APPENDIX H

Cultural Resources

PHASE I CULTURAL RESOURCE SURVEY REPORT

By: Archaeological Services
of the Rochester Museum & Science Center

November 22, 2011

Cultural Resource Survey Report
Phase I Cultural Resource Investigations
for the Proposed Carroll Landfill Expansion

AS/RMSC PIN 2011.16

Town of Carroll
Chautauqua County
New York
MCD: 01303

Prepared By:

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With Contributions By
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Submitted To:

Ms. Bethany Acquisto
Daigler Engineering, P.C.
1711 Grand Island Boulevard
Grand Island, New York 14072

22 November 2011

Sponsor: Local SEQR

MANAGEMENT SUMMARY

A. **SHPO Project Review Number:** N/A

B. **Involved State and Federal Agencies:** Local SEQR

C. **Phase of Survey:** Phase I Cultural Resource Investigations

D. **Location Information**
Location: Town of Carroll
Minor Civil Division: MCD 01303
County: Chautauqua County, New York

E. **Survey Area**
Maximum Length: 524 meters (1,720 feet) north-south
Maximum Width: 475 meters (1,560 feet) east-west
Project Area Acres: Approximately 21.9 hectares (54.1 acres)
Number of Square Meter & Feet Excavated (Phase II, Phase III only): N/A
Percentage of the Site Excavated (Phase II, Phase III only): N/A

F. **USGS 7.5 Minute Quadrangle Map:** Ivory, New York 1954 (Photorevised 1976)

G. **Archaeological Survey Overview**
Number & Interval of Shovel Tests: 376 STPS @ 15 m (50 ft)
Number & Size of Units: N/A
Width of Plowed Strips: N/A
Surface Survey Transect Interval: N/A

H. **Results of Archaeological Survey**
Number of & name of prehistoric sites identified: 0
Number of & name of historic sites identified: 0
Number of & name of sites recommended for Phase II/Avoidance: 0

I. **Results of Architectural Survey**
Number of buildings/structures/cemeteries within project area: N/A
Number of buildings/structures/cemeteries adjacent to project area: N/A
Number of known NR listed/eligible buildings/structures/cemeteries/districts: N/A
Number of identified eligible buildings/structures/cemeteries/districts: N/A

J. **Report Author(s):** Andrew K. Graupman and Mark W. Ewing, Archaeological Services (AS) of the Rochester Museum & Science Center (RMSC), Rochester, New York.

K. **Date of Report:** 22 November 2011

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I. PROJECT DESCRIPTION

This report presents the results of a Phase I cultural resource investigation as part of the preliminary planning for the proposed expansion of the Carroll Landfill in the Town of Carroll, New York. The proposed project is located just north of Sandberg Road, south and west of Dodge Road, and west of Storehouse Run Creek. The project area is approximately 1,950 meters (6,400 feet) west of the Chautauqua/Cattaraugus County Line and 1,280 meters (4,200 feet) north of the New York/Pennsylvania border. The Carroll Landfill Expansion project entails the expansion of the existing estimated 3-acre closed landfill into a larger 38-acre landfill with an additional 8.5 acres developed with ancillary and support facilities and about 7.6 acres which will remain undeveloped. All of this acreage is part of an original 54.1-acre project area. The Phase I Cultural Resource Investigations, requested by Ms. Bethany Acquisto, Environmental Engineer at Daigler Engineering, P.C., are in compliance with existing state and federal regulations regarding the location, evaluation, and preservation of cultural resources that may suffer adverse impacts from government assisted or permitted construction projects. The project area encompasses approximately 21.9 hectares (54.1 acres) which, at the time of the Phase IB survey, was considered the Area of Potential Effect (APE) with the exception of a 75 to 100-ft buffer zone around the perimeter of the property. Subsequent delivery of a more detailed design plan during the execution of fieldwork reduced the size of the APE where ground disturbing activities are slated to occur during the proposed planned phased development. For the purpose of this report the Phase IB survey examined the entire 21.9-ha (54.1-acre) project area which includes the APE which must be considered as it is part of the proposed project area. However, all subsequent references to the project area refer to the entire 21.9-ha (54.1-acre) area contained within the project boundaries unless it is specifically noted that the APE is referring to the current design plan where ground disturbing activities will occur. All work will occur within the Town of Carroll, Chautauqua County, New York. The maximum survey length is 524 meters (1,720 feet) from north to south and the total width of surveyed area is 475 meters (1,560 feet) from east to west.

The fieldwork summarized in this document was performed under the direct supervision of Mark W. Ewing, Manager, Archaeological Services (AS) of the Rochester Museum & Science Center (RMSC), who also served as editor. Scott A. Crowder, AS/RMSC Assistant Manager, and Andrew K. Graupman, AS/RMSC Project Archaeologist, served as the project co-directors while Andrew K. Graupman is the principal author of this report. The field crew was supervised by Scott A. Crowder and Andrew K. Graupman and consisted of the co-directors as well as AS/RMSC Field Technicians John Gordinier and Mark Foos. Fieldwork was conducted on various dates between 22 August 2011 and 09 September 2011. Andrew K. Graupman constructed the project databases and project maps.

In compliance with the New York State Education Department's Revised Work Scope Descriptions (March 2005) and National Park Service's Criteria and Procedures for the Identification of Historic Properties (1990), the area within the project boundaries, for the purpose of conducting the survey, is considered the Area of Impact where potential impacts may occur. Thus, the following Phase I cultural resource reconnaissance survey will examine the entire project area, including the APE where ground disturbing activities are slated to occur, in regards to both background research and field testing regardless of whether or not impacts will actually occur within all areas contained by the project boundaries. *The results of the research performed for this report, though referencing aspects of the surrounding lands, do not apply to any territory outside the project area and are not meant to indicate any form of recommendation for lands outside the project boundaries.*

II. GENERAL PROJECT AREA

Figure 1 places the general project location within Chautauqua County and New York State. Figure 2 shows the project area and APE on the 1954 USGS 7.5' Ivory, N. Y. Quadrangle topographic map (Photorevised 1976). Photographs 1 through 22 demonstrate present land uses and current conditions within and adjacent to the project area and can be found within Appendix A.

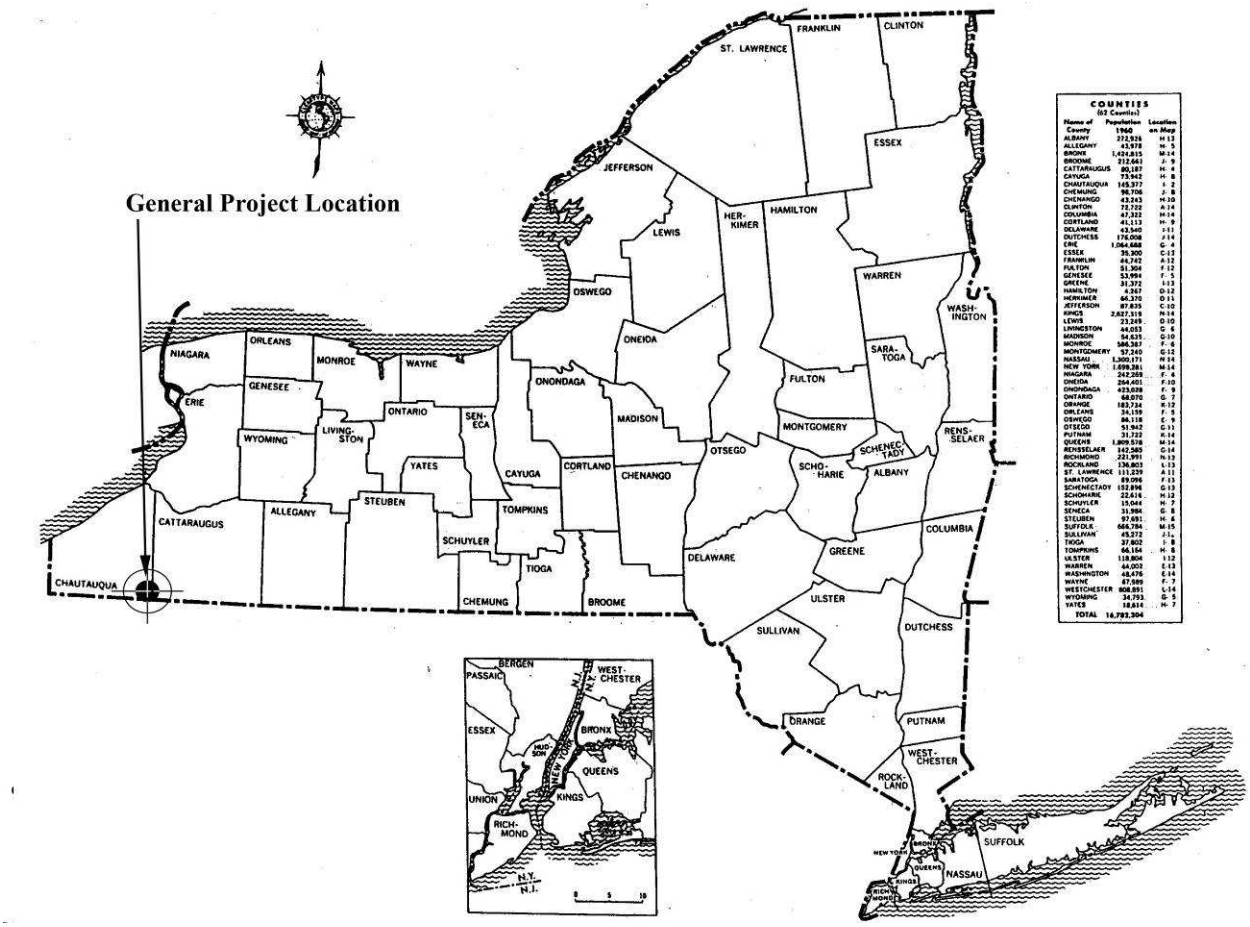

Figure 1: General project location in Chautauqua County, New York State

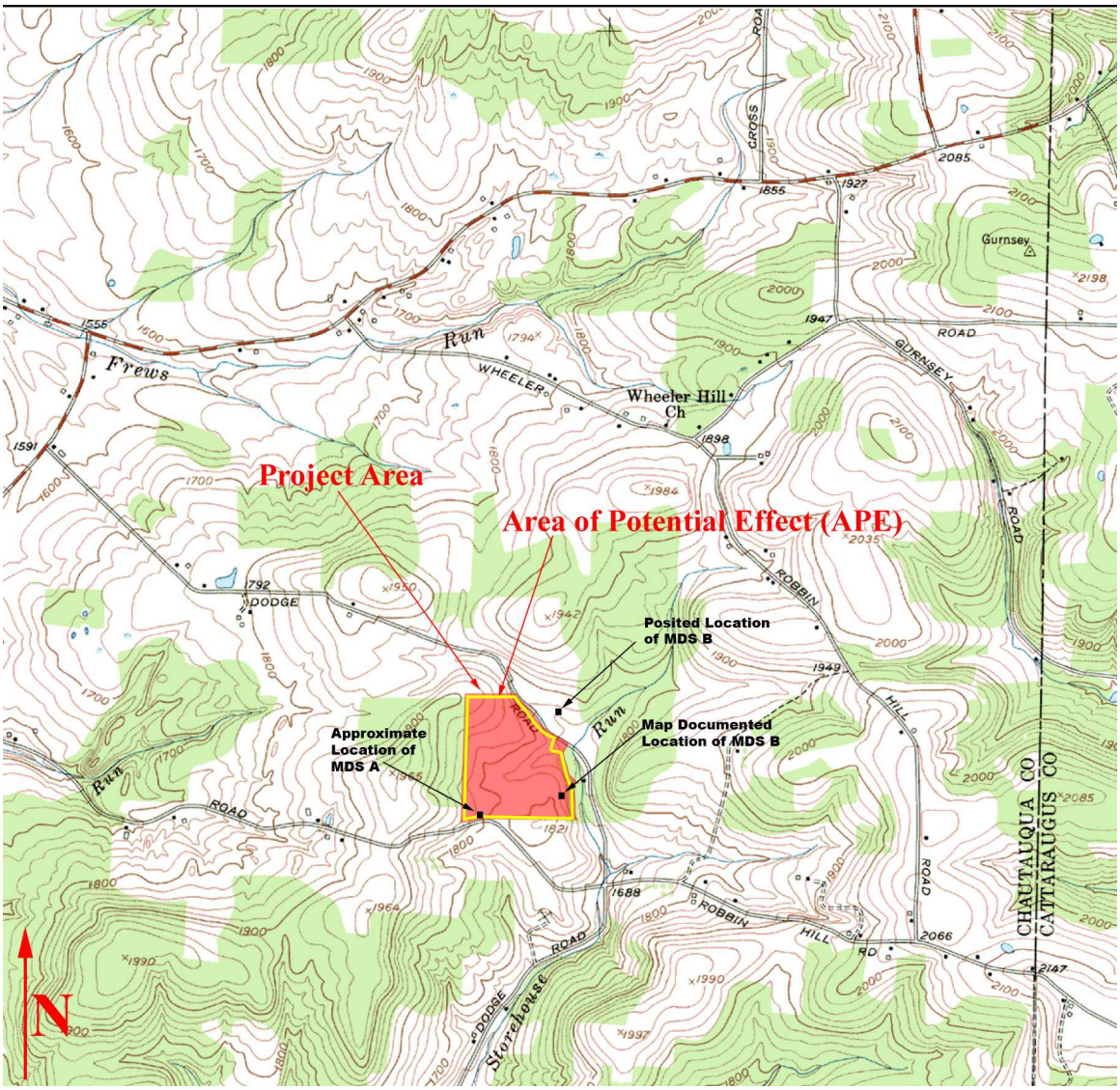

Figure 2: Project Area and Area of Potential Effect (APE) on the USGS 7.5' Ivory, NY Quadrangle 1954 (Photorevised 1976)

III. BACKGROUND RESEARCH

3.1 Project Area Soils

Chautauqua County as a whole is dominated by two (2) physiographic provinces. The first, located along the southern shore of Lake Erie, is the Erie-Ontario Plain. The second, the Allegheny Plateau, is where the project area resides. Unlike most areas of New York State where activities associated with the retreat of the glaciers have left behind a varied terrain of drumlins, moraines, and till plains, the majority of the plateau was not covered by ice during the last glacial period. As such the topography is a bit more rugged and consists of long, steep-sided valleys incised into the relatively level plateau, wide ridgetops, and flat-topped hills. However, based upon previously excavated soil test borings, it appears that the project area is indeed located at a terminal moraine. Loosely consolidated glacial till recovered from the borings suggest that the project area is located at the receding edge of the glacial advance. In fact, to quote the soil report, "it is believed that the site sits on the western portion of a bedrock valley filled with … glacial deposits … from till, glaciolacustrine and glacialfluvial depositional environments." The report further states that the local bedrock in the upper portions of the till had been scoured, plucked, and carried a short distance which suggests numerous advance and retreats of the glacier at the landfill site were more localized. There is also the potential that the project area was altered by agricultural practices during the historic period and suffered modifications associated with the modern development of the Carroll Landfill. As for the project area itself, the topography as a whole is gently sloped downhill from northwest to southeast towards Storehouse Run. However, within the APE slopes range from relatively level to excessively steep and numerous swales abound through out the central portion of the APE. Of course, there is also the notable presence of the now closed landfill, essentially a man-made hill, in the center of the project area. The elevation of the project area ranges from approximately 576 m (1,890 ft) above mean sea level (amsl) in the northwest corner to 530 m (1,740 ft) above mean sea level (amsl) along the eastern project boundary near Storehouse Run.

The bedrock underlying Chautauqua County is of sedimentary origin and consists predominantly of shale and limestone deposited in ancient seas. The bedrock provided parent material for the soils found within the county, and where the bedrock was close to the surface the topography often follows the underlying formations.

Chautauqua County is in the drainage system of both the Allegheny-Ohio-Mississippi River/Gulf of Mexico system as well as the Lake Erie-Lake Ontario-St. Lawrence/Atlantic Ocean system. On the whole, the northwest portion of the county drains into Lake Erie which flows north into Lake Ontario via the Niagara River then into the Atlantic Ocean via the St. Lawrence Seaway. As for the remainder of the county, it drains via the Allegheny River which joins the Ohio River in Pittsburgh, Pennsylvania to form the Mississippi River which meanders south to drain into the Gulf of Mexico. The project area drains via Storehouse Run which flows into Conewango Creek which then joins the Allegheny River.

Eight (8) soil types representing six (6) soil series are identified within the project area (Figure 3) and are summarized in Table 1. In general, the eight (8) soil types are somewhat well drained, although the slope of these soils varies widely from 0% to 35%. It was probably once well suited to support a variety of farming-related practices, with less sloping areas used for growing hay, corn, small grains, and vegetables while the more sloping areas would have been used as pasture land. This use is suggested by the dense hedgerows containing large, mature trees along the perimeter of at least some of the property. Since then mature woodland and scrub undergrowth have grown up within the project boundaries.

