

HISTORICAL
PERSPECTIVES INC.



**PHASE IB ARCHAEOLOGICAL
FIELD INVESTIGATION**

**Tennyson Avenue Development
Block 5212, Lot 37
Staten Island, Richmond County, New York**

Board of Standards and Appeals: 20BSA019R

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Prepared For:

Tora Development, LLC.
18 Hurlingham Drive
Greenwich, CT 06831

Prepared By:

Historical Perspectives, Inc.
P.O. Box 529
Westport, CT 06881

Authors:

Elizabeth Eibert, M.A.
Sara F. Mascia, Ph.D., R.P.A.

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EXECUTIVE SUMMARY

The Tennyson Avenue Development residential project is on Block 5212, Lot 37 at the mouth of the Great Kills Harbor on the southeastern shore of Staten Island, Richmond County, New York (Figure 1). The development parcel is roughly triangular and bounded by Fitzgerald Avenue to the west, Nelson Avenue to the south and Cleveland Avenue to the north (Figure 2).

A restrictive declaration was placed on the project by the New York City Landmarks Preservation Commission (LPC) on the grounds that the project property could be archaeologically significant, a decision which had been based on a sensitivity assessment made by Historical Perspectives Inc. (HPI) in 1987 (HPI 1987). This Phase IA assessment for the Regatta Cove project had determined that the project site was underlain with geological deposits characteristic of marshes, which are known to have been exploited for numerous resources as well as occupied by Native American peoples. In 2018, HPI proposed to address the concerns of LPC and the New York State Department of Environmental Conservation (DEC) for the Tennyson Avenue Development Project parcel with the conduction of soil boring analysis on Block 5212 Lot 37, which would refine the area of archaeological sensitivity. Soil borings were conducted in 2021 but did not provide definitive data regarding archaeological concerns (HPI 2023). Four of the nine soil borings completed in 2021 identified an organic peat stratum, with three borings (B1, B2, and B9) located in the west corner of the project site. HPI recommended that a Phase 1B Archaeological Field Investigation should occur to ensure a thorough knowledge of the archaeological sensitivity of the project site and LPC concurred.

During the last several decades, the project site experienced significant disturbance resulting in thick layers of fill soils covering the original landscape, which necessitated the use of a backhoe under the direction of an archaeologist to conduct the recommended investigations. Four test trenches (Trenches 1-4) were investigated during fieldwork conducted in April 2024.

Testing determined that much of the APE was covered by several feet of fill soils containing modern cultural material, beneath which lay the peat lens, which had potentially been of archaeological significance pertaining to pre-contact cultures. However, no evidence of pre-contact cultural activity was observed during excavation of this stratum, nor of those beneath. There was, however, some evidence of human activity taking place during the 20th century. Trench 1 was found to contain several glass bottle fragments within the peat lens which could be dated to the first half of the 20th century. Cultural material found in the peat lens of Trenches 2 and 3 appeared more modern and likely manufactured during the middle of the 20th century. The peat lens appears to be an organic/marsh surface that was exposed during the 20th century, used for the deposition of waste from the nearby residences, and later filled during the mid-20th century. The results of the field investigation indicate that no further consideration for the recovery of archaeological resources is warranted within the Project APE.

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INTRODUCTION

The Tennyson Avenue Development residential project is on Block 5212, Lot 37 at the mouth of the Great Kills Harbor on the southeastern shore of Staten Island, Richmond County, New York (Figure 1). The development parcel is roughly triangular and bounded by Fitzgerald Avenue to the west, Nelson Avenue to the south and Cleveland Avenue to the north. Tennyson Drive, to the east, has historically been a paper street which now serves to separate the Project Site from a shoreline city park (Figure 2).

As a function of the CEQR process (20BSA019R), a restrictive declaration was placed on the Project due to concerns of the New York City Landmarks Preservation Commission (LPC). LPC's review stated that the Project property "May be archaeologically significant" and requested additional materials to make an informed judgment on the proposed impact (6/27/11). The LPC decision was based on a 1987 assessment of sensitivity of the neighborhood for the Regatta Cove Project (HPI 1987; CEQR No. 87-197R).

The original 1987 assessment was for a much larger development called the Regatta Cove Condominiums Project, which encompassed Zoning Lots 1 and 2. The current Tennyson Avenue Development Project's Area of Potential Effect (APE) covers only a portion of the earlier Regatta Cove Condominium development APE, roughly the narrow upland portion of the 1987 Zoning Lot 1 (Figure 2). In 2018, HPI made a proposal to address the concerns of LPC and the New York State Department of Environmental Conservation (DEC) for the Tennyson Avenue Development Project parcel, recommending the completion of strategically placed soil borings on Block 5212 Lot 37, and undertaking an analysis of resultant data to refine the archaeological sensitivity. The proposal was forwarded to LPC on 5/3/18 and approved 5/8/18. Soil borings were conducted on Lot 37 in 2021. These 2021 borings were conducted for construction planning and, when studied by HPI, did not provide definitive data regarding the potential for previous disturbance or the presence of archaeological resources. Four of the nine soil borings completed in 2021 identified an organic peat stratum, with three borings (B1, B2, and B9) located in the west corner of the project site (Figure 2; HPI 2023). LPC concurred with HPI that field testing should occur as a next step.

An Archaeological Work Plan for Phase IB field testing was prepared and submitted to LPC for review in October 2023 (HPI). Due to the potential precontact sensitivity HPI also contacted interested Indigenous Tribes to apprise them of the Work Plan and impending fieldwork. The plan, which called for trench excavations in the western corner of the project APE, was approved by LPC (Figures 2 and 3). HPI contacted LPC and the Tribal representatives to provide them with the field investigation start date in April 2024

FIELD METHODOLOGY

Phase IB fieldwork was designed to ascertain the presence/absence, type, and relative extent of archaeological resources. Specific field investigation tasks included excavation, mapping and

photography, laboratory analysis, and an assessment of the strata explored and any recovered cultural resources.

Archaeological field testing was conducted using a combined effort of heavy machinery and hand-excavation under the direction of HPI's professional archaeologists experienced in urban archaeological excavation techniques. Mechanical were planned to remove modern fill and debris in shallow and controlled increments to determine the presence of subtle changes in soil color and/or texture, which would indicate the presence of historical or pre-contact surfaces, deposits, or features.

In particular, the archaeologists focused on the excavation of the buried organic peat lens that had been recorded through soil boring analysis and determined potentially sensitive for the presence of archaeological deposits from Native American occupation. This stratum and those immediately beneath it would be excavated by hand when closer inspection was deemed necessary.

