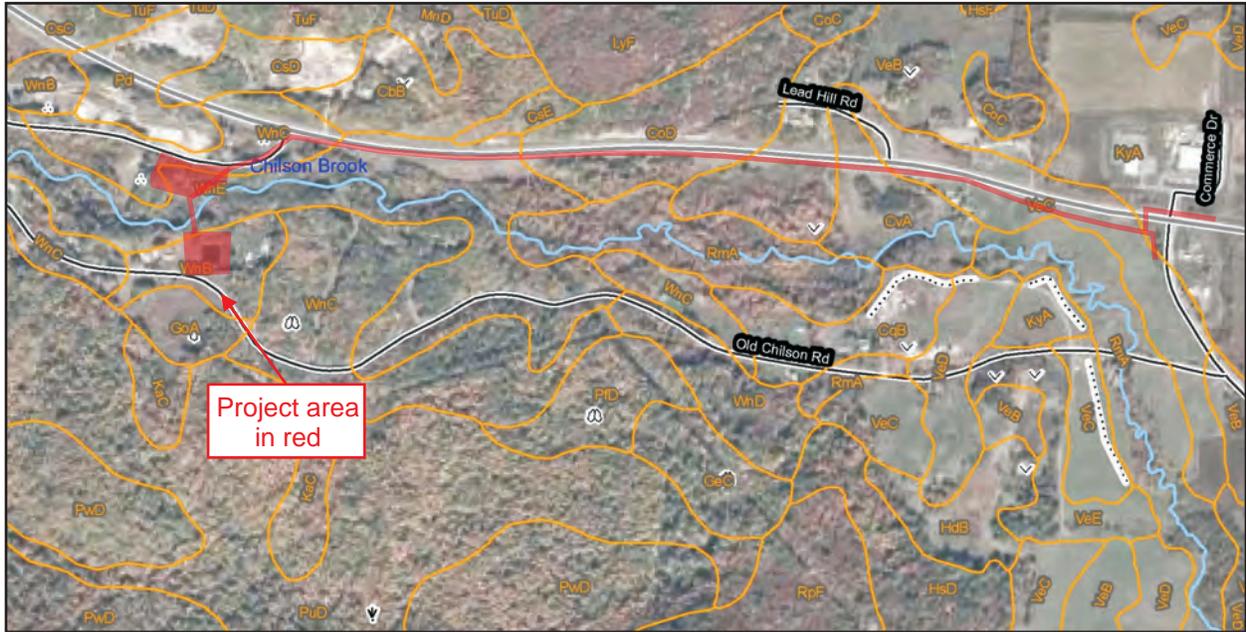


Figure 9. Portion of NRCS Soils map showing project area (NRCS 2012).



Figure 10. Portion of 1858 Map of Essex County showing project area (French 1858).