There are zero (0) soils within the project area that are alluvial in nature. As noted by the USDA, the depth below surface to subsoil ranges from approximately 18 centimeters (7 inches) below ground surface to 23 centimeters (9 inches) below ground surface. Based upon the information provided by the USDA soil book, there is no possibility that deeply buried soil deposits capable of containing cultural material could exist within the project boundaries. Thus, standard shovel test pits penetrating to the subsoil are deemed sufficient for assessing the presence or absence of archaeological material within the project area.

Additionally, it should be noted that agricultural practices may have been conducted within at least portions of the project area. As such, the soils may have slightly deeper depths to subsoil as tillage could have mixed the upper portion of the B horizon with the A horizon soils to create a plow zone whose characteristics may not match those noted for the A horizon in the field survey guide.

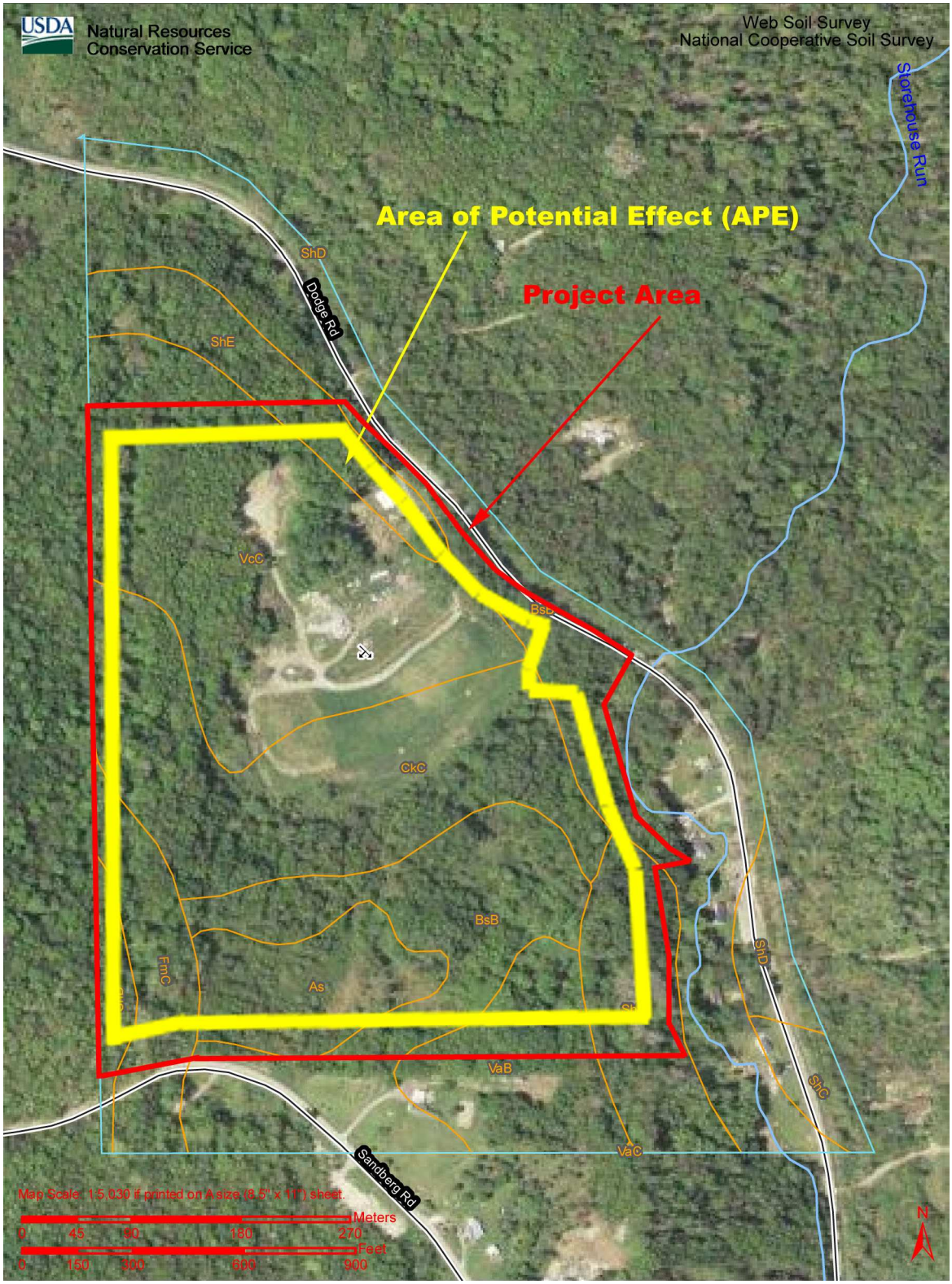

Figure 3: Project Area and Area of Potential Effect (APE) on the *Soil Survey of Chautauqua County, New York* (USDA WSS 2011)

Table 1: Soil Types Represented within the Project Area.

Name	Soil Horizon Depth cm (in)	Color	Texture, Inclusions	Slope %	Drainage	Landform
Ashville silt loam (As)	Ap 0-23 cm (0-9 in) Bg1 23-30 cm (9-12 in) Bg2 30-53 cm (12-21 in) Bg3 53-91 cm (21-36 in) Cg 91-183 cm (36-72 in)	VDkGry GryBrn GryBrn GryBrn Brn	SiLo SiLo SiLo SiLo GrlSiLo	0-3	Poorly drained	Depressions in glacial till plains
Busti silt loam (BsB)	Ap 0-20 cm (0-8 in) Bw1 20-30 cm (8-12 in) Bw2 30-48 cm (12-19 in) BC 48-68 cm (19-27 in) C 68-183 cm (27-72 in)	VDkGryBrn Brn Brn Brn DkGryBrn	SiLo SiLo SiLo GrlSiLo GrlSiLo	3-8	Somewhat poorly drained	Uplands on glacial till plains
Chautauqua silt loam (CkC)	Ap 0-18 cm (0-7 in) Bw1 18-56 cm (7-22 in) Bw2 56-86 cm (22-34 in) C1 86-152 cm (34-60 in) C2 152-183 cm (60-72 in)	VDkGryBrn DkYBrn Brn DkYBrn DkYBrn	SiLo SiLo GrlSiLo GrlSiLo VGrlLo	8-15	Moderately well drained	Uplands on glacial till plains
Fremont silt loam (FmC)	Ap 0-18 cm (0-7 in) Bw1 18-30 cm (7-12 in) Bw2 30-46 cm (12-18 in) Bw3 46-71 cm (18-28 in) C1 71-91 cm (28-36 in) C2 91-183 cm (36-72 in)	DkGryBrn OlvBrn LtOlvBrn Olv Gry Gry	SiLo SiLo SiClLo SiClLo SiLo SiClLo	8-15	Somewhat poorly drained	Uplands on glacial till plains
Schuyler silt loam (ShD)	Ap 0-23 cm (0-9 in) Bw1 23-36 cm (9-14 in) Bw2 36-56 cm (14-22 in) Bw3 56-76 cm (22-30 in) BC 76-97 cm (30-38 in) C 97-183 cm (38-72 in)	Brn OlvBrn LtOlvBrn Olv OlvGry OlvGry	SiLo SiLo SiLo SiLo SiLo SiLo	15-25	Moderately well drained	Glacial plateaus
Schuyler silt loam (ShE)	Ap 0-23 cm (0-9 in) Bw1 23-36 cm (9-14 in) Bw2 36-56 cm (14-22 in) Bw3 56-76 cm (22-30 in) BC 76-97 cm (30-38 in) C 97-183 cm (38-72 in)	Brn OlvBrn LtOlvBrn Olv OlvGry OlvGry	SiLo SiLo SiLo SiLo SiLo SiLo	25-35	Moderately well drained	Glacial plateaus
Valois gravelly silt loam (VaB)	Ap 0-18 cm (0-7 in) Bw1 18-76 cm (7-30 in) Bw2 76-119 cm (30-47 in) 2C 119-183 cm (47-72 in)	Brn StrgBrn Brn DkGryBrn	GrlLo GrlLo GrlSiLo VGrlSaLo	3-8	Well drained	Lateral moraines
Valois gravelly silt loam (VcC)	Ap 0-18 cm (0-7 in) Bw1 18-76 cm (7-30 in) Bw2 76-119 cm (30-47 in) 2C 119-183 cm (47-72 in)	Brn StrgBrn Brn DkGryBrn	GrlLo GrlLo GrlSiLo VGrlSaLo	Rolling	Well drained	Lateral moraines

KEY:

Shade: Lt – Light, Dk – Dark, V – Very
Color: Brn – Brown, Blk – Black, Gry – Gray, GBrn – Gray Brown, StrBrn – Strong Brown, RBrn – Red Brown, YBrn – Yellow Brown
Soils: Cl – Clay, Lo – Loam, Si – Silt, Sa – Sand
Other: / - Mottled, Grl – Gravel, Cbs – Cobbles, Pbs – Pebbles, Rts – Roots

3.2 Sites within a One- Mile Radius

Archaeological site files checks were conducted at the Archaeological Services of the Rochester Museum & Science Center (AS/RMSC), the New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP), and the New York State Museum (NYSM). The site files checks identified one (1) individual archaeological site within 1.6 km (1 mi) of the project area (Table 2). The site is listed as a historic EuroAmerican stone-lined well and is located within the project area. Known as the Dodge Road Foundation site, the only known information pertaining to the site is that it is comprised of a stone foundation. No other information pertaining to what cultural material, if any, was recovered is listed.

Table 2: Archaeological Sites within a One-Mile Radius of the Project Area.

	NYSOPRHP Site #	Additional Site #	Distance from APE m (ft)	Time Period	Site Type
1	A013-03-0032	RMSC Jtn 044	Within the project area	Historic EuroAmerican	Foundation

It would appear that the most likely site type that could be expected within the project area would have a historic EuroAmerican cultural affiliation. In this case, a sheet midden associated with the foundation would be most likely. It should be noted though that, based upon its location away from major roads in a hilly topography of greater than fifteen percent (15%) slope as well as its small size, the foundation most likely once supported some sort of farm outbuilding such as a smoke house or sugar shack rather than a residence. Additionally, the site area itself may have been disturbed through the construction of surrounding access roads, particularly to the south and east, such that cultural material may no longer rest *in situ*. Yet, as the project area is near several historic farmsteads and contains the known site, it is possible that a historic EuroAmerican site could be encountered.

As well, there is the potential, albeit small, to encounter a small camp or resource procurement site with a Native American cultural affiliation within the project area. This is possible due to the project area being within close proximity to several small creeks which places the project area in a reasonable location for accessing many faunal, floral, and lithic resources desired by Native Americans. No known prehistoric archaeological sites are within close proximity to the project area. However, this may be a result of a paucity of cultural resource reconnaissance surveys performed in the area rather than a true lack of Native sites.

3.3 Settlement patterns

Figures 2, 4, and 5 demonstrate changes in settlement in the 19th and 20th centuries surrounding the project area. The project area itself and surrounding lands have seen relatively minor changes, if any, over the preceding century and a half. In 1867, the project area appears to be surrounded by a number of residential farmsteads and structures (Figure 4). However, the bulk of structures are generally located around small hamlets, centered on the intersection of major thoroughfares, and closer to the Town of Frewsburg. Within the project area itself, there are two (2) recorded structures, both owned by G.W.B. As these are in close proximity to a sawmill owned by G.W. Brown to the east, these structures are most likely buildings also belonging to Mr. Brown. The location of one of these two buildings along another stream suggests a second mill, while the G.W.B. structure noted furthest westward is most likely a residence adjacent to Sandberg Road.

Nearly four (4) decades later, a few changes to the project area are apparent. The two (2) G.W.B. structures are no longer present, becoming MDS A and MDS B (MDS: map documented structure, i.e., a structure older than fifty years no longer in existence), and the road along the northern boundary now exists whereas it was not present in 1867, having then ended at the P. Anderson residence to the northwest of the project area (Figure 5). The project area, already showing little development, now shows no development or historic structures and is still most likely used for farming purposes. The surrounding lands, still populated predominantly by scattered rural farmsteads, show no noticeable increase in settlement.

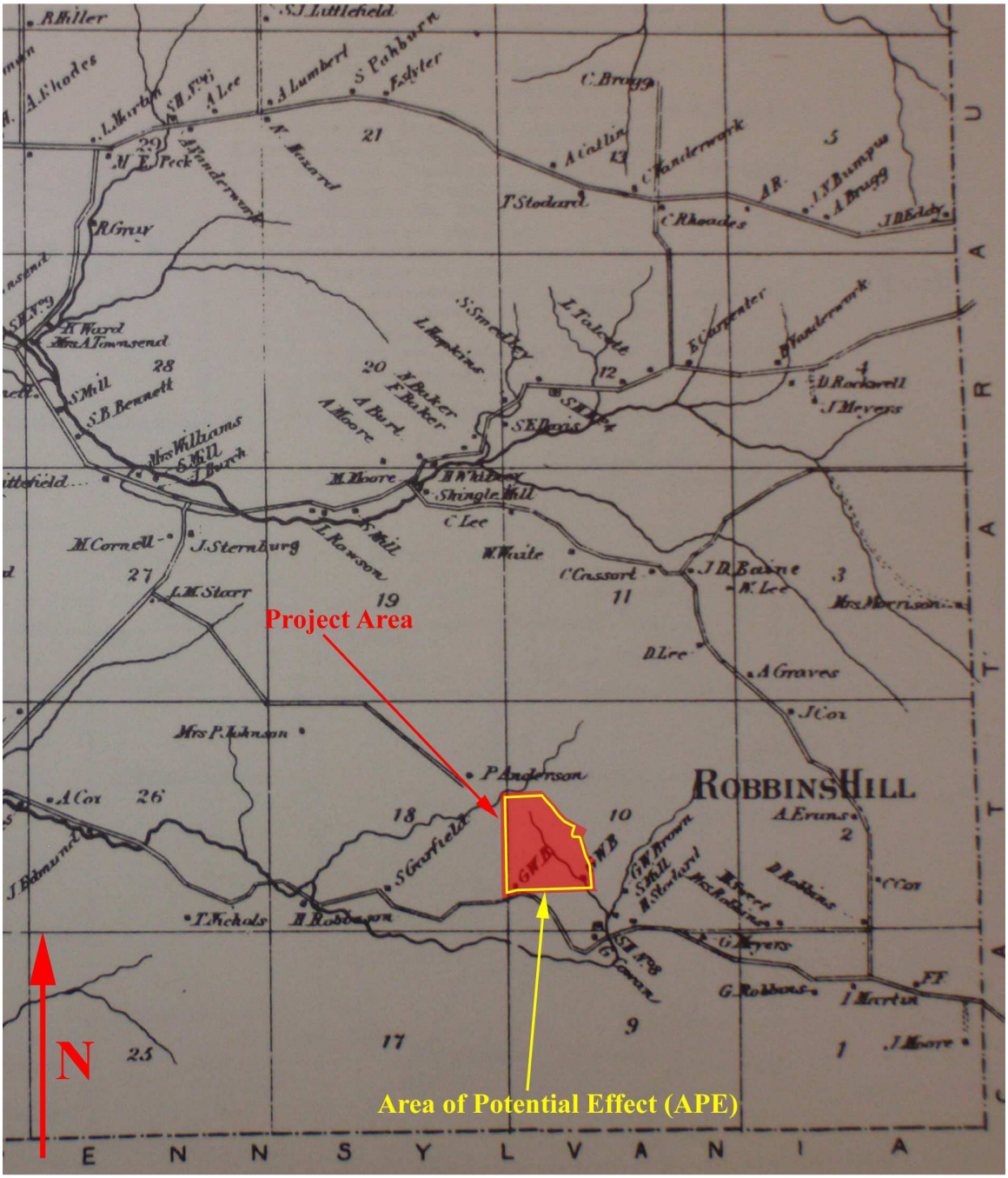

Figure 4: Project Area and Area of Potential Effect (APE) on Sheet 13 of the 1867 Stewart's *New Topographical Atlas of Chautauqua County, New York*