For the field plan, HPI had originally determined that in the western corner of the site, the excavation of three trenches measuring 10 x 18-20 feet would be sufficient for sampling the archaeologically sensitive area. The final depths of these trenches would be determined by the depth of the peat lens. The actual field conditions, discussed below, required a small modification to this plan; the third trench was split into two 10 x 10 feet trenches in order to ensure a thorough investigation. The sequencing of the testing and the final number and location of test trenches were dictated by the HPI archaeologists in the field. During field testing, the archaeologists also adhered to all applicable OSHA regulations. Professional standards for excavation, screening, recording stratigraphy, labeling, mapping, photographing, and cataloging were applied. The results of the Phase IB field investigation is presented below.

RESULTS OF THE FIELD INVESTIGATION

Phase 1B testing took place at the project site April 15-16, 2024. The topography of the project site was found to be somewhat altered in the time since the initial IA study was completed requiring slight in-field modifications to the originally proposed trench locations. Four test trenches (Trenches 1-4) were planned for the western corner of the site according to the results of the 2021 soil borings where a peat lens was noted.

At the onset of the testing, it was noted that much of the site had been disturbed by earth moving and the introduction of large piles of fill soils rising several feet above the ground surface, which would have greatly increased the depths of two of the proposed trenches (Photographs 7, 15, 20, 21). As excavation depths were limited by constraints of both safety and machine excavator size, modifications to the originally proposed placements of Trenches 2 and 3 were made (Figure 3). In making these modifications, the archaeologists considered the locations of the soil borings, B-1, B-2, and B-9, which had contained the peat lens deemed potentially culturally sensitive to ensure the new locations would still be close to the sites of the borings (see Figure 2; Appendix A).

Prior to excavation, the corners of the four rectangular excavation trenches were marked out and their locations noted. All trenches were oriented parallel to the northwestern boundary of the

project area, running from southwest to northeast. In some locations, removal of surface debris and vegetation was required before excavation could commence (Photographs 23 and 24). During testing a combination of machine-aided and hand excavation techniques were utilized. Profiles of all trenches were recorded depicting all soil strata observed. For the purpose of safe access, trenches were excavated in approximately 10 x 10-foot sections with a terraced side for safe entry and recordation. All cultural material was noted, and any diagnostic artifacts were recovered. All trenches were backfilled following the collection of necessary data. The following is a summary of the results from each of the four test trenches investigated.

Trench 1

The location of Trench 1 was altered slightly to avoid disturbance created by the placement of boring hole B-9 in 2021 (Photograph 1). The west corner of the trench was 23 feet from the Fitzgerald Avenue fence line and 25 feet from the Nelson Avenue fence line at an elevation of about 10.3 feet NAVD 88 (Figure 3). The final placement was less than 20 feet southeast of soil boring B-9. Trench 1 measured 12 x 20 feet (3.65m x 6.09m) in size.

Five distinct strata were observed in Trench 1 (Table 1, Photographs 2 and 3). The top two were layers of fill containing modern cultural material such as plastic, asphalt, scrap metal, and metal rebar. Within the second fill level, archaeologists observed tar containing clearly modern wire nails at 5.46 ft NAVD 88 (147.32 cmbs) (Table 1, Photograph 4). The peat lens which had been seen in soil boring B-9 was encountered between 5.63 and 5.05 ft NAVD 88 (142.2-160 cmbs), being nearer to the ground surface in the western half of the trench (see Figure 4). This stratum was a dark colored silty clay rich in organic material with a preserved overlay of branches and plant matter (Photograph 5). Within and partially beneath this organic stratum several fragmented glass vessels were recovered and cataloged (see Appendix B), as discussed below. Two more natural strata were observed beneath the peat lens, consisting of sandy clay and containing neither organic nor cultural material. Excavation was terminated at a depth of approximately 3.38-3.21 ft NAVD 88 (210.8-215.9 cmbs), at which point ground water began to intrude (Table 1, Photograph 2).

Table 1. Profile of Trench 1 Northwest Wall

Level	West Corner Depths	North Corner Depths	Description
1	10.3-8.33 ft NAVD 88 (0-58.4 cmbs)	10.3-8.3 ft NAVD 88 (0-60.9 cmbs)	dark brown (10YR3/3) coarse sandy clay loam fill with gravel and large cobbles
2	8.33-5.63 ft NAVD 88 (58.4-142.2 cmbs)	8.3-5.05 ft NAVD 88 (60.9-160 cmbs)	reddish brown (5YR4/4) silty sandy clay fill with gravel
3	5.63-5.13 ft NAVD 88 (142.2-157.4 cmbs)	5.05-4.71 ft NAVD 88 (160-170.1 cmbs)	very dark grey (7.5YR3/1), silty clay with organic material (peat)
4	5.13-4.55 ft NAVD 88 (157.4-175.2 cmbs)	4.71-4.21 ft NAVD 88 (170.1-185.4 cmbs)	dark reddish brown (5YR3/3) sandy clay
5	4.55-3.38 ft NAVD 88 (175.2-210.8 cmbs)	4.21-3.21 ft NAVD 88 (185.4-215.9 cmbs)	dark brown (7.5YR3/2) coarse sandy clay

Trench 1- Dateable Cultural Material

Within the peat lens, just below the preserved plant matter in the northeastern half of Trench 1 were the fragmentary remains of seven glass bottles (Photograph 6), all determined to be of food related function (Appendix B). The most specific date comes from five brown glass beer bottle fragments. Base fragments of this vessel are embossed with "VAN NOSTRAND", the name of a brewing company which was both established and defunct in 1934 (Brooks 2023). Other more specific dates were gleaned from fourteen brown glass liquor bottle shards. The body of this vessel displayed a partial embossment of "FEDERAL LAW PROHIBITS SALE OR...", indicating manufacture between 1935 and mid-1960's (Lindsay 2024). A base fragment is embossed with "Thatcher Mfg. Co." makers-mark dating from 1923 to ca.1954 (Lindsay 2024), therefore this vessel may be dated to the time between 1935 and 1954.

The manufacture dates of the rest of the bottles are less clear. Two of the vessels, consisting of two aqua glass shards and seven green glass shards (Appendix B, Photograph 6), do not have any clearly identifying embossments but do display crown finishes. This definitively dates them to post-1892, when this finish was invented (Lindsay 2024). Because these vessels appear to be machine-made, they may further be dated to post-1910, which is the time at which crown finishes began appearing on machine-made bottles (Lindsay 2024).