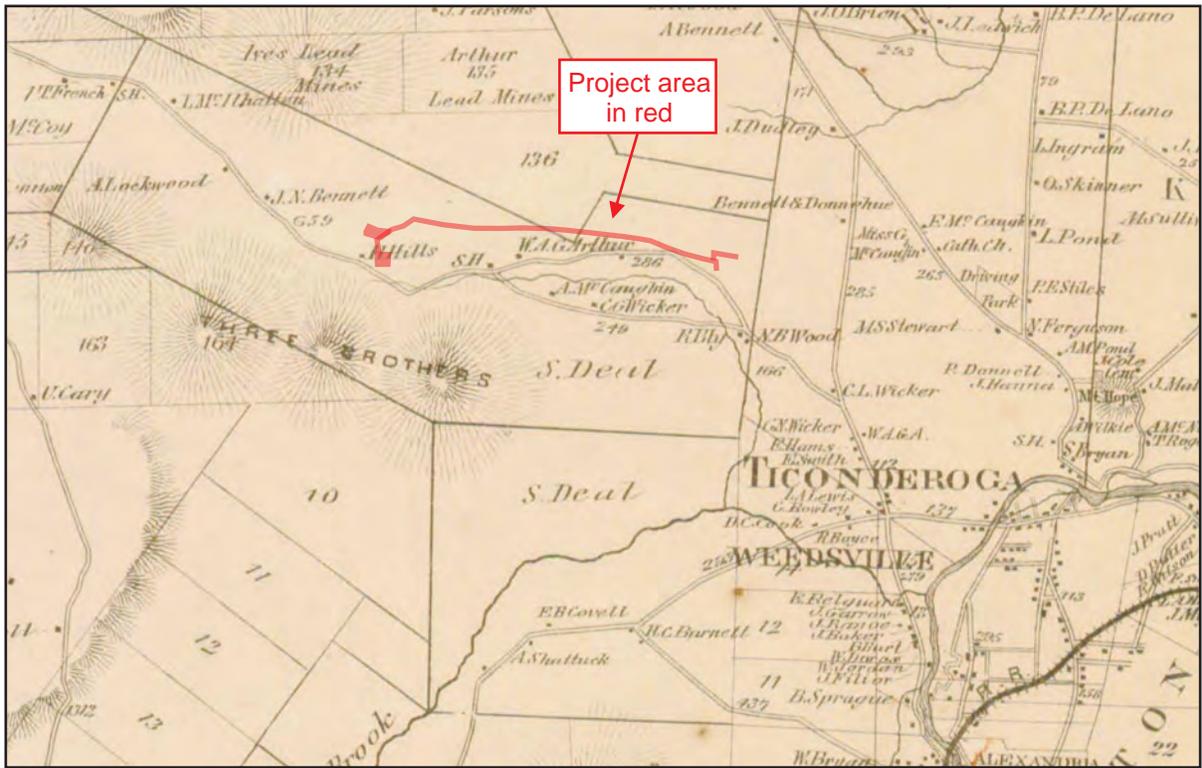


Figure 11. Portion of 1876 Atlas of Essex County showing project location (Gray 1876).

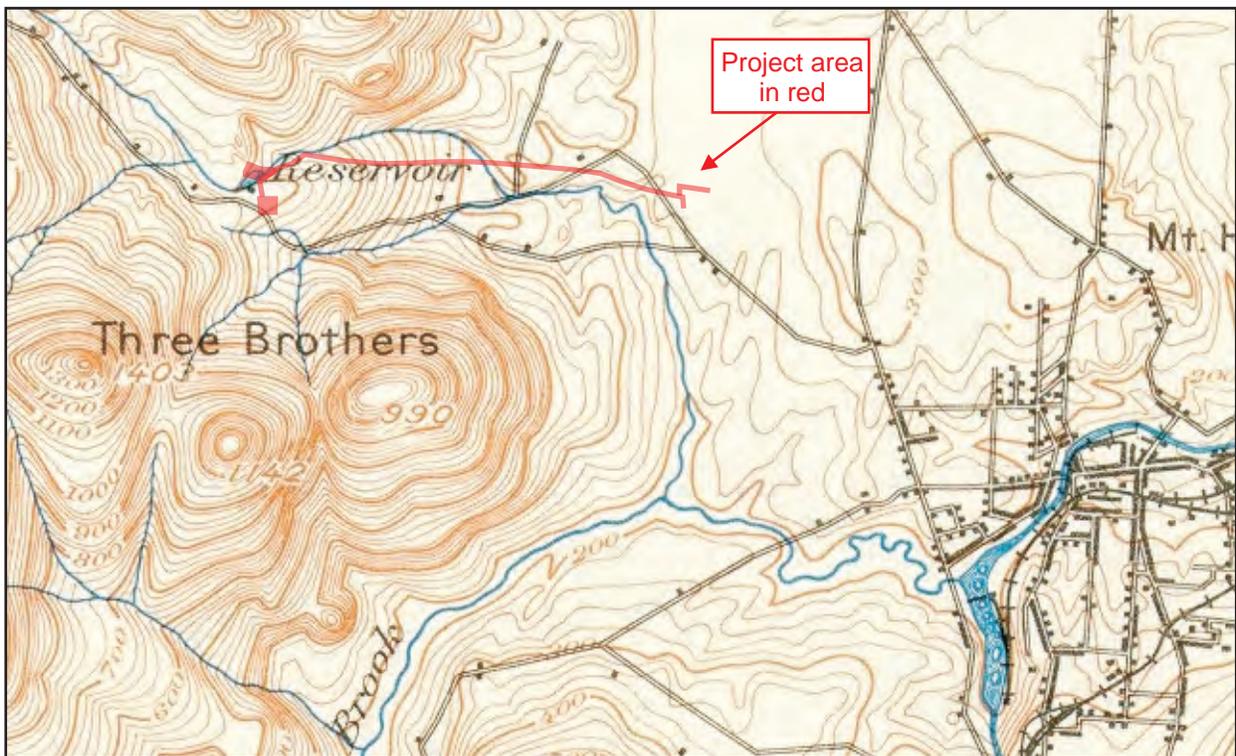


Figure 12. Portion of 1902 Ticonderoga 15' Topographic Quadrangle showing project area (USGS 1902).