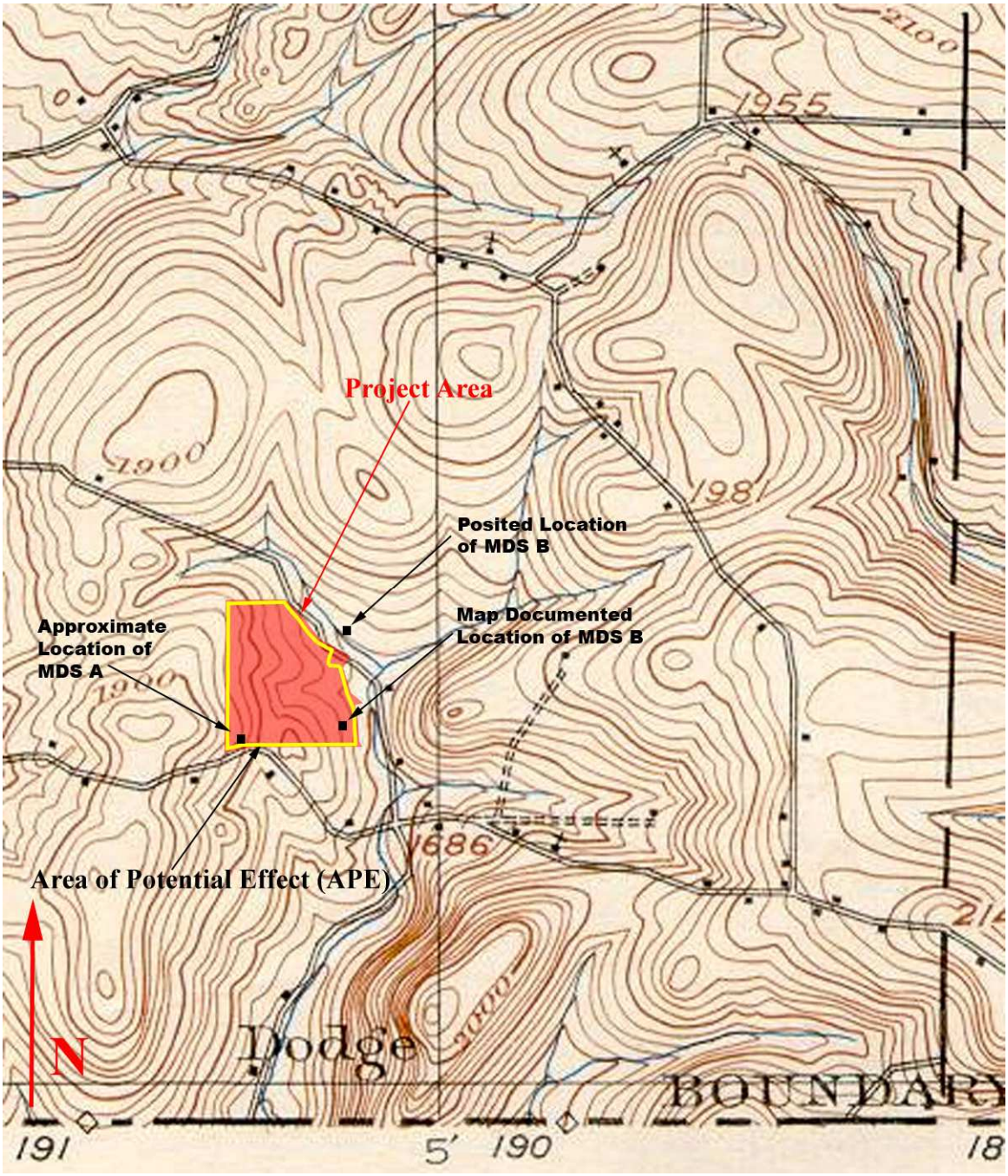

Figure 5: Project Area and Area of Potential Effect (APE) on the USGS 15' Jamestown, NY Quadrangle 1905

At this point it is critical to note that the AS/RMSC staff believe that there is an inaccuracy in the location of the waterway where the middle G.W.B. structure, posited to be a sawmill (but not noted as one), is sited. When comparing the maps from 1867 and 1905 (Figures 4 and 5), the road alignments match up fairly well but the locations of the waterways seem different. The small stream that is noted north of the project area on Figure 5 lies within contour lines that do not appear to have been unnaturally altered, suggesting an original, unchanged stream course. In a general comparison to Figure 4, this stream course would be the same one that the G.W.B. structure was located adjacent to. However, as Figure 5 provides a more accurate location based on a topographic survey, it appears that the stream's location actually exists northeast of where it was shown in 1867. Additionally, the fact that this stream course is now paralleling to the north a newly constructed road (as of 1905) that forms a section of the project area boundary, it is logical to assume that while a structure is presumed to have been present adjacent to the stream in 1867, it is no longer present in 1905 and that it would have been located outside of the project area, not within as Figure 4 would suggest. Additionally, initial observation led AS/RMSC staff to believe MDS B may have been the structure which demarcated the Dodge Road Foundation site. However, as MDS B is most likely outside the project area, it is worth noting that no structure appears on the map which might indicate the known foundation.

In the middle of the twentieth century, one would expect to see a slow progression of development within and surrounding the project area. It is at this time that residential development expanded throughout the 1940s and 1950s echoing regional and national population trends of suburban growth post World War II. However, being located in a rural setting, the project area still has seen little development. In 1954, the project area is still devoid of any development (Figure 2). Residential, commercial, or any other development surrounding the project area is also lacking. Thus, the project area itself appears to be little changed. Devoid of structures, including any which might denote the known foundation site, and, though once used as agricultural land in the historic era, it has probably now been allowed to go fallow and revert to scrub land.

Since the middle of the twentieth century, the project area and surrounding lands still appear to have seen limited development. In fact, since 1954, it appears the only modifications made to the project area have been associated with construction and installation of the Carroll Landfill. Though used as a construction dump for many years, it was subsequently closed in the early twenty-first century. Limited residential rural development in the areas surrounding the landfill has continued to the present.

IV. SENSITIVITY ASSESSMENT

4.1 Prehistoric site sensitivity

The prehistoric site sensitivity, based on integration of environmental information, site file data, overview, and current land use/disturbances, is estimated to be low. There are zero (0) individual sites recorded within a 1.6 km (1 mi) radius of the proposed project area that have a Native American cultural affiliation, either prehistoric or historic. However, the lack of known sites within the vicinity of the project area is most likely a result of the paucity of development projects in a rural setting which would necessitate a cultural resource reconnaissance survey than a true lack of Native American archaeological sites. As for the project area as a whole, some of its soils are relatively well-drained with a less than 15% slope with areas of marshy wetlands, an environmental setting evidenced to be desirable for settling. Additionally, several small creeks, including Storehouse Run, are within close proximity to the project area. These attributes would suggest a relatively low sensitivity for the potential of a prehistoric site being located within the project area. With the rolling topography, the most likely type of prehistoric site to be encountered within the project area would be a small undifferentiated prehistoric site such as a camp or a resource procurement site.

4.2 Historic site sensitivity

Based upon historic map results and information about settlement prior to the documentation of historic maps, the project area would have an average historic site sensitivity. There is one (1) historic site documented within 1.6 km (1 mi) of the project area. In fact, the "Dodge Road Foundation" site is located within the southeast corner of the project area, though it does not appear on any historic map, while the location of the former G.W.B. structure noted as MDS A (MDS: map documented structure, i.e., a structure older than fifty years no longer in existence) also lies within the project boundaries. Additionally, several historic farmsteads exist within the vicinity of the project area. However, another factor to take into consideration is that the topography of the project area is quite rolling and hilly, making at least sections of the project area unsuited for habitation. Thus, due to these factors, it would be very feasible for historic cultural material to exist within the project area.

V. TYPE AND EXTENT OF DISTURBANCE

The project area is surrounded mainly by single family rural residences and woodland. The project area itself, outside of the cleared area associated with the existing landfill, is mainly comprised of mature woodland and scrub undergrowth. The project area is dominated by several areas of disturbance associated with the existing landfill, including the mound comprised of the closed landfill itself and a large soil borrow area to the northwest. There is also a modern barn and gravel driveway related to the use of the landfill, which reside in the northern portion of the project area. These areas have been extensively cut, graded, and filled. It should also be noted that a wide swath of land through the central portion of the project area has been disturbed to allow for redirected drainage away from the landfill. As the disturbance is visually obvious, it is relatively easy to delineate which areas should be precluded from Phase IB testing due to disturbed soils. Although not considered disturbance, excessive slopes of greater than fifteen percent (15%) are associated with both the artificially-created drainage as well as the area along the eastern project boundary which lead to Storehouse Run, creating more sections of the project area which would not be suitable for testing. It is very important to note that the location of the Dodge Road Foundation site falls within an area where the redirected drainage has been created, effectively destroying the intact soils surrounding the remnant foundation hole. Additionally, it is within an area of excessive slopes greater than fifteen percent (15%) and appears to have been effected by construction of access roads to the south and the east of the site area. Overall, based on known, documentable disturbance and areas of slopes in excess of 15% an estimated 12.4 ha (30.6 ac) of the project area are assumed to be untestable whereas 9.5 ha (23.5 ac) are considered to contain potentially undisturbed soils and are considered testable (Figure 6). Of the untestable sections, disturbance accounts for 4.7 ha (11.6 ac), excessive slope accounts for 6.1 ha (15.2 ac), and wetland accounts for 1.5 ha (3.8 ac).

VI. TESTING RECOMMENDATIONS

Based on information supplied by Ms. Bethany Acquisto and the results of the site visit, it was determined the project area is vegetated and could not be prepared for a surface inspection via plowing and disking. Therefore, the Phase IB field investigation strategy would utilize the excavation of STPs at a standard 15-meter (50-foot) interval. Should cultural material be encountered, the testing interval will either be tightened to 7.5 meters (25 feet) or close-interval STPs will be placed at 1 m (3 ft) and 3 m (10 ft) from the original positive STP in each of the four (4) cardinal directions. In cases were disturbance is not readily observable visually but is encountered subsurface, the AS/RMSC reserves the right to increase the testing interval to 30-meter (100-feet) as is standard and accepted practice.

The large areas of disturbance associated with the existing landfill, borrow pit, and drainage swales do not warrant Phase IB testing nor do the areas where slopes are in excess of fifteen percent (15%). According to information provided by the client, designated wetlands, particularly those located in the southwest portion of the project area, are included within the proposed APE and may factor into ground disturbing activities. As there is no guarantee that the wetlands will be avoided during construction, the AS/RMSC recommends they be tested as much as possible.

VII. PHASE 1B ARCHAEOLOGICAL SURVEY METHODOLOGY

7.1 Project walkover

A field visit by Mark W. Ewing, AS/RMSC Manager, Scott A. Crowder, AS/RMSC Assistant Manager, and Andrew K. Graupman, AS/RMSC Project Archaeologist, was conducted on 09 August 2011 to evaluate the conditions within the project area prior to the commencement of field investigations. This visit confirmed the project area boundaries as well as sections of the project area which appeared to be untestable either due to excessive slopes or existing disturbance. Based on observations, approximately 9.5 ha (23.5 ac) of the project area contains potentially undisturbed soils which would require testing.

7.2 Testing procedures

7.2.1 Surface

The project area is vegetated and a surface inspection was not conducted.

7.2.2 Subsurface testing

All undisturbed sections of the project area where ground-disturbing activities are planned were tested using STPs excavated at set intervals. The interval between STPs was dictated by field conditions and/or the recovery of artifacts.

7.2.3 Size, placement, intervals, and depths

All STPs were placed at an interval of 15 m (50 ft). In cases were disturbance was encountered, the testing interval was increased to 30 meter (100 feet) as is standard and accepted practice. All STPs were hand dug with a shovel and were generally 30 cm (12 in) in diameter. An effort was made to excavate all STPs to a depth of 15 cm (6 in) into the underlying subsoil or to a maximum depth of 50 cm (20 in) if no change in soil horizon was observed. All excavated soils were carefully passed through ¼ inch screen in order to recover any cultural material from each soil layer. An effort was made to separate the A and B horizon soils and to pass them through the screen separately. Notes on subsurface conditions, including descriptions of soil type, texture, color, excavation conditions, location and the presence or absence of cultural material were kept in field notebooks. All shovel test summaries can be found in Appendix B.

7.3 Laboratory methodology

Following fieldwork, all artifacts are processed and analyzed in the AS/RMSC laboratory at the Rochester Museum & Science Center. Recovered material is cleaned, identified, inventoried, and catalogued in accordance with professional standards. Processing includes washing and/or dry brushing, as well as reviewing the artifact bags to ensure proper provenience. All cultural material as well as notes, maps, and photographs relevant to the project will be curated, according to federal (36 CFR Part 79) and state (NYAC 1994) guidelines, at the Rochester Museum & Science Center, Rochester, New York.

Historic artifacts are cataloged according to an AS/RMSC system following South's Carolina Artifact Pattern (South 1976) which identifies broad artifact patterning through the use of functional groups. Each artifact was classified to functional group (i.e., kitchen, architectural, bone and shell, furniture, lighting, arms, clothing, personal, tobacco pipe, activities, and miscellaneous). Information from ceramic decoration and form is also recorded when present along with date ranges for the manufacture of these artifacts and other diagnostic pieces.

VIII. ARCHAEOLOGICAL SURVEY RESULTS

8.1 Overview

A total of 376 STPs were placed within the testable sections of the project area, 361 of which were excavated (96%). This equates to approximately 16.0 STPs per acre or 39.6 STPs per hectare within the tested section of the project area. Of the fifteen (15) STPs written off and left unexcavated, the majority were done so due to standing water associated with low/wet conditions, areas previously disturbed through excavations, or impenetrable vegetation. All STPs were placed at a 15-m (50-ft) interval. Transects were oriented linearly either east-west or north-south and generally were either perpendicular or parallel to project boundaries (Figures 7).

The average mean depth of Layer 1 was 20.9 centimeters (8.4 inches) below the surface. The majority of colors for Layer 1 were noted as various hues of brown (e.g., light brown, brown, dark brown, etc.) (72%) with brown the most predominant color (41%) followed by dark brown (30%) and then grayish brown (10%). This soil layer appeared to be widely varied in its texture. The most predominant soil types included silty loam (34%), sandy loam (16%), loam (7%), and clayey loam (6%). Eight percent (8%) of Layer 1 STPs contained a notable amount of gravel. Fifty-one (51) STPs did not reach Layer 2 as result of an exceptionally deep Layer 1 (i.e. more than 50 cm below the surface) or an impasse such as rock, roots, gravel, or a water intrusion associated with a high groundwater table. The average mean depth of excavation into Layer 2 was 39.0 centimeters (15.6 inches) below the surface. The predominant colors for Layer 2 were noted generally as various mixtures and hues of both brown and yellow. Yellowish brown (43%) was the most predominant color followed by brownish yellow (22%), light yellowish brown (10%), and dark yellowish brown (5%). Textures for Layer 2 soils were noted as containing mostly silt and clay. The most predominant textures encountered for Layer 2 were categorized as a silty loam (16%), clayey silt (15%), silty clay (11%), and a pure silt (10%). Five percent (5%) of Layer 2 STPs contained a notable amount of gravel. Layer 3, which was encountered in ten (10) STPs, also had an average mean depth of excavation of 39.0 centimeters (15.6 inches) below the surface. The most predominant colors for this third layer were light yellowish brown and

yellowish brown (30% each) while the most predominant textures were silty clay, clayey silt, and silty loam (20% each). No STPs reached a fourth layer (Appendix B).

In general, the soil colors and textures noted in the field were close to what was noted in the soil survey book. However, there were some variations in color, texture, and depth indicative of disturbance. For example, Layer 1 soils were noted as being less gray than was indicated by the soil survey book. Additionally, Layer 2 soils were more mottled with brown and yellow than was expected and contained less of a sand content than expected. This could be due to impacts during the modern period associated with construction and installation of the Carroll landfill as well as impacts associated with possible agricultural usage of the project area during the historic era.

8.2 Survey Results

No Native American artifacts or artifacts with an historic EuroAmerican cultural affiliation were encountered within the project area. In fact, no cultural material of any kind (e.g., prehistoric, historic, modern, etc.) was recovered anywhere within the project area. The only material observed anywhere within the project area was bricks noted on the ground surface associated with the Dodge Road Foundation site where substantial ground-disturbing activities had already impacted the integrity of the soils and site area. Brick tends to be non-diagnostic and thus is generally considered insignificant It should be noted that, at no point, was there any recovery of subsurface cultural material or even any visual surface evidence of the existence of MDS A within the project boundaries..

IX. PHASE I CONCLUSIONS AND RECOMMENDATIONS

The project area exhibited a distinct lack of prehistoric Native American cultural material and historic EuroAmerican cultural material. Not a single artifact of either cultural affiliation was recovered from anywhere within the project area. In fact, aside from some non-diagnostic and insignificant brick scattered on the surface near a known foundation (i.e., Dodge Road Foundation site), no cultural material of any kind was observed within the project area. Additionally, no evidence of MDS A was encountered subsurface nor observed on the ground surface. As such, the AS/RMSC will not designate any new prehistoric Native American archaeological site or an new historic EuroAmerican archaeological site within the project limits. This does not mean that an archaeological site does not exist within the project area, as the Dodge Road Foundation site is located within the project area. However, the location of the site is on an excessive slope of greater than fifteen percent (15%) within an area of substantial disturbance which negatively impacted the site integrity and structure such that there is limited research potential left at this location. Thus, we strongly feel that no more work is required at this site location or within the remainder of the project area. However, if the project limits are redefined to include sections located in adjacent areas outside the project boundaries where no Phase IB field investigations were conducted, additional work would be recommended to determine whether intact cultural deposits lie in these areas.

Again, it is important to note that the APE for this project has been refined since the completion of fieldwork. Originally, the entire project area was considered to constitute the APE but subsequent design plans of the proposed project were more detailed and resulted in a reduced APE. As such, our recommendations for no additional work actually encompass the entire 21.9-ha (54.1-acre) project area, not just the refined Area of Potential Effect (APE) where ground disturbing activities are slated to occur. Furthermore, though the refined design plans indicate that the Dodge Road Foundation site is indeed within the APE, the disturbed nature of the site area as well as its location in an area of excessive slope greater than fifteen percent (15%) had already precluded more work in that area (Figure 7). Thus, based upon the known and documented disturbance and the overwhelmingly low potential to yield any significant data concerning the existing Dodge Road Foundation site and any activities performed there during the historic EuroAmerican period, the AS/RMSC recommends no further cultural resource reconnaissance work be conducted within the project boundaries.