Two of the vessels are the remnants of milk bottles. The first consists of 8 colorless shards (Appendix 2). The faceted body fragments are embossed: "BORDENS FARM PRODUCTS CO INC". The neck fragment has the circular embossment: "BORDENS TRADEMARK QUALITY SERVICE", and a capseat finish. The time period during which Borden's utilized this particular bottle could not be determined through the embossment style. The finish, along with the shape of the body indicates that the vessel was of the "Common Sense" milk bottle design, which was industry standard by the early 1900's (Lockhart 2014, Lindsay 2024). This style was used widely until the 1950's, when square styles became more popular, however, cylindrical styles were produced until the 1980's (Lindsay 2024). All that can be said definitively of this bottle's manufacture date is that it was between 1900 and 1980, though it does appear to date closer to the first half of this range. The second milk bottle consists of two manganese-tinted shards. One of these is a base fragment embossed "36 B" inside of a circular ejection mark from machine manufacturing (Appendix B). This may be a Buck Glass Co. maker's mark dating to ca. 1931-ca. 1941 (Lockhart et al. 2013), though this is unclear. It is possible that all the milk bottle shards come from the same vessel and that these two shards got their pale lavender coloring from sun-exposure (Lockhart 2006).

The remaining vessel consists of four unmarked aqua-tinted glass shards (Appendix 2, Photograph 6), which appear to be machine-made, dating them to a time period post-1903 (Lindsay 2024), though the quality of the glass indicates a somewhat later date of manufacture.

These vessels appear largely to have been manufactured sometime during the first half of the 20th century. However, it must be noted that manufacture dates are not necessarily indicative of deposition dates. It is very possible that these vessels were deposited in the mid-20th century than their dates of manufacture. Because no further evidence of cultural activity was observed, it is impossible to definitively ascribe a specific decade to the stratum in which they were uncovered. What is definitive is that evidence gathered from the peat lens of Trench 1 indicates

this area was likely still a salt meadow marsh during the first half of the 20th century, when these artifacts were discarded in this location. There was no evidence observed which indicated cultural activity from an earlier date.

Trench 2

The location of Trench 2 was modified in order to avoid its placement atop a large fill pile (Photograph 7). It was placed 65 feet northeast of Trench 1 and approximately 30 feet northwest from soil boring B-1. Its west corner was 50 feet from the Fitzgerald Avenue fence line and 109 feet from the Nelson Avenue fence line at an elevation of 8.8 ft NAVD 88 (Figure 3). Trench 2 measured 10 x 20 feet (3.04m x 6.09m) in size.

Six strata were observed in Trench 2 (Figure 5, Photographs 8 and 9). Trench 2 contained the same two thick fill levels seen in Trench 1, with the addition of a third beneath these (Tables 1 and 2). As in Trench 1, these levels in Trench 2 contained modern cultural material: concrete, asphalt, and brick. Within the third fill level was asphalt and a variety of cut wooden pieces, none of which could be specifically dated but appeared clearly-modern. Near the bottom of this level and partially extending into the next stratum, approximately 3.13-2.9 ft NAVD 88, were the remnants of a metal bed frame, which appeared to have been manufactured within the second half of the 20th century (Photograph 10). Just below this was the top of the peat lens stratum (Table 2). As in Trench 1, this stratum was overlaid by a thin layer of preserved plant matter. Within this stratum was a fragment of cut wood with an attached metal handle, also appearing to have been manufactured within the 20th century (Photograph 11). Beneath the peat lens in Trench 2 were the same natural sandy clay strata observed in Trench 1 (Table 2, Figure 5). These strata contained no cultural material.

Table 2. Profile of Trench 2 Southeast Wall

Level	East Corner Depths	South Corner Depths	Description
1	8.8-8.55 ft NAVD 88 (0-7.6 cmbs)	8.8-8.21 ft NAVD 88 (0-17.7 cmbs)	dark brown (10YR3/3) coarse sandy clay loam fill with gravel and large cobbles
2	8.55-6.2 ft NAVD 88 (7.6- 78.7 cmbs)	8.21-6.6 ft NAVD 88 (17.7-66 cmbs)	reddish brown (5YR4/4) silty sandy clay fill with gravel
3	6.2-2.96 ft NAVD 88 (78.7-177.8 cmbs)	6.6-2.8 ft NAVD 88 (66-182.8 cmbs)	dark yellowish brown (10YR4/6) silty sandy clay fill
4	2.96-2.46 ft NAVD 88 (177.8-193 cmbs)	2.8-1.8 ft NAVD 88 (182.8-213.3 cmbs)	very dark grey (7.5YR3/1), silty clay with organic material (peat)
5	2.48-1.46 ft NAVD 88 (193-223.5 cmbs)	1.8-1.13 ft NAVD 88 (213.3-233.6 cmbs)	dark reddish brown (5YR3/3) sandy clay
6	1.46-.55 ft NAVD 88 (223.5-251.4 cmbs)	1.13-.71 ft NAVD 88 (233.6-246.3 cmbs)	dark brown (7.5YR3/2) coarse sandy clay

There was an overnight pause midway through excavation of Trench 2, during which the bottom of the first 10 x 10-foot section of the trench filled with groundwater (Photograph 12). This necessitated the building of a small earthen wall to effectively view the lower strata when the rest of the trench was excavated the following day (see Photograph 13).

Trench 3

Trench 3 was moved from its originally proposed position to avoid recently constructed gravel road (Photograph 14). Large fill piles east of soil boring B-2 (Photograph 15) necessitated its placement northwest of the soil boring. It was approximately 70 feet northeast of Trench 2's modified position, situated between the gravel road and a large fill pile (Photograph 16). Its west corner was 60 feet from the Fitzgerald Avenue Fence line and 200 feet from the Nelson Avenue fence line, at an elevation of approximately 9.3 ft NAVD 88 (Figure 3). It was approximately 30 feet west of soil boring B-2.

In Trench 3, only three distinct soil strata were observed before the intrusion of groundwater prevented further excavation (Figure 6, Photograph 17). The top two were levels of fill much like those seen in Trenches 1 and 2 (Table 3). The first fill level contained asphalt and concrete. The second contained the remnants of a wooden telephone pole (Photograph 18) and a large piece of sheet metal which extended well into the peat lens below (Figure 6, Photograph 17). Also within the peat lens was a variety of cut wood fragments and a rubber shoe sole, all of which appeared to be of relatively modern manufacture (Photograph 19). Unlike in Trenches 1 and 2, there was no preserved plant matter in the peat. Due to the presence of ground water, the terminal depth of this peat level could not be determined, but the deepest point of excavation in the north corner of the trench showed it to have a thickness of at least 4.96 ft NAVD 88 (30.5 cmbs) (Table 3).