Figure 13. Portion of 1995 color infrared orthoimage at 1 meter resolution showing project location (photo date April 1995; NYS Orthoimagery Program 1995).



Figure 14. Portion of 2003 color infrared orthoimage at 2 foot resolution showing project location (photo date April 2003; NYS Orthoimagery Program 2003).



Figure 15. Portion of 2009 4-band color orthoimage at 2 foot resolution showing project location (photo date April 2009; NYS Orthoimagery Program 2009).

Appendix B. Photos



Photo 1. View of project area looking east along NYS Route 74.



Photo 2. View of project area looking south along Chilson Middle Road.



Photo 3. View of project along Chilson Middle Road, looking south.



Photo 4. View of project area looking north as it descends into Chilson Brook.



Photo 5. View of project area looking north at existing reservoir.

Appendix C. Shovel Test Pit Records

Appendix C: STP and Unit Log

dk = dark med = medium lt = light br = brown yl = yellow rd = red gry = grey blk = black sa = sand si = silt cly = clay lo = loam

STP	A01	Comment:	disturbed		
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 68 cm	mixed gravelly sands	Disturbed/mixed	modern bottle glass, foil
STP	A02	Comment:	disturbed		
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 53 cm	mixed gravelly sands	Disturbed/mixed	
	2	53 -- 65 cm	yl br gravelly sand	Subsoil	
STP	A03	Comment:	disturbed. Stopped by rock		
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 65 cm	mixed gravelly sands	Disturbed/mixed	
STP	A04	Comment:			
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 42 cm	mixed gravelly sand	Disturbed/mixed	
	2	42 -- 63 cm	yl br gravelly sand	Subsoil	
STP	A05	Comment:			
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 71 cm	mixed gravelly sands	Disturbed/mixed	galvanized wire nail
STP	A06	Comment:	disturbed		
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 55 cm	mixed gravelly sands	Disturbed/mixed	
	2	55 -- 61 cm	yl br gravelly sand	Subsoil	
STP	A07	Comment:	stopped by rock/fill		
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 46 cm	mixed gravel, sand, loams	Disturbed/mixed	
STP	A08	Comment:			
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 48 cm	mixed gravelly sands	Disturbed/mixed	
	2	48 -- 59 cm	yl br gravelly sand	Subsoil	
STP	A09	Comment:			
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 12 cm	dk br sa lo	Topsoil	
	2	12 -- 32 cm	dk yl br gravelly loamy sand	B-horizon	
	3	32 -- 55 cm	yl br gravelly sand	Subsoil	
STP	A10	Comment:	next to brook, flood deposits/disturbance. Stopped by rock and water.		
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 50 cm	flood deposits, sands, gravels, etc.	Fill	
STP	A11	Comment:			
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 8 cm	vry dk br sa lo	Topsoil	
	2	8 -- 26 cm	dk yl br gravelly loam	B-horizon	
	3	26 -- 40 cm	yl br gravelly sand	Subsoil	
STP	B01	Comment:			
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 10 cm	dk br sa lo	Topsoil	
	2	10 -- 45 cm	yl br gravelly sa	Subsoil	
STP	B02	Comment:			
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 11 cm	dk br sa lo	Topsoil	
	2	11 -- 18 cm	dk yl br loamy gravelly sand	B-horizon	
	3	18 -- 36 cm	yl br gravelly sa	Subsoil	
STP	B03	Comment:			
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 7 cm	dk br sa lo	Topsoil	
	2	7 -- 32 cm	yl br gravelly sa	Subsoil	
STP	B04	Comment:	near existing water		
	<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>
	1	0 -- 48 cm	mixed gravelly sands	Disturbed/mixed	

dk = dark med = medium lt = light br = brown yl = yellow rd = red gry = grey blk = black sa = sand si = silt cly = clay lo = loam