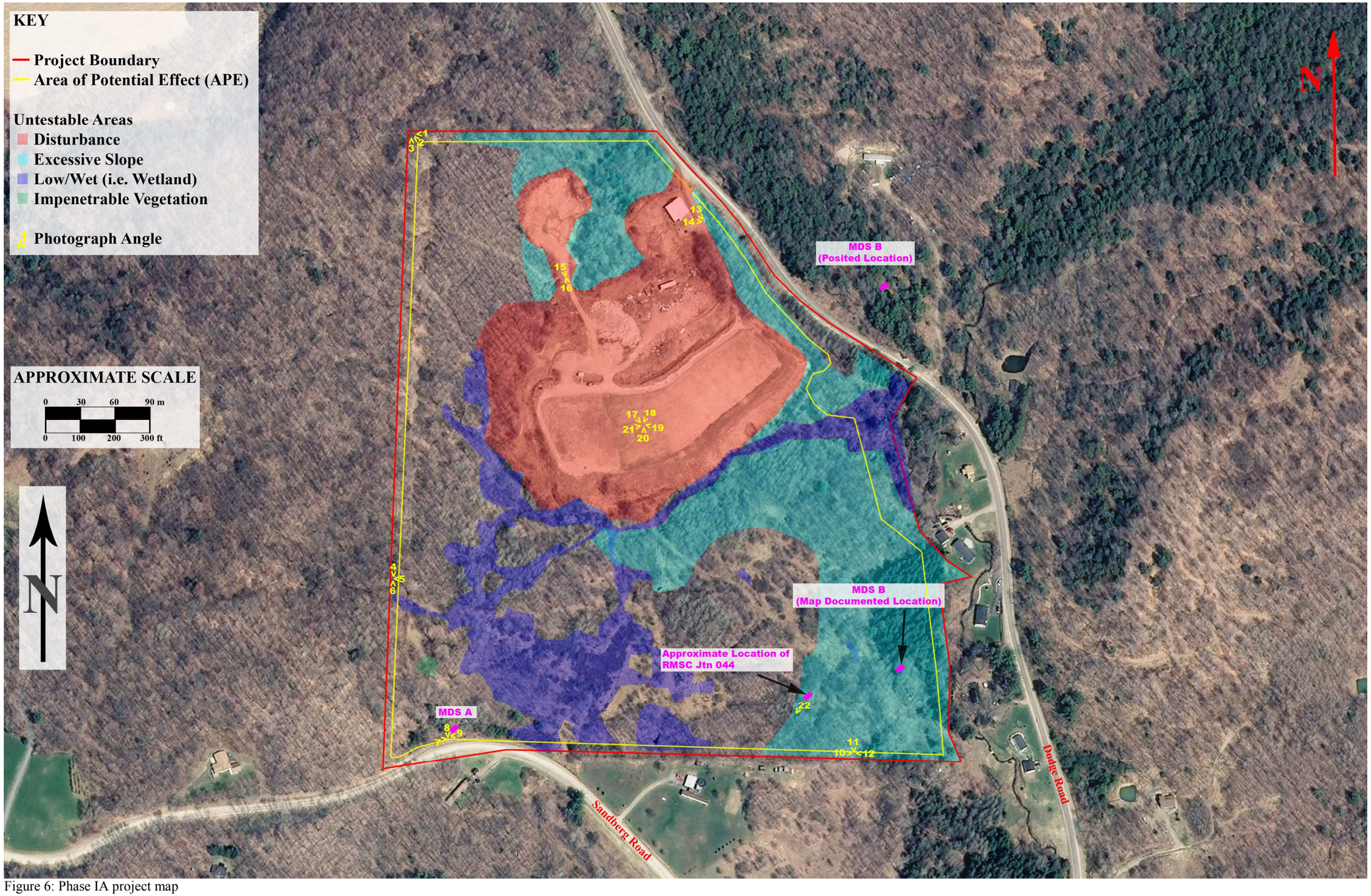

Figure 6: Phase IA project map

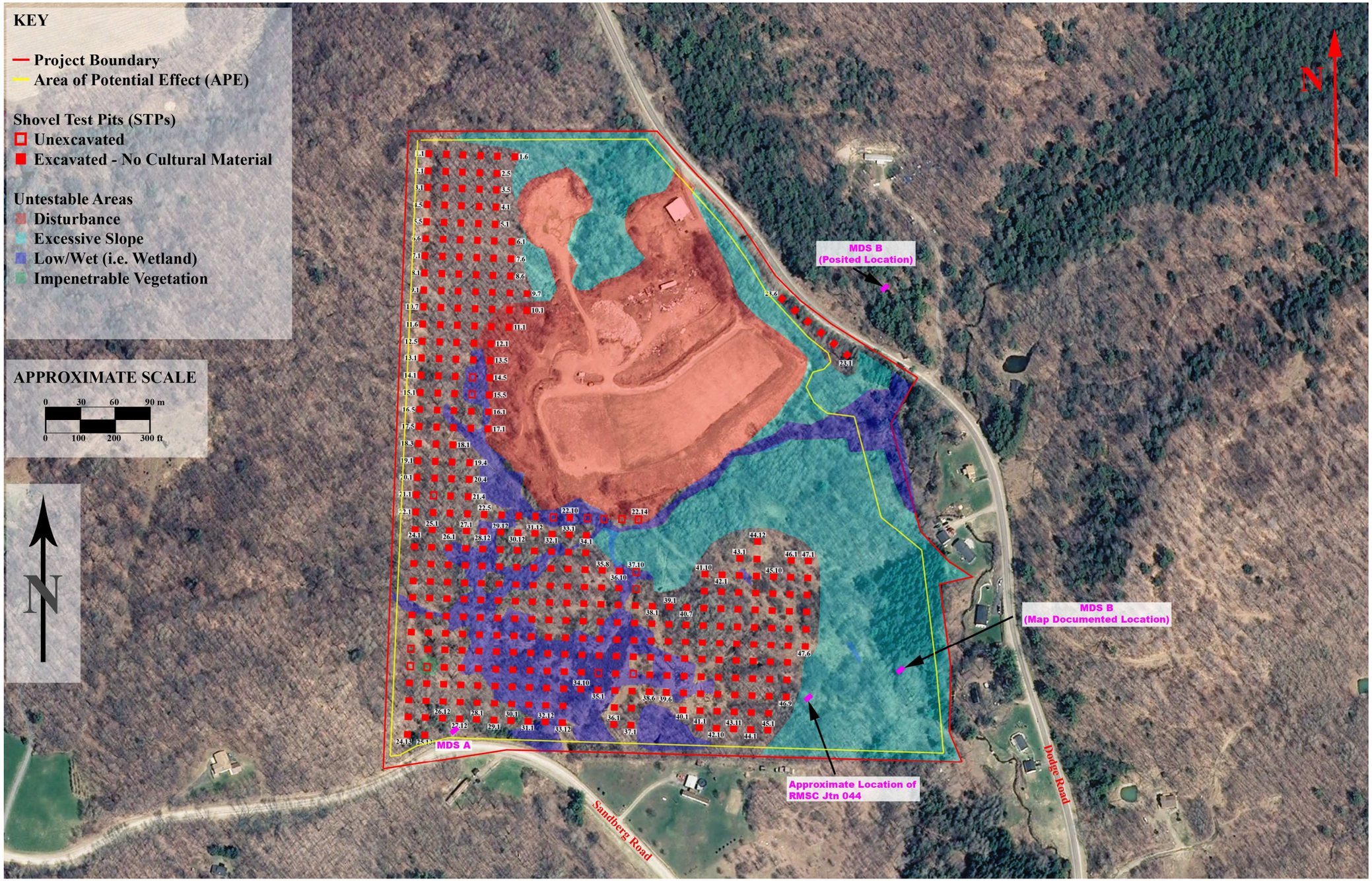

Figure 7: Phase IB Project Map

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APPENDIX A
Photographs

Photograph 1: View of tested section of project area from northwest corner, facing east.

Photograph 2: View of tested section of project area from northwest corner, facing southeast.

Photograph 3: View of tested section of project area from northwest corner, facing south.

Photograph 4: View of tested section of project area from western project boundary, facing north.

Photograph 5: View of tested section of project area from western project boundary, facing east.

Photograph 6: View of tested section of project area from western project boundary, facing south.

Photograph 7: View of tested section of project area from southern project boundary at Sandberg Road, facing west-southwest.

Photograph 8: View of tested section of project area from southern project boundary at Sandberg Road, facing north.

Photograph 9: View of tested section of project area from southern project boundary at Sandberg Road, facing east-northeast.

Photograph 10: View of excessive slope in project area from southern project boundary, facing west.

Photograph 11: View of general project area from southern project boundary, facing north.

Photograph 12: View of general project area from southern project boundary, facing east.

Photograph 13: View of disturbance associated with the graded entrance road leading in to the existing Carroll Landfill, facing northwest.

Photograph 14: View of existing disturbance surrounding a storage barn at the existing Carroll Landfill, facing west.

Photograph 15: View of untested area of disturbance associated with the existing Carroll Landfill, facing north-northwest.

Photograph 16: View of untested area of disturbance associated with the existing Carroll Landfill, facing south-southeast.

Photograph 17: General view of disturbance associated with the existing Carroll Landfill from atop the center of the closed landfill, facing northwest.

Photograph 18: General view of disturbance associated with the existing Carroll Landfill from atop the center of the closed landfill, facing northeast.

Photograph 19: General view of disturbance associated with the existing Carroll Landfill from atop the center of the closed landfill and note steeply sloping land in distance, facing east-southeast.

Photograph 20: General view of disturbance associated with the existing Carroll Landfill from atop the center of the closed landfill and note steeply sloping land in distance, facing south.

Photograph 21: General view of disturbance associated with the existing Carroll Landfill from atop the center of the closed landfill and note steeply sloping land in distance, facing west-southwest.

Photograph 22: Close-up view of RMSC Jtn 044 (Dodge Road Foundation site) within a disturbed section of the project area, facing northeast.