Trench 3 was intended to be 10-12 x 20 feet (3.04-3.65m x 6.09m) in size. However, due to the unexpected presence of groundwater, the decision was made to halt excavation while the trench measured 10 x 10 feet (3.04m x 3.04m).

Table 3. Profile of Trench 3 Northwest Wall

Level	West Corner Depths	North Corner Depths	Description
1	9.3-8.13 ft NAVD 88 (0-35.5 cmbs)	9.3-8.21 ft NAVD 88 (0-33 cmbs)	dark brown (10YR3/3) coarse sandy clay loam fill with gravel and large cobbles
2	8.13-6.1 ft NAVD 88 (35.5-96.5 cmbs)	8.21-5.96 ft NAVD 88 (33-101.6 cmbs)	reddish brown (5YR4/4) silty sandy clay fill with gravel
3	6.1-5.8 ft NAVD 88 (96.5-106.6 cmbs)	5.96-4.97ft NAVD 88 (101.6-132 cmbs)	very dark grey (7.5YR3/1), silty clay with organic material (peat)

Trench 4

Due to the unexpectedly smaller size of Trench 3, it was decided that an additional trench measuring at least 10 x 10 feet (3.04m x 3.04m) would be excavated to ensure a thorough investigation of the area surrounding soil boring B-2. Trench 4 was placed approximately 15 feet

northwest of Trench 3, situated between several large fill piles (Photographs 20 and 21). Its west corner was 34 feet from the Fitzgerald Avenue fence line and 180 feet from the Nelson Avenue fence line at an elevation of approximately 9.8 ft NAVD 88 (Figure 3). It was approximately 50 feet northwest of soil boring B-2.

Four layers of fill were observed in Trench 4 (Figure 7, Photograph 22). The first level was identical in color and texture to the second fill layers observed in all three previous trenches (Tables 1, 2, & 3), with the addition of very large concrete slabs (Photograph 23). The second layer was a very thin coarse sand lens (Figure 7). The third and fourth layers were more typical of the fill layers seen previously: sandy clay containing asphalt, concrete, and shale slabs (Table 4). Below this, 4.63 ft NAVD 88 (157.4 cmbs) was a relatively thin peat lens, 4 inches at its thickest point (Table 4, Figure 7). This stratum contained no cultural material. Beneath the peat lens were the same natural sandy clay strata observed in Trenches 1 and 2 (Tables 1 & 2), which also contained no cultural material. Excavation was concluded at a depth of 2.88 ft NAVD 88 (210.8 cmbs), at which point groundwater began to intrude (Photograph 22).

Table 4. Profile of Trench 4 Northeast Wall

Level	North Corner Depths	East Corner Depths	Description
1	9.8-8.05 ft NAVD 88 (0-53.3 cmbs)	9.8-8.05 ft NAVD 88 (0-53.3 cmbs)	reddish brown (5YR4/4) silty sandy clay fill with gravel and large cobbles
2	8.05-7.55 ft NAVD 88 (53.3-68.5 cmbs)	8.05-7.63 ft NAVD 88 (53.3-66 cmbs)	light grey (10YR7/1) coarse sand fill
3	7.55-6.38 ft NAVD 88 (53.3-104.1 cmbs)	7.63-6.38 ft NAVD 88 (66-104.1 cmbs)	dark yellowish brown (10YR4/6) silty sandy clay fill
4	6.38-4.63 ft NAVD 88 (104.1-157.4 cmbs)	6.38-4.63 ft NAVD 88 (104.1-157.4 cmbs)	dark greyish brown (10YR4/2) fine sandy clay fill
5	4.63-4.46 ft NAVD 88 (157.4-162.5 cmbs)	4.63-4.13 ft NAVD 88 (157.4-172.7 cmbs)	very dark grey (7.5YR3/1), silty clay with organic material (peat)
6	4.46-3.45 ft NAVD 88 (162.5-193 cmbs)	4.13-3.3 ft NAVD 88 (172.7-198.1 cmbs)	dark reddish brown (5YR3/3) sandy clay
7	3.45-2.96 ft NAVD 88 (193-208.2 cmbs)	3.3-2.88 ft NAVD 88 (198.1-210.8 cmbs)	dark brown (7.5YR3/2) coarse sandy clay

CONCLUSIONS AND RECOMMENDATIONS

Archaeological field testing was conducted within the Project APE in accordance with the applicable archaeological guidelines. The field investigation of the four test trenches found that much of the APE was covered by several feet of fill soils containing modern cultural material. Beneath this was the intact organic peat lens which had initially sparked plans for archaeological investigation. Though this peat lens had potentially been of archaeological significance

pertaining to pre-contact cultures, no evidence of this was observed during excavation of this stratum, nor of those beneath.

There was, however, evidence of human activity taking place during the 20th century. Trench 1 was found to contain several vessels within the peat lens which could be dated to the first half of the 20th century. The cultural material found in the peat lens of Trenches 2 and 3 could not be clearly dated, but it did appear relatively modern and possibly manufactured during the second half of the 20th century.

Based on the above findings, it appears that the peat was originally a wetland/salt meadow used as an area for refuse deposition, likely from nearby residences. This activity likely began sometime around the early 20th century and continued at least the mid-20th century, when increased development activities in the area lead to the deposit of more modern fill soils, resulting in the highly uneven ground surface that characterizes much of the project site today.

The results of the field investigation indicate that no further consideration for the recovery of archaeological resources is warranted within the Project APE.