STP	Level	Depth	Soil	Strata	Summary of Artifacts
B05	1	0 -- 13 cm	dk br sa lo	Topsoil	
	2	13 -- 38 cm	yl br gravelly sand	Subsoil	
B06	1	0 -- 28 cm	mixed gravelly loam	Disturbed/mixed	
	2	28 -- 42 cm	yl br gravelly loam	Subsoil	
B07	1	0 -- 31 cm	mixed br, yl br, gry gravelly loam	Disturbed/mixed	
	2	31 -- 45 cm	yl br gravelly sa	Subsoil	
B08	1	0 -- 25 cm	mixed soils	Disturbed/mixed	
	2	25 -- 41 cm	yl br gravelly sa	Subsoil	
B09	1	0 -- 31 cm	mixed loam, gravel, sand	Disturbed/mixed	
	2	31 -- 49 cm	yl br gravelly sa	Subsoil	
B10	1	0 -- 50 cm	mixed gravelly loams and sand	Disturbed/mixed	
B11	1	0 -- 12 cm	dk br sa lo	Topsoil	
	2	12 -- 37 cm	yl br gravelly sand	Subsoil	
B12	1	0 -- 29 cm	mixed dk br, yl br, lt yl br gravelly loam	Disturbed/mixed	
	2	29 -- 48 cm	yl br gravelly sa	Subsoil	
B13	1	0 -- 22 cm	mixed loams and sands	Disturbed/mixed	
	2	22 -- 40 cm	yl br gravelly sa	Subsoil	
B14	1	0 -- 22 cm	mixed dk br, yl br, gray sa, lo, gravel	Disturbed/mixed	
	2	22 -- 40 cm	yl br gravelly sa	Subsoil	
B15	1	0 -- 18 cm	mixed soils, gravels	Disturbed/mixed	
	2	18 -- 38 cm	yl br gravelly sa	Subsoil	
B16	1	0 -- 23 cm	mixed loam, gravel, sand	Disturbed/mixed	
	2	23 -- 41 cm	yl br gravelly sa	Subsoil	
C01	1	0 -- 12 cm	dk br sa lo	Topsoil	
	2	12 -- 18 cm	dk yl br gravelly lo	B-horizon	
	3	18 -- 31 cm	yl br gravelly sa	Subsoil	
C02	1	0 -- 7 cm	dk br sa lo	Topsoil	
	2	7 -- 31 cm	yl br gravelly sa lo	Subsoil	
C03	1	0 -- 32 cm	mixed dk br, yl br, pale br gravelly loams	Disturbed/mixed	
	2	32 -- 41 cm	yl br gravelly sa	Subsoil	

dk = dark med = medium lt = light br = brown yl = yellow rd = red gry = grey blk = black sa = sand si = silt cly = clay lo = loam

STP	C04	Comment:			
<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>	
1	0 -- 37 cm	mixed gravelly loams and sands	Disturbed/mixed		
2	37 -- 51 cm	yl br gravelly sa	Subsoil		
STP	C05	Comment: next to drainage ditch			
<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>	
1	0 -- 63 cm	mixed gravel, sands, loams	Disturbed/mixed		
STP	C06	Comment:			
<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>	
1	0 -- 45 cm	mixed soils, gravelly	Disturbed/mixed		
2	45 -- 61 cm	yl br gravelly sa	Subsoil		
STP	D01	Comment: in front of Tractor Supply.			
<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>	
1	0 -- 39 cm	mixed dk gry, lt gry cly lo with some gravel	Disturbed/mixed		
2	39 -- 52 cm	lt gry cly	Subsoil		
STP	D02	Comment:			
<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>	
1	0 -- 28 cm	mixed dk gry br, lt gry cly lo	Disturbed/mixed		
2	28 -- 41 cm	lt gry cly	Subsoil		
STP	D03	Comment:			
<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>	
1	0 -- 35 cm	mixed dk gry, lt gry br cly lo	Disturbed/mixed	asphalt, modern bottle glass, plastic	
2	35 -- 49 cm	lt gry cly	Subsoil		
STP	D04	Comment:			
<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>	
1	0 -- 42 cm	mixed dk gry, lt gry cly lo and gravel	Disturbed/mixed	plastic, styrofoam	
2	42 -- 56 cm	lt gry cly, hard	Subsoil		
STP	D05	Comment:			
<u>Level</u>	<u>Depth</u>	<u>Soil</u>	<u>Strata</u>	<u>Summary of Artifacts</u>	
1	0 -- 26 cm	mixed dk gry, lt gry clays	Disturbed/mixed		
2	26 -- 41 cm	lt gry cly	Subsoil		

Appendix D. Artifact Catalog

Appendix D: Artifact Catalog

STP A01			
<i>Level</i>	<i>1</i>		
<u>Quantity</u>	<u>Artifact Description</u>	<u>Qualifier</u>	<u>Saved?</u>
2	amber bottle glass	modern	no
1	aluminum foil frag		no

STP A05			
<i>Level</i>	<i>1</i>		
<u>Quantity</u>	<u>Artifact Description</u>	<u>Qualifier</u>	<u>Saved?</u>
1	wire nail, unidentified	galvanized	no