APPENDIX B
Shovel Test Record

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
1.1	1	0-8	Brn SiLo	NCM
	2	8-50	BrnY SiLo	NCM
1.2	1	0-16	YBrn SiLo	NCM
	2	16-42	BrnY SiLo	NCM
1.3	1	0-18	YBrn SiLo	NCM
	2	18-41	BrnY SiLo	NCM
1.4	1	0-22	Brn SiLo	NCM
	2	22-37	BrnY ClSiLo	NCM
1.5	1	0-32	DkBrn SiLo	NCM
	-	32+	Root impasse.	-----
1.6	1	0-24	YBrn SiLo	NCM
	2	24-26	BrnY SiLo	NCM
	-	26+	Rock impasse.	-----
2.1	1	0-8	VDkBrn Lo	NCM
	2	8-19	GryBrn SaLo	NCM
	3	19-34	LtYBrn SiLo	NCM
2.2	1	0-22	GryBrn SaLo	NCM
	2	22-38	LtYBrn SiLo	NCM
2.3	1	0-20	GryBrn SaLo	NCM
	2	20-35	LtYBrn ClSi	NCM
2.4	1	0-26	GryBrn SaLo	NCM
	2	26-30	LtYBrn ClSi	NCM
	-	30+	Rock impasse.	-----
2.5	1	0-17	Brn SaLo	NCM
	2	17-34	YBrn SaLo	NCM
3.1	1	0-17	GryBrn Si	NCM
	2	17-38	YBrn ClSi	NCM
3.2	1	0-20	Brn SiLo	NCM
	2	20-50	YBrn Si	NCM
3.3	1	0-26	DkYBrn Si	NCM
	2	26-50	LtYBrn Si	NCM
3.4	1	0-23	Brn SiLo	NCM
	2	23-50	YBrn Si	NCM
3.5	1	0-21	Brn SiLo	NCM
	2	21-50	YBrn Si	NCM
4.1	1	0-25	Brn SiLo	NCM
	2	25-40	YBrn SiLo	NCM
4.2	1	0-17	Brn SiLo	NCM
	2	17-37	BrnY ClSiLo	NCM
4.3	1	0-21	Brn SiLo	NCM
	-	21+	Root impasse.	-----
4.4	1	0-18	Brn SiLo	NCM
	2	18-40	YBrn ClSiLo	NCM
4.5	1	0-20	YBrn SiClLo	NCM
	2	20-35	BrnY SiClLo	NCM
5.1	1	0-11	GryBrn ClSi	NCM
	2	11-30	YBrn/Gry SiCl/Cl	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
5.2	1	0-25	Ybrn/Gry Cl/Cl	NCM
	-	25+	Disturbed.	-----
5.3	1	0-20	Brn SaLo	NCM
	2	20-34	BrnY SiCl	NCM
5.4	1	0-19	Brn SaLo	NCM
	2	19-31	LtYBrn ClSi	NCM
5.5	1	0-0	Brn SaLo	NCM
	2	0-46	Ybrn/Y SaLo/Si	NCM
6.1	1	0-23	Brn GrlSi	NCM
	-	23+	Rock impasse.	-----
6.2	1	0-40	Y SiCl	NCM
	-	40+	Disturbed.	-----
6.3	1	0-21	GryBrn SiLo	NCM
	2	21-41	YBrn Si	NCM
6.4	1	0-12	Gry ClSi	NCM
	2	12-28	Y ClSi	NCM
6.5	1	0-26	GryBrn SiLo	NCM
	2	26-43	YBrn ClSi	NCM
6.6	1	0-32	Brn SiLo	NCM
	2	32-50	LtYBrn Si	NCM
7.1	1	0-20	DkBrn SiLo	NCM
	2	20-35	BrnY SaLo	NCM
7.2	1	0-24	Brn SiLo	NCM
	2	24-38	BrnY SiLo	NCM
7.3	1	0-23	Brn SiLo	NCM
	2	23-38	BrnY ClSiLo	NCM
7.4	1	0-25	Brn SiLo	NCM
	2	25-44	BrnY SiLo	NCM
7.5	1	0-20	Brn SiLo	NCM
	2	20-32	YBrn SiLo	NCM
7.6	1	0-23	Brn SiLo	NCM
	2	23-45	BrnY SiLo	NCM
8.1	1	0-24	Brn SaLo	NCM
	2	24-32	YBrn ClSi	NCM
8.2	1	0-6	GryBrn Cl	NCM
	2	6-22	Ybrn/Gry Cl	NCM
8.3	1	0-17	Brn SaLo	NCM
	2	17-33	YBrn SiCl	NCM
8.4	1	0-24	Brn SaLo	NCM
	2	24-39	YBrn ClSi	NCM
8.5	1	0-22	Brn SaLo	NCM
	2	22-37	YBrn GrlSaLo	NCM
8.6	1	0-23	GryBrn SaLo	NCM
	2	23-36	YBrn ClSi	NCM
9.1	1	0-38	YBrn SaCl	NCM
	-	38+	Rock impasse.	-----
9.2	1	0-28	Brn Si	NCM
	2	28-45	YBrn Si	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
9.3	1	0-22	DkYBrn SiLo	NCM
	-	22+	Rock impasse.	-----
9.4	1	0-38	GryBrn SiLo	NCM
	2	38-55	YBrn Si	NCM
9.5	1	0-27	Brn SiLo	NCM
	2	27-50	YBrn Si	NCM
9.6	1	0-28	GryBrn SiLo	NCM
	-	28+	Root impasse.	-----
9.7	1	0-29	GryBrn SiLo	NCM
	2	29-50	YBrn SiLo	NCM
10.1	1	0-22	Brn SiLo	NCM
	2	22-33	BrnY SiLo	NCM
10.2	1	0-22	DkBrn SaLo	NCM
	2	22-40	DkYBrn SiLo	NCM
10.3	1	0-30	Brn SaLo	NCM
	2	30-40	BrnY ClSiLo	NCM
10.4	1	0-20	DkBrn SiLo	NCM
	2	20-36	LtYBrn ClSiLo	NCM
10.5	1	0-24	Brn SiLo	NCM
	-	24+	Root impasse.	-----
10.6	1	0-18	Brn SiLo	NCM
	2	18-29	BrnY ClSiLo	NCM
10.7	1	0-23	Brn SiLo	NCM
	2	23-36	BrnY ClSiLo	NCM
11.1	1	0-17	DkYBrn GrlSaLo	NCM
	2	17-42	YBrn SiSa	NCM
11.2	1	0-16	GryBrn SaLo	NCM
	-	16+	Root impasse.	-----
11.3	1	0-25	Brn SiSa	NCM
	2	25-44	Brn ClSi	NCM
11.4	1	0-12	Brn GrlSiSa	NCM
	-	12+	Rock impasse.	-----
11.5	1	0-20	Brn GrlSaLo	NCM
	2	20-34	YBrn ClSi	NCM
11.6	1	0-28	DkBrn Si	NCM
	2	28-44	YBrn SiCl	NCM
12.1	1	0-28	Brn GrlSiLo	NCM
	2	28-55	YBrn GrlSi	NCM
12.2	1	0-28	DkYBrn GrlSi	NCM
	-	28+	Rock impasse.	-----
12.3	1	0-28	Brn SiLo	NCM
	2	28-55	YBrn Si	NCM
12.4	1	0-20	YBrn Si	NCM
12.5	1	0-22	GryBrn GrlSi	NCM
	2	22-50	YBrn GrlSi	NCM
13.1	1	0-20	DkBrn SiLo	NCM
	2	20-41	YBrn ClSiLo	NCM
13.2	1	0-21	Brn SiLo	NCM
	2	21-39	LtYBrn ClSiLo	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
13.3	1	0-24	Brn SiLo	NCM
	-	24+	Root impasse.	-----
13.4	1	0-22	YBrn SaSi	NCM
	2	22-44	BrnY SaSi	NCM
13.5	1	0-30	DkBrn/YBrn SaLo	NCM
	-	30+	Rock impasse.	-----
14.1	1	0-20	BrnGry GrlSi	NCM
	2	20-35	YBrn ClSi	NCM
14.2	1	0-20	BrnGry ClLo	NCM
	2	20-37	YBrn SiCl	NCM
14.3	1	0-19	Brn SaLo	NCM
	2	19-35	YBrn ClSi	NCM
14.4	-	-----	not excavated; disturbance	-----
14.5	1	0-24	YBrn SaLo	NCM
	2	24-40	LtYBrn ClSi	NCM
15.1	1	0-20	DkBrn SiLo	NCM
	2	20-50	YBrn GrlSi	NCM
15.2	1	0-20	Gry ClSi	NCM
	2	20-45	YBrn ClSi	NCM
15.3	1	0-17	Brn SiLo	NCM
	2	17-40	YBrn GrlSi	NCM
15.4	-	-----	not excavated; low/wet	-----
15.5	1	0-15	DkBrn Lo	NCM
	2	15-35	YBrn GrlSi	NCM
16.1	1	0-14	DkBrn SaLo	NCM
	2	14-31	YBrn SiLo	NCM
16.2	1	0-19	DkBrn SiLo	NCM
	2	19-42	BrnY ClLo	NCM
16.3	1	0-22	Brn SiLo	NCM
	2	22-38	BrnY SiLo	NCM
16.4	1	0-17	DkBrn ClSi	NCM
	2	17-33	LtYBrn SiCl	NCM
16.5	1	0-15	Brn SaLo	NCM
	2	15-26	YBrn SiLo	NCM
17.1	1	0-28	Brn GrlSiLo	NCM
	2	28-35	YBrn GrlSi	NCM
	-	35+	Rock impasse.	-----
17.2	1	0-17	DkBrn GrlSiLo	NCM
	2	17-34	Brn ClLo	NCM
17.3	1	0-14	Brn SaLo	NCM
	2	14-32	YBrn SaSi	NCM
17.4	1	0-17	Brn GrlSaLo	NCM
	2	17-34	YBrn SiSa	NCM
17.5	1	0-12	VDkBrn SaLo	NCM
	2	12-30	YBrn GrlSaLo	NCM
18.1	1	0-32	DkGryBrn GrlClSi	NCM
	2	32-55	YBrn GrlSiCl	NCM
18.2	1	0-36	DkBrn Si	NCM
	2	36-55	YBrn Si	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
18.3	1	0-27	Brn GrlSi	NCM
	2	27-55	YBrn Si	NCM
19.1	1	0-24	Brn SaSi	NCM
	2	24-41	YBrn SiLo	NCM
19.2	1	0-18	Brn SiSa	NCM
	2	18-23	YBrn SiLo	NCM
	-	23+	Root impasse.	-----
19.3	1	0-16	DkBrn SiLo	NCM
	-	16+	Root impasse.	-----
19.4	1	0-20	DkBrn SiLo	NCM
	2	20-35	LtYBrn ClSiLo	NCM
20.1	1	0-10	VDkBrn SaLo	NCM
	2	10-17	Brn GrlSaLo	NCM
	3	17-28	YBrn Sa	NCM
	-	28+	Root impasse.	-----
20.2	1	0-23	Brn GrlSaLo	NCM
	2	23-40	YBrn GrlClSa	NCM
20.3	1	0-26	Brn GrlSaLo	NCM
	2	26-42	YBrn GrlClSa	NCM
20.4	1	0-18	GryBrn GrlSaLo	NCM
	2	18-33	YBrn ClSa	NCM
21.1	1	0-16	DkBrn SiLo	NCM
	2	16-35	YBrn ClSi	NCM
21.2	-	-----	not excavated; disturbance	-----
21.3	1	0-21	DkBrn SiLo	NCM
	2	21-50	YBrn ClSi	NCM
21.4	1	0-22	DkBrn SiLo	NCM
	2	22-30	YBrn Si	NCM
	-	30+	Rock impasse.	-----
22.1	1	0-19	Brn SiLo	NCM
	2	19-30	YBrn SiLo	NCM
22.2	1	0-26	Brn GrlSaLo	NCM
	2	26-41	YBrn SiSa	NCM
22.3	1	0-21	DkBrn SiLo	NCM
	2	21-50	YBrn GrlSi	NCM
22.4	1	0-20	DkBrn ClSiLo	NCM
	2	20-37	YBrn SiLo	NCM
22.5	1	0-24	DkBrn SiLo	NCM
	2	24-45	YBrn SiCl	NCM
22.6	1	0-19	GryBrn GrlSaLo	NCM
	2	19-35	YBrn SiCl	NCM
22.7	1	0-28	DkBrn ClLo	NCM
	2	28-43	DkYBrn ClLo	NCM
22.8	1	0-11	DkBrn SiLo	NCM
	2	11-35	LtYBrn Si	NCM
22.9	-	-----	not excavated; low/wet	-----
22.10	1	0-14	GryBrn ClLo	NCM
	2	14-30	DkYBrn SaCl	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
22.11	-	-----	not excavated; disturbance	-----
22.12	-	-----	not excavated; disturbance	-----
22.13	-	-----	not excavated; disturbance	-----
22.14	-	-----	not excavated; disturbance	-----
23.1	1	0-12	DkBrn SaSi	NCM
	2	12-40	LtYBrn SaSi	NCM
23.2	1	0-19	DkBrn SaSi	NCM
	2	19-36	BrnY SiSa	NCM
23.3	1	0-25	Brn SaLo	NCM
	2	25-45	YBrn Cl	NCM
23.4	1	0-30	Brn/YBrn SaSi	NCM
	-	30+	Rock impasse.	-----
23.5	1	0-25	BrnY SiSa	NCM
	2	25-41	Y SaSi	NCM
23.6	1	0-10	GryBrn SaLo	NCM
	2	10-16	YBrn SaLo	NCM
	-	16+	Root impasse.	-----
24.1	1	0-16	DkBrn SiLo	NCM
	2	16-35	YBrn ClSiLo	NCM
24.2	1	0-16	DkBrn SiLo	NCM
	2	16-36	BrnY SiLo	NCM
24.3	1	0-19	DkBrn ClSiLo	NCM
	2	19-38	YBrn ClSiLo	NCM
24.4	1	0-11	DkBrn SiLo	NCM
	2	11-33	YBrn Si	NCM
24.5	1	0-27	Brn SiLo	NCM
	2	27-43	BrnY SaSi	NCM
24.6	1	0-22	DkBrn SiLo	NCM
	2	22-40	YBrn SiLo	NCM
24.7	1	0-21	DkBrn SiLo	NCM
	2	21-44	YBrn SiLo	NCM
24.8	-	-----	not excavated; access denied	-----
24.9	-	-----	not excavated; access denied	-----
24.10	1	0-17	VDkBrn SiLo	NCM
	-	17+	Root impasse.	-----
24.11	1	0-50	BrnY ClSiLo	NCM
24.12	1	0-32	DkBrn SiLo	NCM
	2	32-34	BrnY SiLo	NCM
24.13	1	0-21	Brn SiLo	NCM
	-	21+	Root impasse.	-----
25.1	1	0-19	Brn SiLo	NCM
	2	19-35	LtBrn ClSi	NCM
25.2	1	0-11	DkBrn Lo	NCM
	2	11-26	LtBrn SiSa	NCM
25.3	1	0-17	Brn SiSa	NCM
	2	17-35	LtBrn ClSa	NCM
25.4	1	0-18	Brn SaLo	NCM
	2	18-35	LtBrn ClSa	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
25.5	1	0-17	Brn ClSa	NCM
	2	17-35	LtBrn SiSa	NCM
25.6	1	0-19	Brn ClSa	NCM
	2	19-35	LtBrn ClSi	NCM
25.7	1	0-24	Brn SaLo	NCM
	2	24-40	LtBrn ClSa	NCM
25.8	1	0-17	Brn SaLo	NCM
	2	17-35	LtBrn SaSi	NCM
25.9	-	-----	not excavated; impenetrable vegetation	-----
25.10	1	0-7	Blk Lo	NCM
	2	7-15	Brn SaSi	NCM
	-	15+	Root impasse.	-----
25.11	1	0-5	Blk SaLo	NCM
	2	5-15	Brn Si	NCM
25.12	1	0-22	DkBrn ClSiLo	NCM
	2	22-37	BrnY SiClLo	NCM
25.13	1	0-20	Brn SiLo	NCM
	-	20+	Root impasse.	-----
26.1	1	0-23	Brn GrlSa	NCM
	2	23-40	YBrn SiSa	NCM
26.2	1	0-20	Brn GrlSaLo	NCM
	-	20+	Root impasse.	-----
26.3	1	0-18	Brn GrlSaLo	NCM
	2	18-35	DkYBrn ClSa	NCM
26.4	1	0-14	Brn GrlClSa	NCM
	2	14-34	BrnGry SaCl	NCM
26.5	1	0-19	Brn SaLo	NCM
	2	19-35	LtYBrn ClSi	NCM
26.6	1	0-23	GryBrn ClSa	NCM
	2	23-40	LtYBrn ClSi	NCM
26.7	1	0-24	GryBrn ClSa	NCM
	2	24-40	YBrn SiCl	NCM
26.8	1	0-31	Brn SaLo	NCM
	2	31-46	BrnGry SaCl	NCM
26.9	1	0-10	GryBrn SaSi	NCM
	2	10-30	YBrn GrlSa	NCM
26.10	1	0-14	Brn SaLo	NCM
	2	14-32	YBrn ClSi	NCM
26.11	1	0-10	Brn GrlSaLo	NCM
	2	10-20	YBrn ClSi	NCM
	-	20+	Root impasse.	-----
26.12	1	0-21	Brn GrlClSa	NCM
	2	21-36	YBrn SaCl	NCM
27.1	1	0-24	Brn SiLo	NCM
	2	24-45	YBrn SiCl	NCM
27.2	1	0-28	Brn SiLo	NCM
	2	28-55	YBrn ClSi	NCM
27.3	1	0-50	DkGryBrn ClSi	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
27.4	1	0-19	DkBrn ClLo	NCM
	2	19-45	YBrn SaSi	NCM
27.5	1	0-8	DkBrn ClLo	NCM
	2	8-45	Gry Cl	NCM
27.6	1	0-5	DkGryBrn ClLo	NCM
	2	5-45	Gry Cl	NCM
27.7	1	0-35	DkGryBrn ClLo	NCM
	2	35-55	Gry Cl	NCM
27.8	1	0-14	DkBrn LoCl	NCM
	2	14-39	Gry/YBrn Cl	NCM
27.9	1	0-35	DkGryBrn LoCl	NCM
	2	35-55	YBrn SiCl	NCM
27.10	1	0-14	DkBrn LoCl	NCM
	2	14-40	Ybrn/GryBrn SaCl	NCM
27.11	1	0-28	DkBrn LoCl	NCM
	-	28+	Water intrusion @ 5 cmbs.	-----
27.12	1	0-26	DkBrn SiLo	NCM
	2	26-50	YBrn ClSi	NCM
28.1	1	0-17	DkBrn ClSiLo	NCM
	2	17-35	YBrn SiCl	NCM
28.2	1	0-24	DkBrn SiLo	NCM
	2	24-40	DkYBrn ClLo	NCM
28.3	1	0-16	DkBrn ClSi	NCM
	2	16-42	BrnY ClSiLo	NCM
28.4	1	0-17	DkBrn/DkYBrn ClLo	NCM
	2	17-34	Gry SiCl	NCM
28.5	1	0-19	GryBrn SiCl	NCM
	2	19-40	BrnY SiClLo	NCM
28.6	1	0-28	DkBrn SiLo	NCM
	2	28-30	YBrn SiLo	NCM
	-	30+	Root impasse.	-----
28.7	1	0-19	BrnY SiLo	NCM
	-	19+	Root impasse.	-----
28.8	1	0-18	DkBrn ClSiLo	NCM
	2	18-37	BrnGry/DkYBrn SaCl	NCM
28.9	1	0-20	DkGryBrn SiLo	NCM
	2	20-40	BrnY SiLo	NCM
28.10	1	0-21	DkBrn SiLo	NCM
	2	21-38	BrnY SiLo	NCM
28.11	1	0-19	DkGryBrn ClSiLo	NCM
	2	19-37	BrnY SiClLo	NCM
28.12	1	0-16	DkGryBrn SiCl	NCM
	2	16-43	DkGry SiCl	NCM
29.1	1	0-5	Blk Lo	NCM
	-	5+	Root impasse.	-----
29.2	1	0-9	Brn SiLo	NCM
	2	9-24	Blk ClSa	NCM
	3	24-40	OrngBrn/Gry SiCl	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
29.3	1	0-19	Brn ClLo	NCM
	2	19-35	OrngBrn/Gry ClSi	NCM
29.4	1	0-22	Brn LoCl	NCM
	2	22-40	OrngBrn/Gry SaCl	NCM
29.5	1	0-26	GryBrn SiCl	NCM
	2	26-45	Blk SaCl	NCM
29.6	1	0-20	Brn SiCl	NCM
	2	20-35	OrngBrn/Gry SaCl	NCM
29.7	1	0-3	Brn SaLo	NCM
	-	3+	Root impasse.	-----
29.8	1	0-50	Brn Sa	NCM
29.9	1	0-18	Brn SaLo	NCM
	2	18-35	LtBrn ClSa	NCM
29.10	1	0-26	DkBrn SaLo	NCM
	2	26-50	YBrn SaSi	NCM
29.11	1	0-24	DkBrn SiLo	NCM
	2	24-36	BrnY SiCl	NCM
29.12	1	0-9	DkBrn SiLo	NCM
	2	9-18	BrnY SiLo	NCM
	-	18+	Rock impasse.	-----
30.1	1	0-24	BrnGry ClSi	NCM
	2	24-46	LtYBrn SiCl	NCM
30.2	1	0-19	GryBrn ClSi	NCM
	2	19-35	LtGry SiCl	NCM
30.3	1	0-23	DkBrnGry SiCl	NCM
	2	23-37	YBrn SiCl	NCM
30.4	1	0-20	DkBrnGry SiCl	NCM
	2	20-35	LtGry Cl	NCM
30.5	1	0-21	Brn SaLo	NCM
	2	21-37	LtGry ClSa	NCM
30.6	1	0-22	Brn GrlSiLo	NCM
	2	22-37	LtGry SaCl	NCM
30.7	1	0-20	DkYBrn GrlSa	NCM
	2	20-28	LtGry SiCl	NCM
	-	28+	Root impasse.	-----
30.8	1	0-10	DkYBrn GrlSa	NCM
	-	10+	Root impasse.	-----
30.9	1	0-24	GryBrn GrlSaLo	NCM
	2	24-40	LtGry ClSi	NCM
30.10	1	0-19	GryBrn GrlSaLo	NCM
	2	19-35	LtGry ClSi	NCM
30.11	1	0-19	Brn GrlSaLo	NCM
	2	19-35	YBrn SaCl	NCM
30.12	1	0-19	Gry ClSi	NCM
	2	19-35	BrnGry SiCl	NCM
31.1	1	0-50	DkGryBrn LoCl	NCM
31.2	1	0-21	DkBrn SiLo	NCM
	2	21-48	YBrn SiCl	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
31.3	1	0-28	DkBrn SiLo	NCM
	-	28+	Root impasse.	-----
31.4	1	0-22	DkBrn SiLo	NCM
	-	22+	Water intrusion @ 20 cmbs.	-----
31.5	1	0-20	Brn SiLo	NCM
	2	20-40	LtYBrn Si	NCM
31.6	1	0-23	DkBrn Lo	NCM
	2	23-55	BrnY SaSi	NCM
31.7	1	0-22	Brn SaLo	NCM
	2	22-40	YBrn Si	NCM
31.8	1	0-15	Brn SaLo	NCM
	2	15-40	DkYBrn GrlSa	NCM
31.9	1	0-21	DkBrn Lo	NCM
	2	21-55	LtYBrn ClSi	NCM
31.10	1	0-22	DkBrn GrlSaLo	NCM
	-	22+	Rock impasse.	-----
31.11	1	0-12	GryBrn Lo	NCM
	2	12-38	LtYBrn ClSi	NCM
31.12	1	0-22	DkBrn ClLo	NCM
	-	22+	Water intrusion @ 10 cmbs.	-----
32.1	1	0-22	DkBrn/GryBrn ClSi	NCM
	2	22-35	YBrn SiCl	NCM
32.2	1	0-22	DkBrn SiLo	NCM
	2	22-48	YBrn SiLo	NCM
32.3	1	0-22	GryBrn SiLo	NCM
	2	22-40	YBrn ClLo	NCM
32.4	1	0-22	DkBrn ClLo	NCM
	2	22-25	BrnY SiLo	NCM
	-	25+	Rock impasse.	-----
32.5	1	0-24	Brn ClLo	NCM
	2	24-31	GryBrn ClLo	NCM
	3	31-41	LtYBrn ClLo	NCM
32.6	1	0-25	Brn SaSi	NCM
	2	25-44	BrnY SiLo	NCM
32.7	1	0-22	DkBrn SiLo	NCM
	2	22-47	BrnY SaSi	NCM
32.8	1	0-24	DkBrn SiLo	NCM
	2	24-45	BrnY SiLo	NCM
32.9	1	0-30	DkGryBrn SiLo	NCM
	2	30-32	GryBrn ClLo	NCM
	-	32+	Root impasse.	-----
32.10	1	0-25	Brn SiClLo	NCM
	2	25-40	BrnY/Gry Cl	NCM
32.11	1	0-24	DkGryBrn SiClLo	NCM
	2	24-26	Gry ClSiLo	NCM
	3	26-45	BrnY ClSiLo	NCM
32.12	1	0-19	DkBrn ClSiLo	NCM
	2	19-39	BrnY SiClLo	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
33.1	1	0-10	GryBrn ClSi	NCM
	2	10-40	LtGry ClSi	NCM
33.2	1	0-13	Brn SaSi	NCM
	2	13-42	YBrn ClSi	NCM
33.3	1	0-19	GryBrn SiLo	NCM
	2	19-39	GryBrn SiCl	NCM
33.4	1	0-21	DkBrn SiLo	NCM
	2	21-37	YBrn SiCl	NCM
33.5	1	0-23	Brn SaLo	NCM
	2	23-33	DkBrn ClSi	NCM
	3	33-42	YBrn ClSi	NCM
33.6	1	0-12	Brn SaLo	NCM
	2	12-31	YBrn ClSi	NCM
33.7	1	0-15	Brn SiSa	NCM
	2	15-31	YBrn SaSi	NCM
33.8	1	0-17	Brn SaLo	NCM
	2	17-37	YBrn SaSi	NCM
33.9	1	0-11	Brn SaLo	NCM
	2	11-24	BrnGry Si	NCM
	-	24+	Root impasse.	-----
33.10	1	0-10	Brn SaLo	NCM
	2	10-21	BrnGry SiCl	NCM
	3	21-33	LtGry SiCl	NCM
33.11	1	0-12	DkBrn SaLo	NCM
	2	12-30	Gry ClSi	NCM
33.12	1	0-18	Brn SaLo	NCM
	2	18-33	LtGry SiCl	NCM
34.1	1	0-12	DkYBrn SiLo	NCM
	2	12-45	LtYBrn Si	NCM
34.2	1	0-60	Brn/YBrn ClSi	NCM
34.3	1	0-25	DkBrn SiLo	NCM
	2	25-55	YBrn GrlSi	NCM
34.4	1	0-24	DkBrn SiLo	NCM
	2	24-45	YBrn ClSi	NCM
34.5	1	0-25	DkBrn SiLo	NCM
	2	25-50	YBrn SaSi	NCM
34.6	1	0-20	DkBrn SiLo	NCM
	2	20-50	YBrn SaSi	NCM
34.7	1	0-25	DkBrn SiLo	NCM
	2	25-50	YBrn Si	NCM
34.8	1	0-28	DkGryBrn SiLo	NCM
	2	28-49	Gry Si	NCM
34.9	1	0-38	DkGryBrn ClSi	NCM
	-	38+	Water intrusion @ 10 cmbs.	-----
34.10	1	0-30	DkGryBrn SiLo	NCM
	2	30-50	Gry ClSi	NCM
35.1	1	0-37	Gry SiCl	NCM
	-	37+	Water intrusion @ 33 cmbs.	-----
35.2	-	-----	not excavated; impenetrable vegetation	-----