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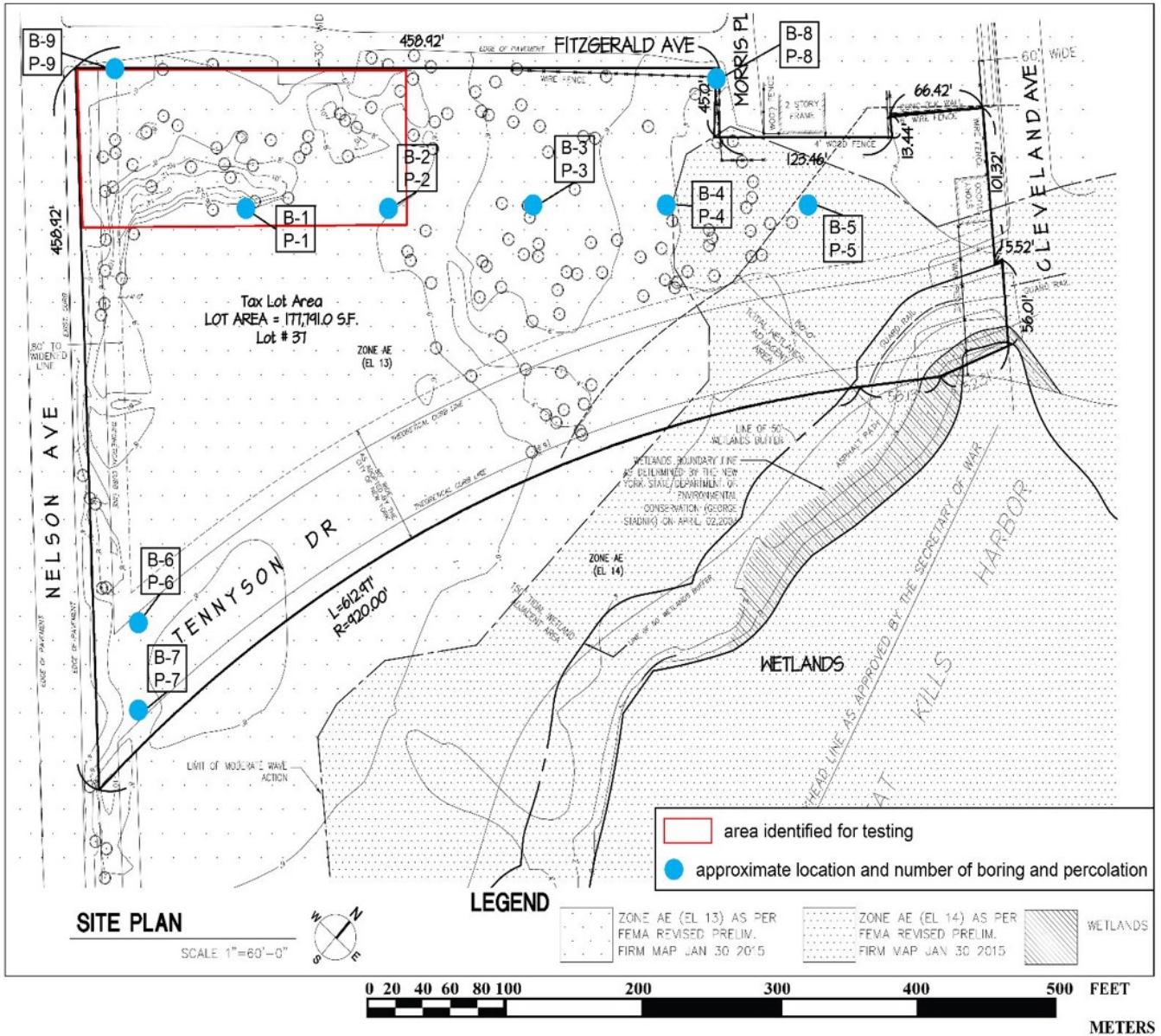
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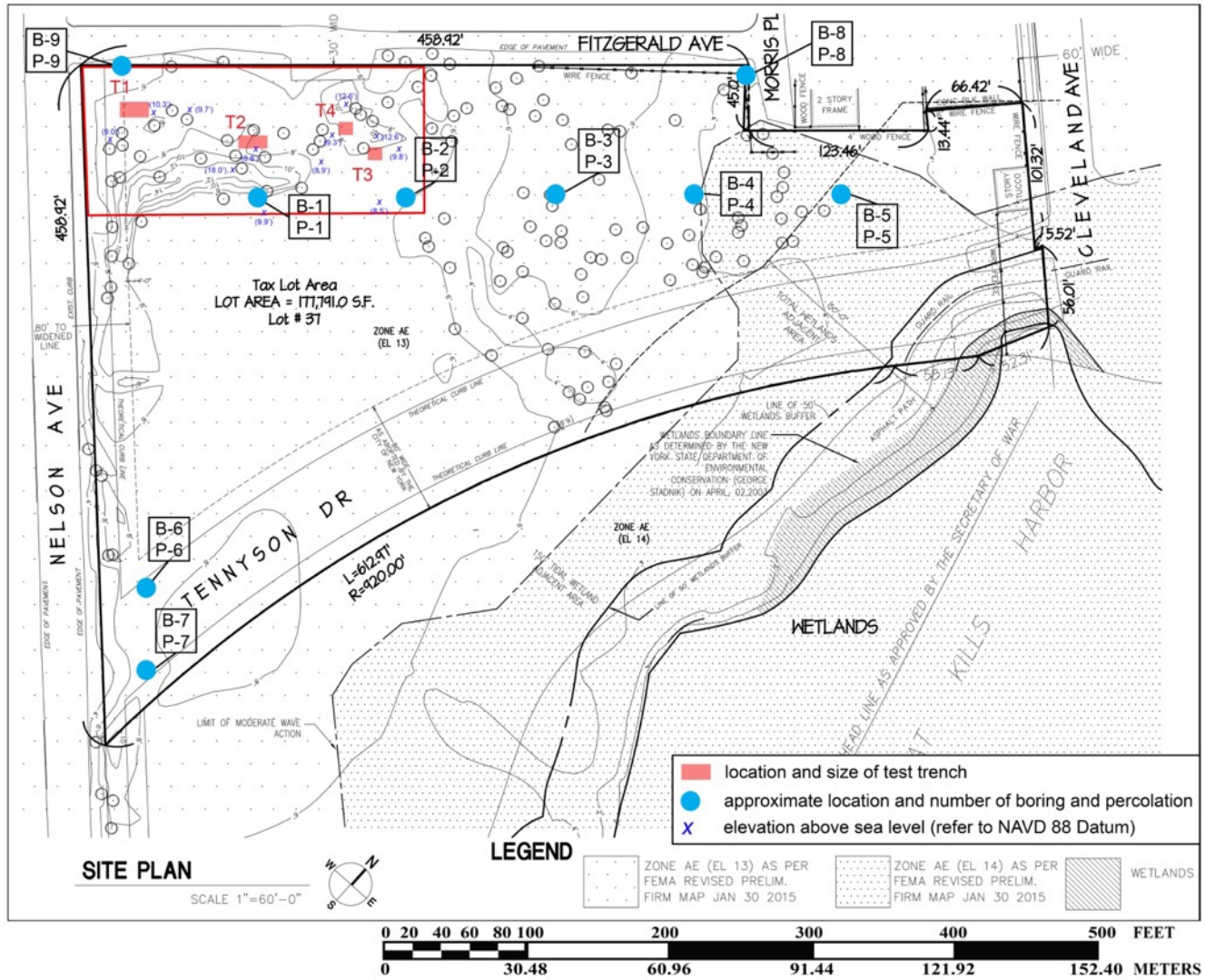
Figure 1: Project Site location on The National Map (U.S.G.S. 2023).