STP D03			
<i>Level</i>	<i>1</i>		
<u>Quantity</u>	<u>Artifact Description</u>	<u>Qualifier</u>	<u>Saved?</u>
0	asphalt pavement frag		no
2	clear bottle glass	with paper label, modern	no
1	plastic		no

STP D04			
<i>Level</i>	<i>1</i>		
<u>Quantity</u>	<u>Artifact Description</u>	<u>Qualifier</u>	<u>Saved?</u>
3	plastic		no
1	styrofoam		no



FEMA

December 20, 2013

John A. Bonafide,
Director, Bureau of Technical Preservation Services
New York State Division for Historic Preservation
New York State Office of Parks, Recreation & Historic Preservation
Peebles Island State Park
P.O. Box 189
Waterfront, NY 12188-0189

Re: Federal Emergency Management Agency
Section 106 Consultation
Town of Ticonderoga, Chilson Water Transmission Main
From Chilson Reservoir to the southside of NYS Route 74 (new site)
Under the Chilson Brook south of NYS Route 74 (original site)
Town of Ticonderoga, Essex County, NY 12883
FEMA-4020-DR-NY, Project # PA-02-NY-4020-06009
SHPO 12PR03581 August, 23, 2012

Dear Mr. Bonafide,

The Federal Emergency Management Agency (FEMA) proposes to provide grant funding to the Town of Ticonderoga (Subgrantee), for the construction of a new underground Chilson Water Transmission Main. In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470f), and its implementing regulation, 36 CFR 800, and as authorized by the U.S. Department of Homeland Security – FEMA, we initiated consultation with you on August 16, 2012. Your Office concurred with the finding of “no historic properties affected” with the following condition: A Phase I A and B Archeological Survey must be conducted for the presence of archaeological materials at the Ticonderoga Chilson proposed project sites (letter 12PR03581 dated August 23, 2012).

We wish to inform you that FEMA has received the Phase I Cultural Resources Survey for the Chilson Water Transmission Main project.

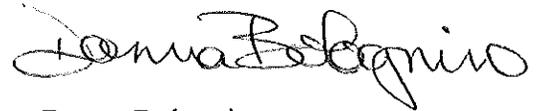
The Subgrantee hired a consultant to work on the required Phase I Archeological Survey. Andrew T. Black, of Black Drake Consulting, conducted a Phase I Cultural Resources Survey in June 2012. The Phase I consisted of documentary research and field reconnaissance. The documentary research included review of environmental setting, previous archaeological

surveys, prehistoric and historic background and assessment of sensitivity for cultural resources. The field reconnaissance included: surface inspection and subsurface testing. No historic features were observed during the surface inspection. The project will create no physical or visual impacts to any historic structure or property. Approximately 2 acres, plus about 500 feet of the new water line, were surveyed using subsurface testing. The remainder of the project was substantially disturbed from road and utility construction. A total of 38 STPs were excavated: four contained bits of modern cultural material. No prehistoric or clearly historic material was recovered. No archaeological deposits were identified in the sub surface excavations. The consultant recommended that no further cultural resources work is required for the project.

FEMA finds the Phase I Cultural Resources Survey adequate and determines that “no historic properties will be affected” as a result of the project.

If you have any questions please contact me at 518-396-3843 or via email at Donna.Bolognino@fema.dhs.gov

Sincerely,

A handwritten signature in black ink that reads "Donna Bolognino". The signature is written in a cursive style with a large, stylized initial 'D'.

Donna Bolognino,
Recovery EHP Coordinator

Enclosure:
Phase I Cultural Resources Survey

cc Rick Lord, DHSES



New York State Office of Parks, Recreation and Historic Preservation

Division for Historic Preservation
P.O. Box 189, Waterford, New York 12188-0189
518-237-8643

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

December 30, 2013

Donna Bolognino
Recovery EHP Coordinator
FEMA DR-4020-NY
Leo O'Brien Federal Building
11A Clinton Ave, Suite 742
Albany, NY 12207
(Via e-mail only)

Re: FEMA, SOEM
Chilson Water Transmission Main Relocation
4020-DR-NY
TICONDEROGA, Essex County
12PR03581

Dear Ms. Bolognino,

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO 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 National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, the SHPO concurs with your agency's determination of No Historic Properties Affected by the proposed work.

If I can be of any further assistance do not hesitate to contact me at (518) 237-8643, ext. 3291

Sincerely,

Larry K Moss
Historic Preservation Technical Specialist

CC: Richard Lord, SOEM (via e-mail only)