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
35.3	1	0-24	GryBrn SiCl	NCM
	2	24-38	LtYBrn ClSiLo	NCM
35.4	1	0-23	Brn SiLo	NCM
	2	23-43	LtYBrn ClSiLo	NCM
35.5	1	0-22	DkBrn SiLo	NCM
	2	22-37	DkYBrn SiLo	NCM
35.6	1	0-25	Brn SiLo	NCM
	2	25-40	LtYBrn SiLo	NCM
35.7	1	0-17	DkBrn/DkYBrn ClSiLo	NCM
	2	17-39	GryBrn/DkYBrn SiClLo	NCM
35.8	1	0-14	Brn SaSiLo	NCM
	-	14+	Root impasse.	-----
36.1	1	0-17	Brn ClSi	NCM
	2	17-42	BrnY ClLo	NCM
36.2	1	0-23	BrnGry SiLo	NCM
	2	23-38	YBrn SaCl	NCM
36.3	1	0-27	DkBrnGry ClSi	NCM
	2	27-42	YBrn ClSi	NCM
36.4	1	0-18	GryBrn SiLo	NCM
	2	18-35	YBrn ClSi	NCM
36.5	1	0-25	DkBrn SiSa	NCM
	2	25-40	YBrn SiCl	NCM
36.6	1	0-28	DkBrn SiSa	NCM
	2	28-45	YBrn SaCl	NCM
36.7	1	0-24	DkBrn SaLo	NCM
	2	24-31	DkBrnGry Si	NCM
	3	31-46	YBrn ClSi	NCM
36.8	1	0-25	DkBrn SaLo	NCM
	2	25-40	YBrn SiCl	NCM
36.9	1	0-14	Brn SaLo	NCM
	2	14-30	YBrn SaCl	NCM
36.10	1	0-12	DkBrn SaLo	NCM
	2	12-30	YBrn SaCl	NCM
37.1	1	0-16	DkBrn Si	NCM
	2	16-35	YBrn SiLo	NCM
37.2	1	0-12	Brn SiLo	NCM
	2	12-45	YBrn ClSi	NCM
37.3	1	0-21	DkBrn Lo	NCM
	2	21-50	YBrn SiCl	NCM
37.4	-	-----	not excavated; low/wet	-----
37.5	1	0-26	DkBrn SaLo	NCM
	2	26-50	LtGry ClSa	NCM
37.6	1	0-26	DkBrn Lo	NCM
	2	26-50	LtGry ClSa	NCM
37.7	1	0-28	DkBrn SaLo	NCM
	-	28+	Rock impasse.	-----
37.8	1	0-34	Brn Lo	NCM
	2	34-40	DkYBrn SaSi	NCM
37.9	-	-----	not excavated; disturbance	-----

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
37.10	-	-----	not excavated; disturbance	-----
38.1	1	0-14	Brn Si	NCM
	2	14-30	BrnY SiLo	NCM
38.2	1	0-12	Brn ClSi	NCM
	2	12-34	YBrn SiCl	NCM
38.3	1	0-17	DkBrn SaSi	NCM
	2	17-40	BrnY SiLo	NCM
38.4	1	0-15	Brn SiLo	NCM
	-	15+	Root impasse.	-----
38.5	1	0-23	DkBrn SaSi	NCM
	2	23-36	DkYBrn SiSa	NCM
38.6	1	0-16	DkBrn SiLo	NCM
	2	16-27	DkYBrn ClLo	NCM
	-	27+	Water intrusion @ 25 cmbs.	-----
39.1	1	0-26	YBrn SiSa	NCM
	-	26+	Disturbed.	-----
39.2	1	0-24	DkBrn ClLo	NCM
	2	24-45	Y ClSi	NCM
39.3	1	0-20	Brn SiLo	NCM
	2	20-45	YBrn Si	NCM
39.4	1	0-23	YBrn Si	NCM
	2	23-45	LtYBrn Si	NCM
39.5	1	0-10	DkBrn Orgnc	NCM
	2	10-20	DkYBrn Si	NCM
	3	20-45	LtYBrn Si	NCM
39.6	1	0-10	LtYBrn Si	NCM
	-	10+	Disturbed.	-----
40.1	1	0-15	DkBrn SiLo	NCM
	2	15-42	YBrn ClSi	NCM
40.2	1	0-19	DkBrn SiLo	NCM
	2	19-37	Y SiLo	NCM
40.3	1	0-11	DkBrn SiLo	NCM
	2	11-19	BrnY SiLo	NCM
	3	19-36	Y SiLo	NCM
40.4	1	0-14	YBrn SiLo	NCM
	2	14-36	BrnY SiLo	NCM
40.5	1	0-17	Brn SaSi	NCM
	2	17-37	BrnY SiSa	NCM
40.6	1	0-24	Brn SiLo	NCM
	2	24-43	BrnY SiLo	NCM
40.7	1	0-27	Brn ClSiLo	NCM
	2	27-44	BrnY SiClLo	NCM
41.1	1	0-25	DkBrn ClLo	NCM
	-	25+	Water intrusion @ 5 cmbs.	-----
41.2	1	0-22	Brn SiLo	NCM
	-	22+	Root impasse.	-----
41.3	1	0-24	DkBrn Lo	NCM
	2	24-45	YBrn ClSi	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
41.4	1	0-22	GryBrn ClLo	NCM
	2	22-45	Gry SiCl	NCM
41.5	1	0-31	Brn Si	NCM
	2	31-50	LtYBrn ClSi	NCM
41.6	1	0-12	Brn SiLo	NCM
	2	12-40	YBrn Si	NCM
41.7	1	0-16	DkBrn SiLo	NCM
	2	16-50	YBrn Si	NCM
41.8	1	0-10	Gry Grl	NCM
	-	10+	Disturbed.	-----
41.9	1	0-28	DkBrn SiLo	NCM
	2	28-40	YBrn ClSi	NCM
41.10	1	0-18	DkBrn ClSi	NCM
	2	18-35	Y SiLo	NCM
42.1	1	0-30	GryBrn ClLo	NCM
	2	30-42	BrnY ClLo	NCM
42.2	1	0-24	GryBrn SiClLo	NCM
	2	24-40	Y ClLo	NCM
42.3	1	0-30	GryBrn SiCl	NCM
	2	30-43	BrnY ClLo	NCM
42.4	1	0-16	Brn SiLo	NCM
	2	16-30	BrnY SiLo	NCM
42.5	1	0-13	Brn SiLo	NCM
	2	13-32	BrnY SaSiLo	NCM
42.6	1	0-25	YBrn SiLo	NCM
	2	25-46	BrnY SiLo	NCM
42.7	1	0-15	YBrn SaSi	NCM
	2	15-25	BrnY SaSi	NCM
42.8	1	0-20	Brn SiSa	NCM
	2	20-41	BrnY SiSa	NCM
42.9	1	0-23	GryBrn ClLo	NCM
	2	23-40	BrnY ClLo	NCM
42.10	1	0-15	YBrn SaLo	NCM
	2	15-42	BrnY SaSi	NCM
43.1	1	0-33	DkBrn ClLo	NCM
	2	33-55	YBrn ClSi	NCM
43.2	1	0-30	DkBrn Lo	NCM
	2	30-55	YBrn GrlSa	NCM
43.3	1	0-26	DkBrn Lo	NCM
	2	26-55	LtYBrn SaCl	NCM
43.4	1	0-30	Brn Lo	NCM
	2	30-47	YBrn SaSi	NCM
43.5	1	0-35	DkBrn Lo	NCM
	-	35+	Root impasse.	-----
43.6	1	0-50	DkBrn ClLo	NCM
43.7	1	0-10	DkBrn Lo	NCM
	-	10+	Water intrusion @ 5 cmbs.	-----
43.8	1	0-13	DkBrn Lo	NCM
	2	13-28	LtYBrn SaCl	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
43.9	1	0-28	Brn SiLo	NCM
	2	28-55	LtYBrn SaSi	NCM
43.10	1	0-26	DkBrn Lo	NCM
	2	26-50	YBrn SaSi	NCM
43.11	1	0-20	Brn SiLo	NCM
	2	20-40	YBrn Si	NCM
44.1	1	0-19	Brn SaLo	NCM
	2	19-41	BrnY Lo	NCM
44.2	1	0-8	Brn SiLo	NCM
	2	8-30	YBrn SaSiLo	NCM
44.3	1	0-19	Brn SiSa	NCM
	2	19-38	BrnY ClSiLo	NCM
44.4	1	0-23	Brn SiLo	NCM
	2	23-42	DkYBrn SaSiLo	NCM
44.5	1	0-21	Brn SiClLo	NCM
	2	21-37	LtYBrn ClLo	NCM
44.6	1	0-18	Brn SiLo	NCM
	2	18-41	Y ClSiLo	NCM
44.7	1	0-18	YBrn SiLo	NCM
	2	18-43	BrnY ClSiLo	NCM
44.8	1	0-18	Brn SiClLo	NCM
	2	18-40	DkYBrn ClSiLo	NCM
44.9	1	0-22	Brn ClSi	NCM
	2	22-44	BrnY ClSiLo	NCM
44.10	1	0-24	DkBrn ClSiLo	NCM
	2	24-38	BrnY SiClLo	NCM
44.11	1	0-18	DkBrn ClSi	NCM
	2	18-40	BrnY ClSiLo	NCM
44.12	1	0-20	DkBrn ClSiLo	NCM
	2	20-42	BrnY SiLo	NCM
45.1	1	0-26	Brn ClLo	NCM
	2	26-50	YBrn SiCl	NCM
45.2	1	0-12	YBrn ClLo	NCM
	2	12-40	PalBrn Sa	NCM
45.3	1	0-14	Brn SiLo	NCM
	2	14-40	YBrn SiLo	NCM
45.4	1	0-20	DkGryBrn ClLo	NCM
	2	20-45	YBrn ClSi	NCM
45.5	1	0-20	Brn Lo	NCM
	2	20-50	YBrn SaSi	NCM
45.6	1	0-18	Brn SiLo	NCM
	-	18+	Root impasse.	-----
45.7	1	0-18	Brn SaLo	NCM
	2	18-50	DkYBrn SaCl	NCM
45.8	1	0-23	Brn ClLo	NCM
	2	23-45	YBrn SiCl	NCM
45.9	1	0-21	YBrn SiLo	NCM
	2	21-41	LtYBrn SaSi	NCM

STP#	Layer	Depth (cmbs)	Soil Description	Artifact Summary
45.10	1	0-27	Brn Lo	NCM
	2	27-48	BrnY Si	NCM
46.1	1	0-12	Brn SiLo	NCM
	2	12-28	BrnY SiLo	NCM
46.2	1	0-11	Brn SaSi	NCM
	2	11-34	YBrn SiLo	NCM
46.3	1	0-15	Brn SaLo	NCM
	2	15-31	BrnY SaLo	NCM
46.4	1	0-21	Brn SiLo	NCM
	2	21-36	BrnY ClLo	NCM
46.5	1	0-18	LtBrn SiSa	NCM
	2	18-34	LtYBrn SaSi	NCM
46.6	1	0-29	YBrn SaLo	NCM
	-	29+	Root impasse.	-----
46.7	1	0-19	Brn SiSa	NCM
	2	19-38	Y SiSa	NCM
46.8	1	0-16	Brn SiSa	NCM
	2	16-34	BrnY SiLo	NCM
46.9	1	0-20	Brn Lo	NCM
	2	20-45	DkYBrn SaSi	NCM
47.1	1	0-12	DkBrn Lo	NCM
	2	12-40	YBrn SiSa	NCM
47.2	1	0-17	DkBrn Lo	NCM
	2	17-40	YBrn SiSa	NCM
47.3	1	0-10	DkBrn Lo	NCM
	2	Oct-45	YBrn SaSi	NCM
47.4	1	0-22	Brn SiLo	NCM
	-	22+	Root impasse.	-----
47.5	1	0-20	Brn Lo	NCM
	2	20-55	YBrn Si	NCM
47.6	1	0-15	Brn SaLo	NCM
	2	15-40	YBrn Sa	NCM

NCM: no cultural material
Items listed in *italics* were noted as present but were not retained.