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 Block 5212 Lot 37
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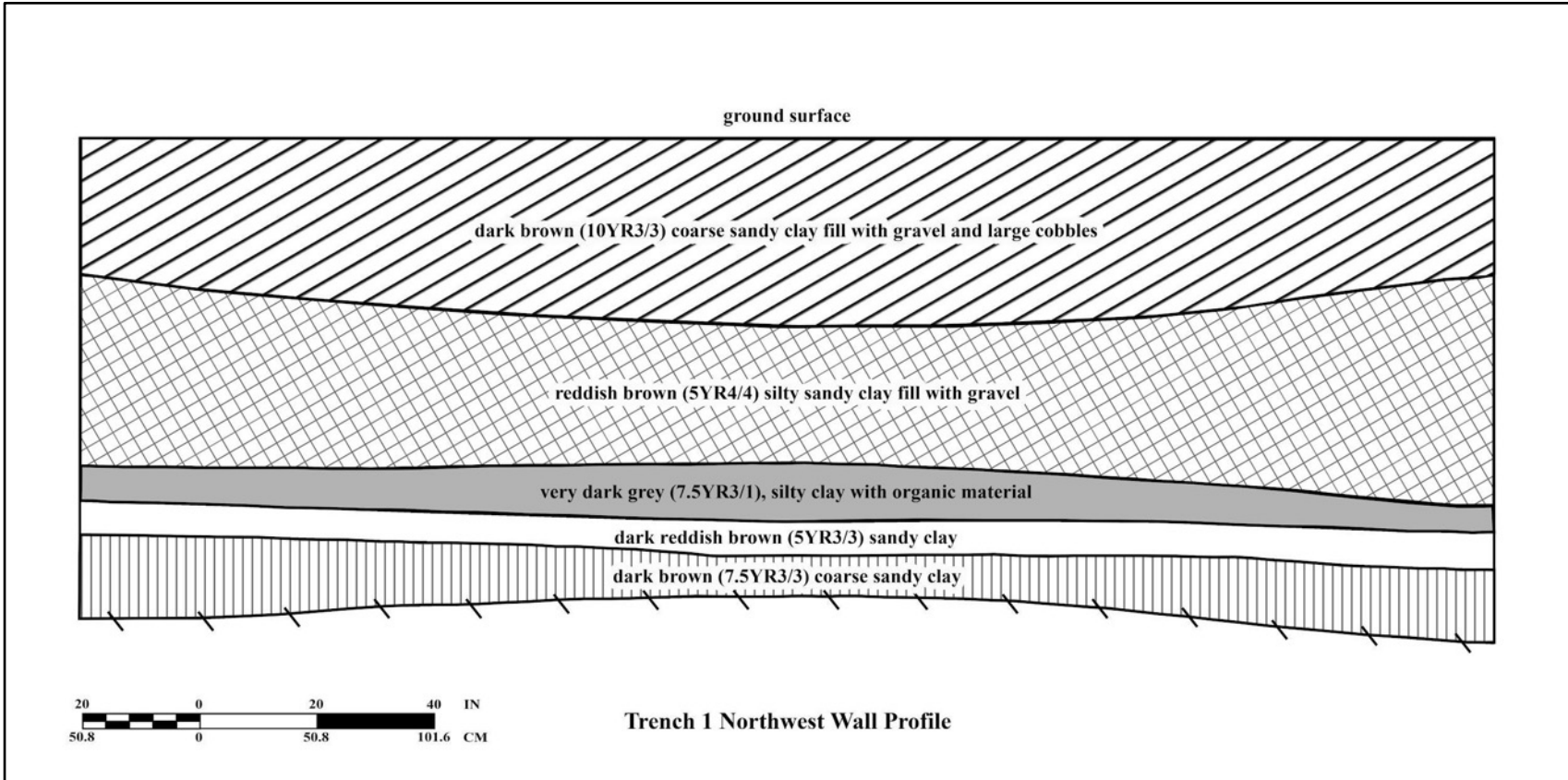
Figure 2: Project Site existing conditions showing completed 2021 soil boring locations and the area identified for archaeological testing (Rampulla Associates Architects 2017, A Tech Engineering NYC 2021, HPI 2024).



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Figure 3: Project Site existing conditions with completed 2021 soil boring locations and numbers (Rampulla Associates Architects 2017 and A Tech Engineering NYC 2021) and archaeological test trench locations.

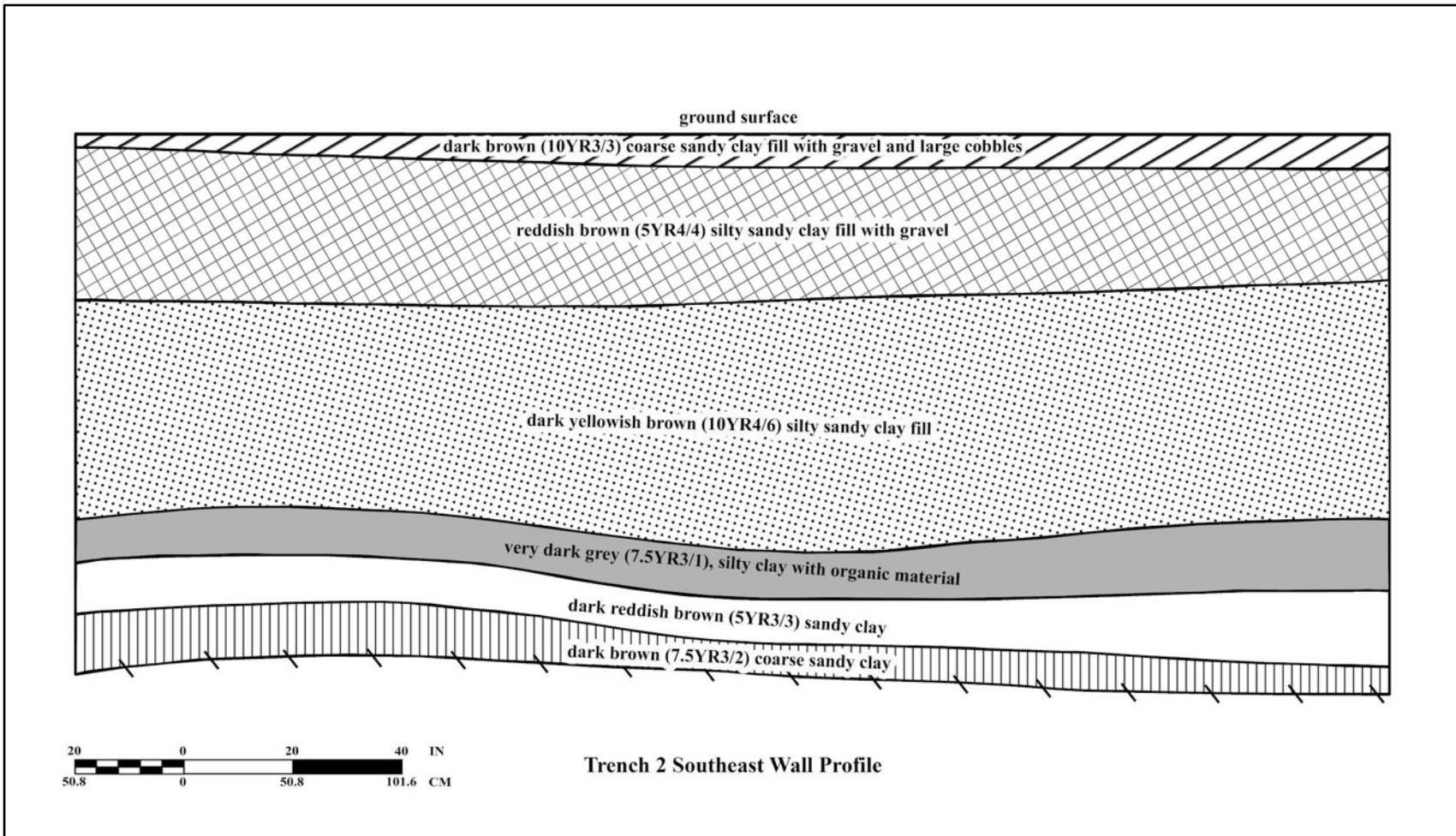




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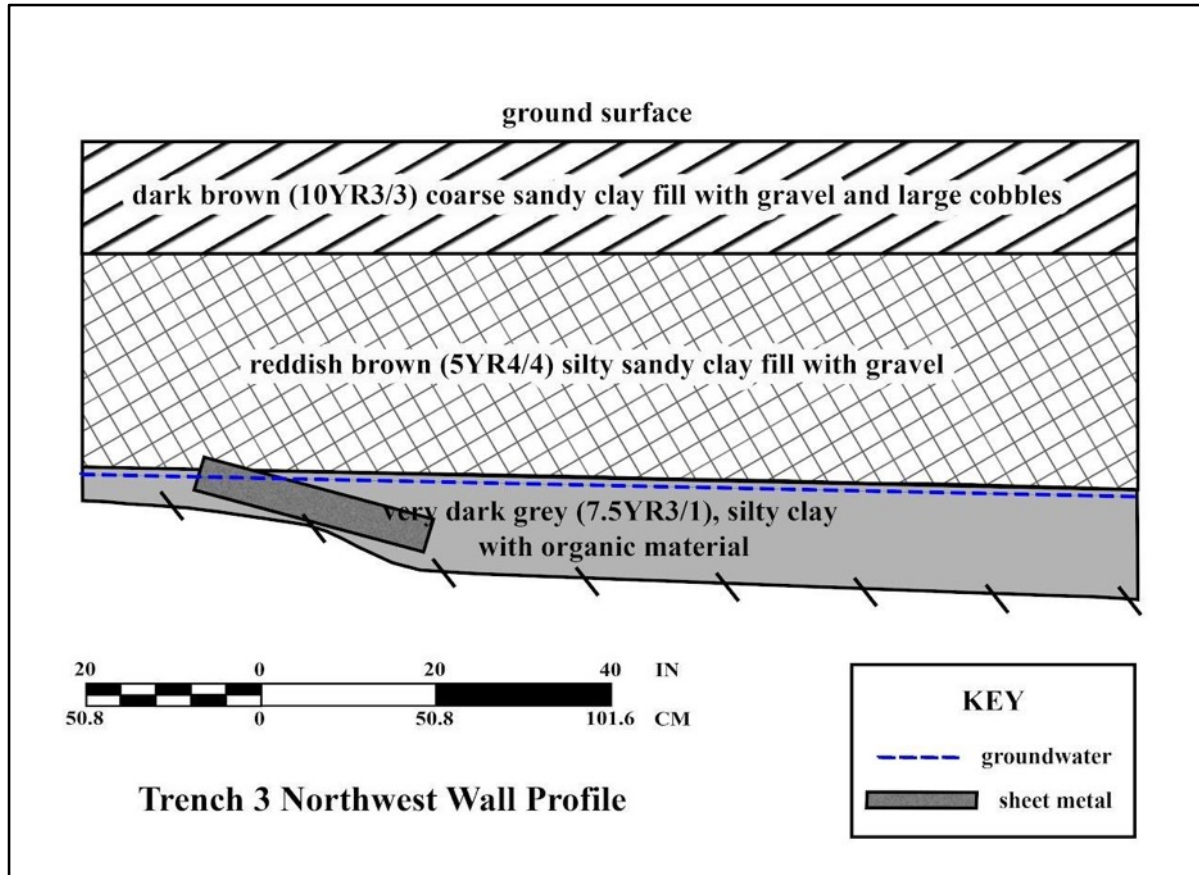
Figure 4. Trench 1 Northwest Wall Profile.