STANDARD SHOVEL TEST PITS

Layer 1			
	No.	**Color**	**%**
	148	brown	41
	110	dark brown	30
	37	grayish brown	10
	19	yellowish brown	5
	15	dark grayish brown	4
	7	dark yellowish brown	2
	5	gray	1
	4	brownish gray	1
	4	very dark brown	1
	3	brownish yellow	1
	3	dark brownish gray	1
	3	black	1
	1	light yellowish brown	0
	1	light brown	0
	1	yellow	0
Total	**361**		**100**

Layer 1			
	No.	**Texture**	**%**
	123	silty loam	34
	57	sandy loam	16
	26	loam	7
	23	clayey loam	6
	19	clayey silt	5
	15	gravelly sand loam	4
	13	sandy silt	4
	13	silty sand	4
	12	clayey silt loam	3
	11	silt	3
	10	silty clay	3
	6	silty clay loam	2
	6	loamy clay	2
	5	gravelly silt	1
	4	clayey sand	1
	4	gravelly silt loam	1
	3	gravelly sand	1
	2	gravelly clay sand	1
	2	clay	1
	1	gravelly clay silt	0
	1	gravelly silt sand	0
	1	gravel	0
	1	sandy clay	0
	1	sand	0
	1	sandy silt loam	0
	1	organics	0
Total	**361**		**100**

STANDARD SHOVEL TEST PITS (continued)

Layer 2			
	No.	**Color**	**%**
	133	yellowish brown	43
	68	brownish yellow	22
	31	light yellowish brown	10
	15	dark yellowish brown	5
	11	light gray	4
	10	gray	3
	9	light brown	3
	8	yellow	3
	6	brownish gray	2
	5	grayish brown	2
	5	brown	2
	3	orangish brown	1
	2	black	1
	1	dark brownish gray	0
	1	dark brown	0
	1	pale brown	0
	1	dark gray	0
Total	**310**		**100**

Layer 2			
	No.	**Texture**	**%**
	49	silty loam	16
	47	clayey silt	15
	33	silty clay	11
	31	silt	10
	26	sandy silt	8
	23	clayey silt loam	7
	18	sandy clay	6
	15	clayey loam	5
	13	silty sand	4
	10	clayey sand	3
	8	silty clay loam	3
	8	clay	3
	8	gravelly silt	3
	6	sandy loam	2
	3	gravelly sand	1
	3	sandy silt loam	1
	3	gravelly sand loam	1
	2	gravelly clay sand	1
	2	sand	1
	1	loam	0
	1	gravelly silty clay	0
Total	**310**		**100**

Layer 3			
	No.	**Color**	**%**
	3	light yellowish brown	30
	3	yellowish brown	30
	1	light gray	10
	1	brownish yellow	10
	1	orangish brown	10
	1	yellow	10
Total	**10**		**100**

Layer 3			
	No.	**Texture**	**%**
	2	silty clay	20
	2	clayey silt	20
	2	silty loam	20
	1	clayey silt loam	10
	1	clayey loam	10
	1	sand	10
	1	silt	10
Total	**10**		**100**

Archeological Site Inventory Form

By: Robert L. Dean
Heritage Preservation & Interpretation Inc.

October 22, 2004

ARCHEOLOGICAL SITE INVENTORY FORM

DIVISION FOR HISTORIC PRESERVATION
NEW YORK STATE PARKS AND RECREATION
ALBANY, NEW YORK

518 237-8643

FOR OFFICE USE ONLY
UNIQUE SITE NO. A01303.000032
QUAD
SERIES
NEG NO.

REPORTED BY: Robert L. Dean

YOUR ADDRESS: P.O. Box 277, Steamburg, NY 14783 TELEPHONE: 716 354-2545

ORGANIZATION (if any): Heritage Preservation & Interpretation Inc.

DATE: 10/22/04

RECEIVED
NOV - 3 2004
HISTORIC PRESERVATION FIELD SERVICES BUREAU

* * * * * * * * * * * * *

1. SITE NAME: Dodge Road Foundation

2. COUNTY: Chautauqua TOWN/~~CITY~~: Carroll VILLAGE: n/a

3. LOCATION: About 150 meters west of Dodge Road and ca. 400 meters north of the junction of Dodge Road and Wiltsie/ Robbins Hill Roads. Laid up stone foundation lies on the eastern crest of the slope in an area covered by tall weeds and grasses.

4. PRESENT OWNER: reportedly Sealand Waste, LLC

5. OWNER'S ADDRESS: Local address appears to be only at Dodge Road property

6. DESCRIPTION, CONDITION, EVIDENCE OF SITE

- ☐ STANDING RUINS
- ☐ CELLAR HOLE WITH WALLS
- ☑ SURFACE TRACES VISIBLE
- ☑ WALLS WITHOUT CELLAR HOLE
- ☐ UNDER CULTIVATION
- ☐ EROSION
- ☐ UNDERWATER
- ☐ NO VISIBLE EVIDENCE
- ☐ OTHER

7. COLLECTION OF MATERIAL FROM SITE:

- ☐ SURFACE HUNTING BY WHOM DATE
- ☐ TESTING BY WHOM DATE
- ☐ EXCAVATION BY WHOM DATE
- ☑ NONE

PRESENT REPOSITORY OF MATERIAL n/a

8. PREHISTORIC CULTURAL AFFILIATION OR DATE: No prehistoric component identified

9. HISTORICAL DOCUMENTATION OF SITE

Examination of historic maps to identify boundaries indicated that the foundation lay within Lot 10.
1854 atlas (Keeney): Dodge Road did not extend into this lot nor was there any indication of this lot being seated.
1867 atlas (Stewart): Dodge Road still did not extend into Lot 10, however, there is considerable activity in the lot and several locations were associated with G.W. Brown, the apparent owner/operator of a sawmill.
1881 atlas (Beers): Dodge Road first shown extending through Lot 10. G.W. Brown noted to own much of the lot and the mill site is identified as a Shingle Mill.
1905/1944 USGS 15' Jamestown Quadrangle: Shows Dodge Run along current course. Several structures along that roadway are indicated that did not exist when the current topographic map was (7.5' Ivory, NY) produced. There is still no symbol indicating a structure present at the location of the foundation site. At present there are more structures in the area than are shown on either of the topographic maps.

Andrew Young's 1875 *History of Chautauqua County, New York* contains a section on the Town of Carroll (pp.241-251). It did not contain any references to Lot 10 or to G.W. Brown.

10. POSSIBILITY OF DESTRUCTION OR DISTURBANCE: There is a proposed landfill expansion on this property and nearby landowners have indicated that cultural resources have not been included in the review process for this expansion.

11. REMARKS: The locality was cursorily examined on 10/13/04. A foundation of un-mortared stone was noted. Its long axis was oriented north-south and the feature measured ca. 13m X 9m by rough pace. There was also a stone-lined spring, or similar feature, on the hill slope to the east of the foundation, over 30m distant to the 'east'. Another feature, in the form of a dug out area. Was noted to the 'south' of the foundation.

Examination of the area was through surface inspection and some light removal of leaves/litter. The only cultural material noted, other than modern debris, was a small metal object atop one of he foundation stones (see attached photographs). At the base of the slope below the noted spring were several pieces of a cast iron stove as well as some more modern debris.

12. MAP LOCATION

7 1/2 MINUTE SERIES QUAD: NAME: Ivory 1954/1976

15 MINUTE SERIES QUAD: NAME: Jamestown 1905/1944

U.S.G.S. COORDINATES

D.O.T. COORDINATES (if known)

ATTACH SKETCH, TRACING OR COPY OF MAP

SOURCE OF MAP

13. PHOTOGRAPHS

See attachments

Attachment 1
USGS 7.5' Ivory Quadrangle

Dodge Road Foundation: Location Map

Mapped, edited, and published by the Geological Survey

Attachment 2

Dodge Road Foundation

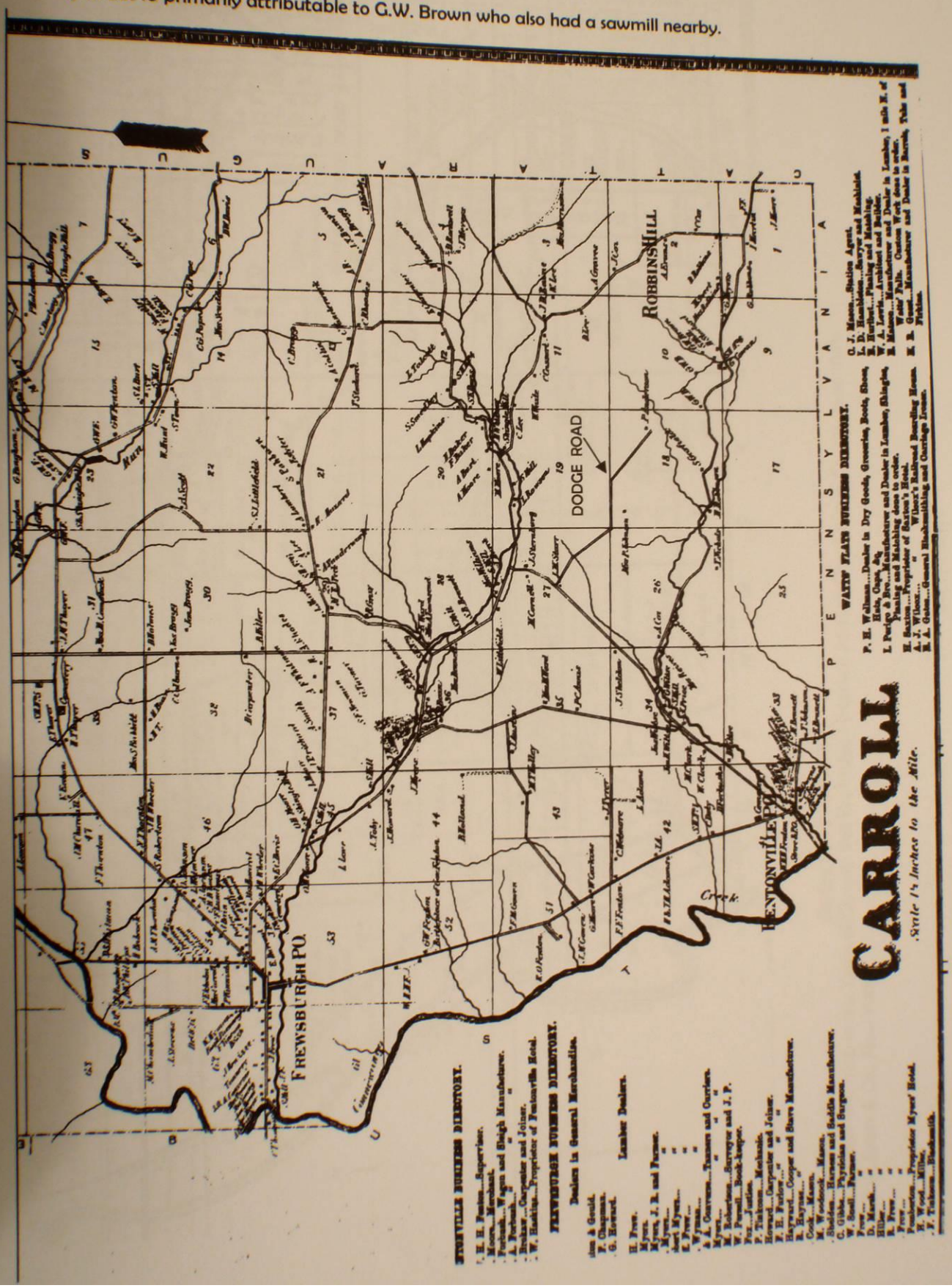
Portion of the map of the Town of Carroll, 1854 Map of Chautauqua County, Published by Collin S. Keeney, Philadelphia

Attachment 3

Dodge Road Foundation

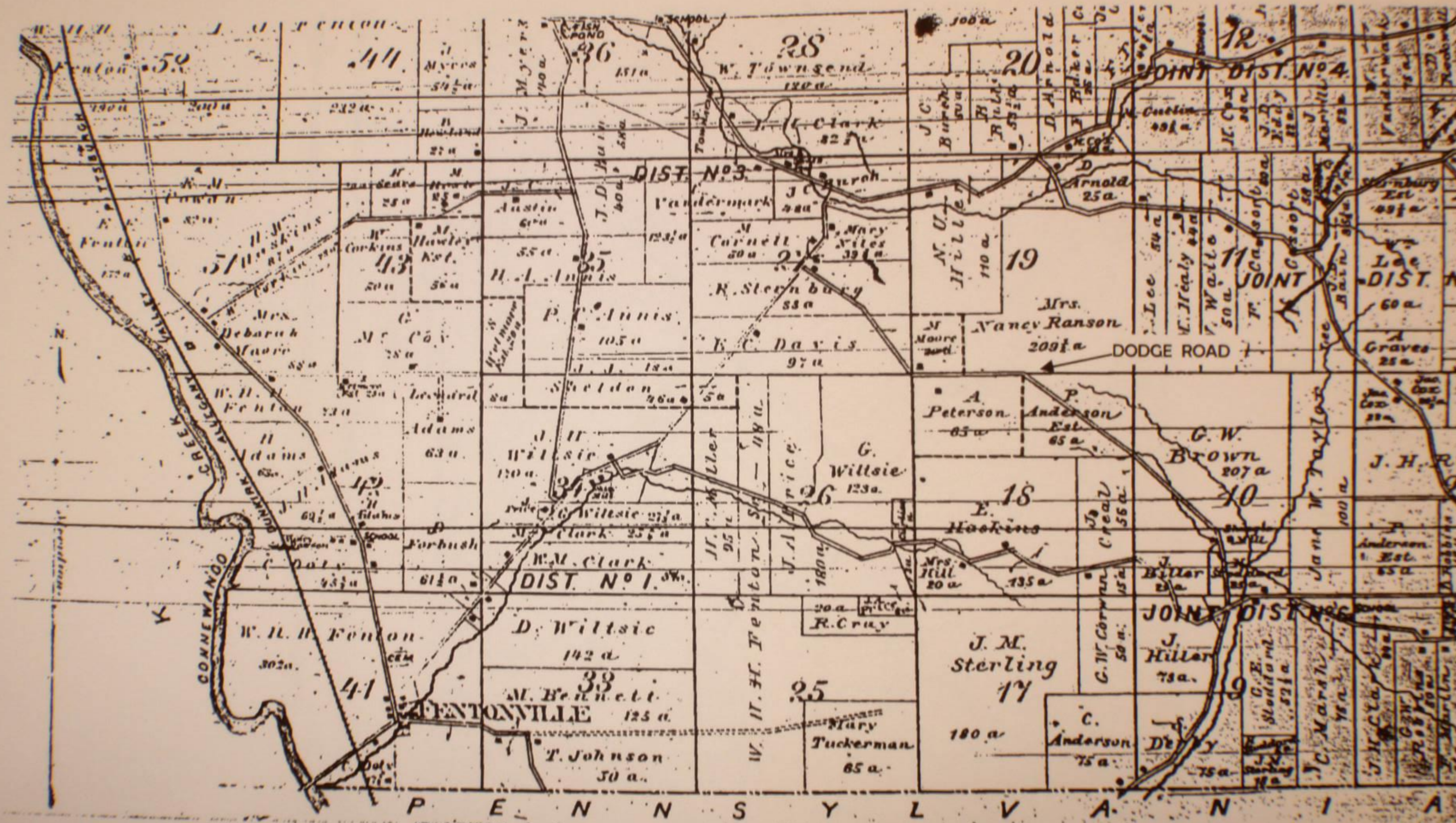
A Portion of a map of the Town of Carroll, 1867 New Topographical Atlas of Chautauqua County, New York.
Wm. Stewart Publisher, Philadelphia

Activity in Lot 10 primarily attributable to G.W. Brown who also had a sawmill nearby.



Incorporated Village: ______________

village or hamlet: __________

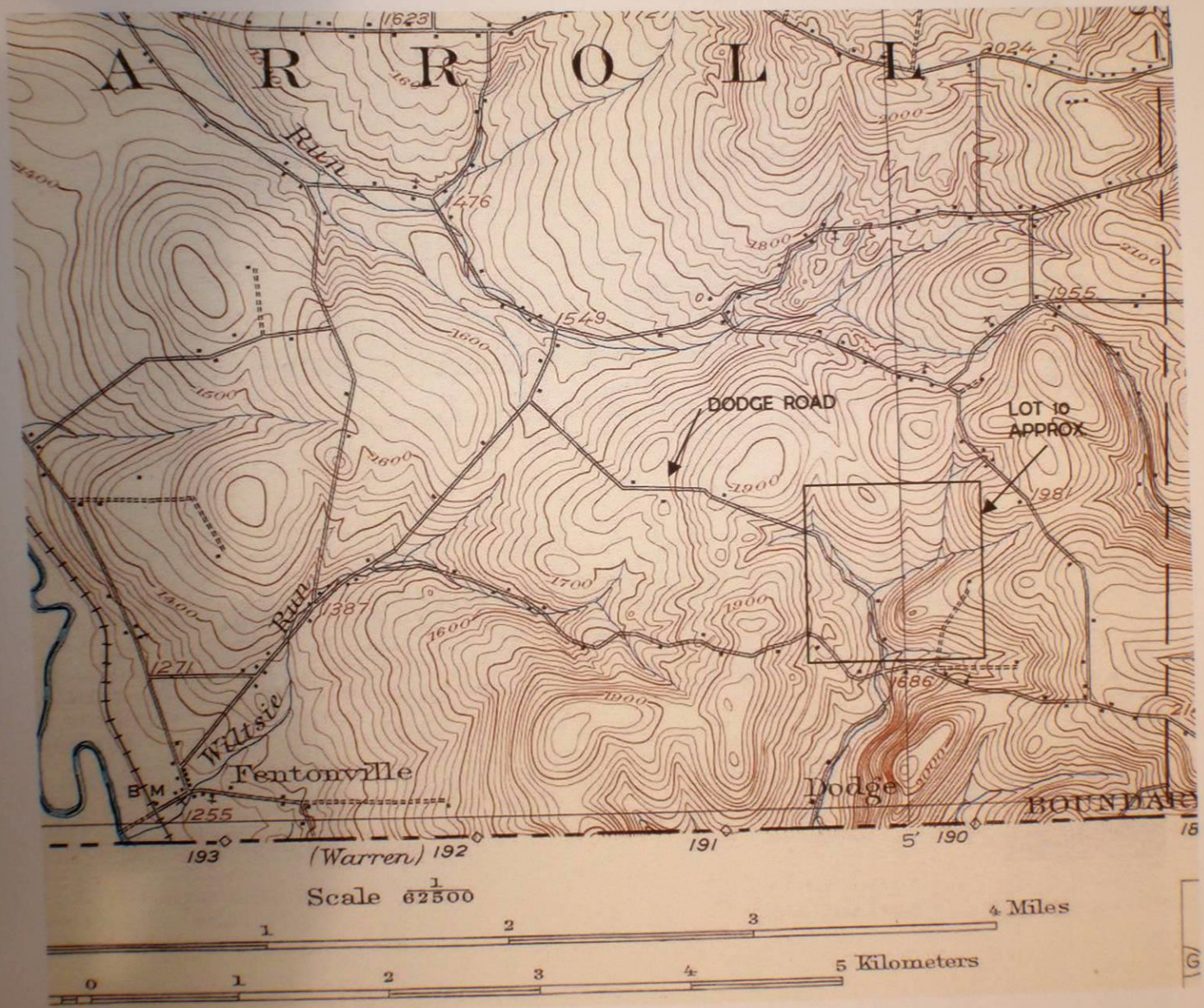


Attachment 4: Dodge Road Foundation

A portion of a map of the Town of Carroll. 1881 Illustrated Historical Atlas of Chautauqua County, New York.

F.W. Beers & Co., New York.

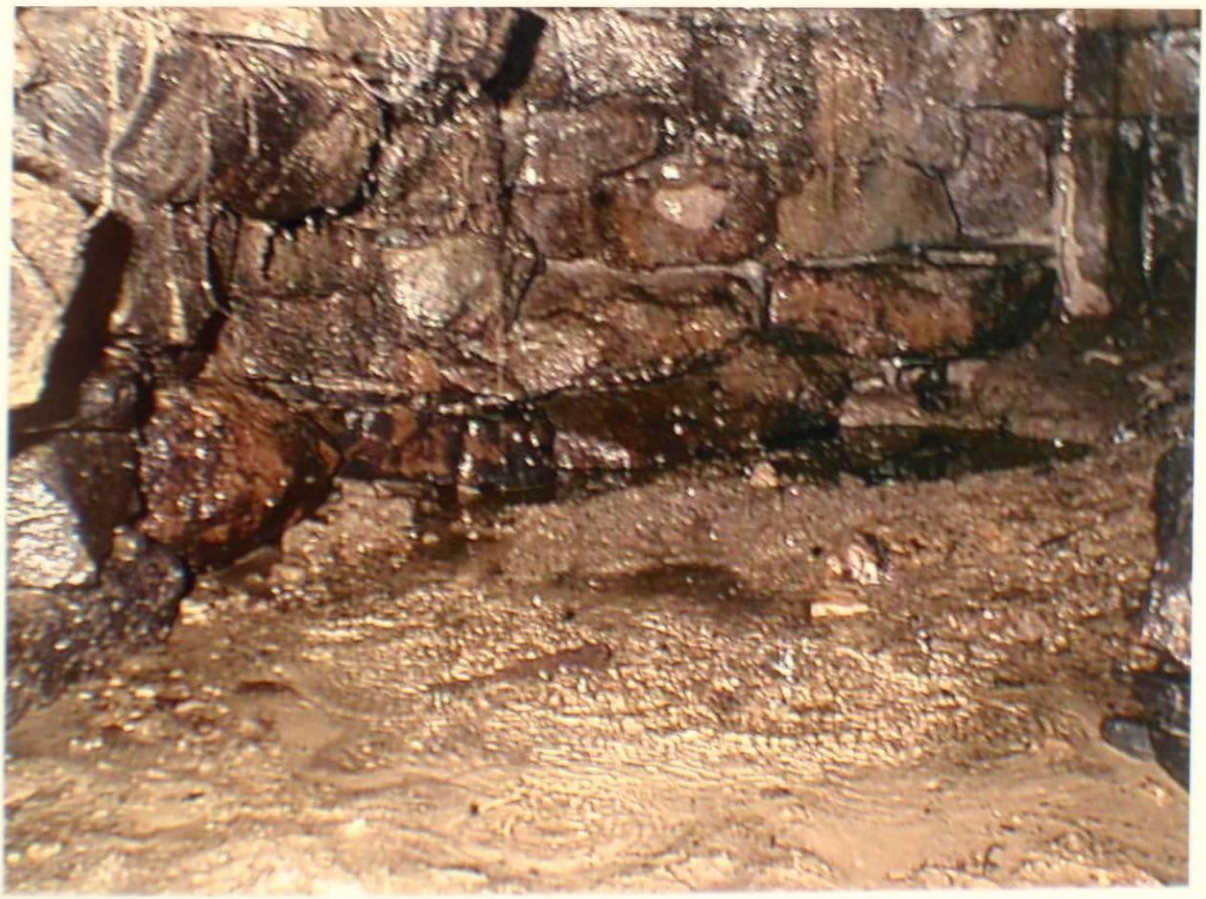
Attachment 5: Dodge Road Foundation
A portion of the 15' Jamestown, NY quadrangle. Edition of 1905, reprinted 1944.



Attachment 6a: Foundation stone with cut out inset and an unidentified metal object. Circular object on the left is a quarter.

Attachment 6b: View of the general cover across the foundation locality. Foundation stones are visible in the center of the photo.

Attachment 6c: View of the built up 'spring' along steep side slope 'east' of the foundation area.



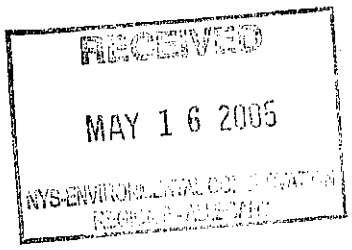
Attachment 6d: View of the laid stone at 'spring' along steep side slope 'east' of the foundation area.
Photograph by Roger Bish, Kennedy, New York.

Letter From: Michelle Lingenfelter
Citizen of the Town of Carroll
To: Mr. Ken Taft
New York State Department of Environmental Conservation
Regarding: cultural resources

Letter Establishing Retainer of Mr. Dean's Services

May 16, 2005 (received)

Michelle Lingengelter
241 Dodge Rd.
Frewsburg, NY 14738



Mr. Ken Taft
NYSDEC
182 East Union Suite 3
Alleghany, NY 14706-13328

Dear Mr. Taft:

I am writting you as a concerned citizen. I live in Frewsburg, NY and will be directly impacted by the landfill expansion proposed by Sealand Waste, LLC in the Town of Carroll, Frewsburg NY.

My area of concern is that in the original Draft EAF there were no cultural resources listed. However, there are! We had a base inspection done on 10-6-04 of an area on my brother- in- laws property by Mr. Roger Bish and Mr. William Lucas. Mr. Bish found the area of interest and contacted Robert Dean from the Division of Historical Preservation of NYS Parks and Recreation. Mr. Dean found another place further up onto the landfill site, possibly related to other site. He filed a report with Nancy Herter at the OPRHP.

With these recent findings we must insist that the landfill NOT be permitted to expand. It will destroy cultural resources that could be potentially significant to the Carroll Historical Society. At the very least these findings must be researched and documented properly so a part of Carroll's history not be lost forever!

Sincerely,

Michelle Lingenfelter

Michelle Lingenfelter

Letter From: Nancy Herter, New York State Offices of Parks, Recreation and Historical Preservation

To: Bethany Acquisto, Daigler Engineering, P.C.

Letter of No Effect

December 21, 2011

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

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

December 21, 2011

Bethany Acquisto
Daigler Engineering, PC
1711 Grand Island Blvd
Grand Island, New York 14072

Re: CORPS PERMITS, DEC
Carroll Landfill Expansion/Dodge Road
Town of Carroll, Chautauqua County
10PR06502

Dear Ms. Acquisto:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the Phase I Cultural Resources Investigation Report, prepared by the Rochester Museum and dated November 22, 2011, 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, it is the SHPO's opinion that your project will have **No Effect** upon cultural resources in or eligible for inclusion in the National Register of Historic Places.

The SHPO appreciates the opportunity to comment on this information. Further consultation with the SHPO is recommended if there are any changes to the project. Please telephone me at ext. 3280 with any questions you may have. Please also refer to the PR# above in any future correspondence for this project.

Sincerely,

Nancy Herter

Nancy Herter
Scientist, Archaeology

cc. Mark Ewing, Rochester Museum *(via email only)*

Letter from: Brian Boddecker, Daigler Engineering, P.C.
To: Nancy Herter, New York State offices of Parks, Recreation and Historical Preservation

Request for Supplemental Review of OPRHP Project 10PR06502

June 9, 2014

DAIGLER ENGINEERING P.C.
engineering · science · design

2620 Grand Island Blvd. Grand Island, New York 14072 *ph (716) 773-6872 /fax (716) 773-6873*

June 9, 2014

Nancy Herter
Archaeology Program Leader
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

Re: Request for Supplmental Review of OPRHP Project 10PR06502

Dear Ms. Herter:

Back in 2010 and 2011, a colleague of mine corresponded with you on the potential impacts that our project may have on cultural resources in Carroll, NY. A foundation of un-mortared stone was reported to be on the site by Robert L. Dean of Heritage Preservation & Interpretation Inc. as documented on the Archaeological Site Inventory Form A01303.000032. The report also mentions a "stone-lined spring, or similar feature" to the east of the foundation. Daigler Engineering, PC obtained Archaeological Services of the Rochester Museum & Science Center (AS/RMSC) to conduct a Phase 1 archeological assessment as required. In their *Cultural Resource Survey Report,* dated November 22, 2011 AS/RMSC concluded that there was a distinct lack of prehistoric Native American cultural material or historic EuroAmerican cultural material on the site.

On December 21, 2011 you concurred with the AS/RMSC's finding and issued an opinion by way of letter that the project will have no effect upon cultural resources. This letter is provided in Attachment C for convenience.

On May 20th of this year, during a routine site visit Daigler Engineering happened upon a stone built structure which is similar to the "stone-lined spring" and is shown in Attachment A. We are unfortunately unable to request that AS/RMSC revisit the site to inspect the newly discovered stone-lined spring, and amend their Phase 1 Investigation Report as they are no longer in business.

As shown in the attached Final Grading and Drainage Plan (see Attachment B), the structure is located in an area that is proposed to have an underground stormwater drainage pipe installed, and would therefore be disturbed as a result of this project.

We request that you review the attached information and provide guidance on any steps that should be taken to address this issue. Should you have any questions or comments, please do not hesitate to contact me at (716)773-6872 ext. 209, or by email at brian@jadenvegr.com.

Sincerely,

DAIGLER ENGINEERING P.C.

Brian Boddecker
Staff Engineer

Attachments

ATTACHMENT A

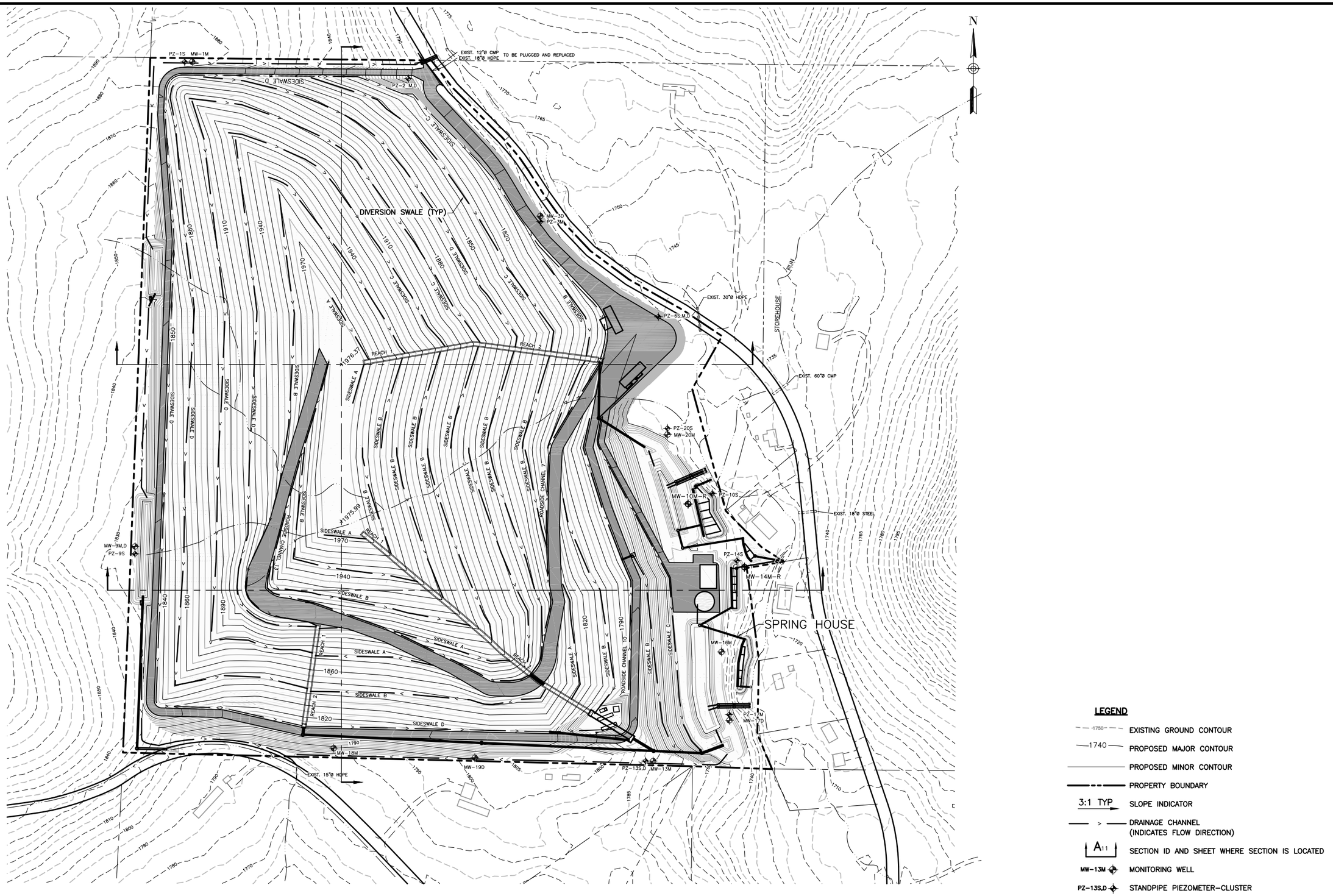
Photographs of Newly Discovered Spring House

Photograph of the Spring House taken during a site visit, May 20th, 2014

ATTACHMENT B

Final Grading and Drainage Plan

This Final Grading and Drainage Plan is the current version and includes all revisions made after June 9th 2014



LEGEND

- EXISTING GROUND CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPERTY BOUNDARY
- 3:1 TYP — SLOPE INDICATOR
- DRAINAGE CHANNEL (INDICATES FLOW DIRECTION)
- A_{11} — SECTION ID AND SHEET WHERE SECTION IS LOCATED
- MW-13M — MONITORING WELL
- PZ-13S,D — STANDPIPE PIEZOMETER-CLUSTER
- MW-10M-R — MONITORING WELL REPLACEMENT

NO.	REVISION	BY	DATE
1	REVISE SHEET NUMBER	TPP	10/13/15

DAIGLER ENGINEERING, P.C.
CIVIL & GEO-ENVIRONMENTAL ENGINEERING
2620 GRAND ISLAND BLVD. (716) 773-6872
GRAND ISLAND, NEW YORK 14072 (716) 773-6873 FAX
JAMES A. DAIGLER, P.E.
NYSPE NO. 061689

DATE: August 2014

SCALE: 1"=120'

PREPARED FOR: SEALAND WASTE, LLC		
DES. BY:	DRW. BY:	CHK. BY:
DWG. PD-9 FINAL GRADING AND DRAINAGE PLAN.dwg		

FINAL GRADING AND DRAINAGE PLAN

CARROLL LANDFILL EXPANSION APPLICATION

TOWN OF CARROLL | CHAUTAUQUA COUNTY | STATE OF NEW YORK

SHEET PD-9 1

O:\Sealand\02-0104 Carroll Landfill\Permit Drawings\2015 REVISIONS\PD-9 FINAL GRADING AND DRAINAGE PLAN.dwg 10/1/2015 2:35 PM

Letter from: Nancy Herter, New York State Offices of Parks, Recreation and Historical Preservation

To: Brian Boddecker, Daigler Engineering, P.C.

Letter of No Effect

June 20, 2014

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

New York State Office of Parks,
Recreation and Historic Preservation

Division for Historic Preservation
Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643
www.nysparks.com

June 20, 2014

Brian Boddecker
Daigler Engineering, PC
1711 Grand Island Blvd
Grand Island, New York 14072
(via email only)

Re: CORPS PERMITS, DEC
Carroll Landfill Expansion/Dodge Rd
Town of Carroll, Chautauqua County
10PR06502

Dear Mr. Boddecker:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the information on the stone-lined spring 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 has no concerns with this stone-lined spring. Therefore, we continue to recommend that this project will have **No Effect** upon cultural resources in or eligible for inclusion in the National Register of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Nancy Herter

Nancy Herter
Historic Preservation Program Analyst