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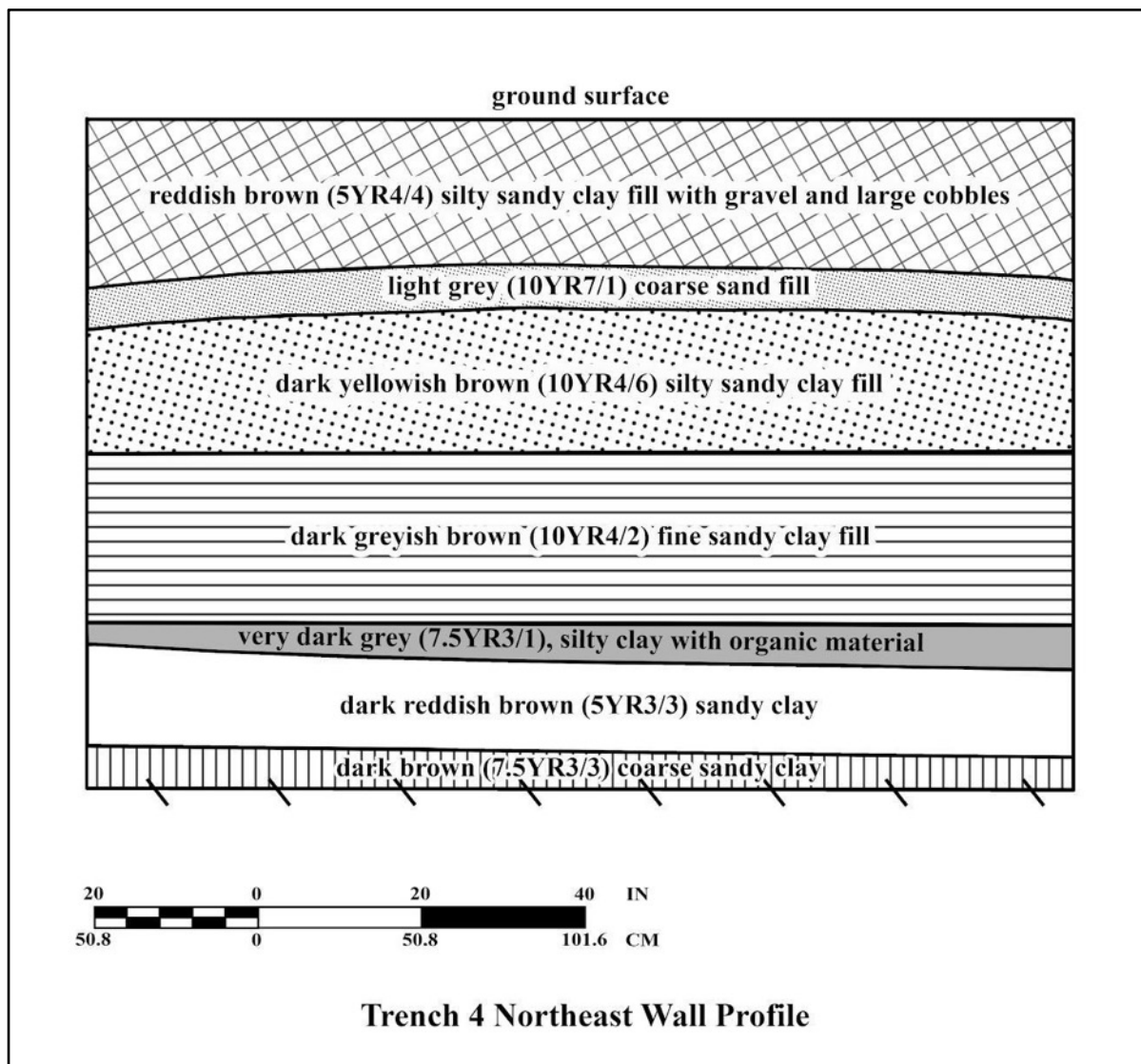
Figure 5. Trench 2 Southeast Wall Profile.



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Figure 6. Trench 3 Northwest Wall Profile.



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Figure 7. Trench 4 Northeast Wall Profile.



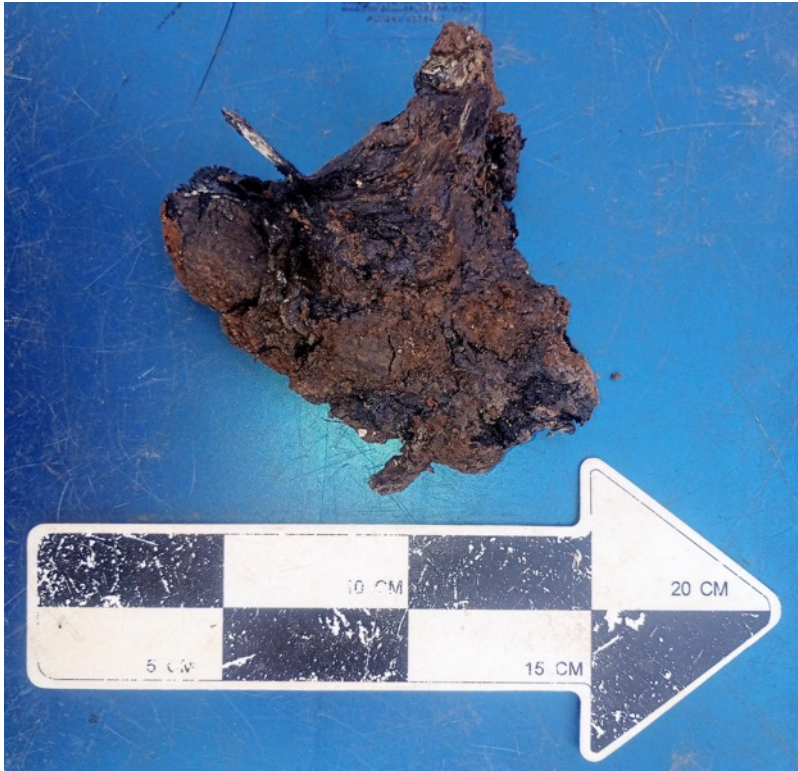
Photograph 1. Uneven ground surface near soil boring B-9, facing west.



Photograph 2. Southwest half of Trench 1, Northwest Wall Profile Wall.



Photograph 3. Northeast half of Trench 1, Northwest Wall Profile Wall.



Photograph 4. Tar containing modern wire nails, observed at bottom of second level in Trench 1.



Photograph 5. Preserved overlay of branches and plant matter on peat lens in Trench 1.



Photograph 6. Fragmentary remains of glass bottles recovered from peat lens in northeastern half of Trench 1.



Photograph 7. Large fill pile directly southeast of Trench 2.



Photograph 8. Southwest half of Trench 2, Southeast Wall Profile.



Photograph 9. Northeast half of Trench 2, Southeast Wall Profile.



Photograph 10. Remnants of metal bed frame observed near bottom of third level in Trench 2.



Photograph 11. Observed in third level of Trench 2; top: cut wood with attached metal handle, bottom: fragment of metal bed frame with springs



Photograph 12. Overnight groundwater intrusion in southwestern half of Trench 2.



Photograph 13. Earthen wall created in bottom of Trench 2 during excavation of northeastern half.



Photograph 14. Gravel road in originally proposed location of Trench 3, facing southwest.



Photograph 15. Large fill piles east of soil boring B-2, facing west.



Photograph 16. Trench 3 placed between gravel road and large fill pile, facing north.



Photograph 17. Trench 3, Northwest Wall Profile with sheet metal visible at left side.



Photograph 18. Wooden telephone pole observed in second level of Trench 3.



Photograph 19. Cut wood and a rubber shoe sole (third from left) observed in peat lens in Trench 3.



Photograph 20. Fill pile directly northwest of Trench 4.



Photograph 21. Trench 4 placed between several fill piles, facing northeast.



Photograph 22. Trench 4, Northeast Wall Profile.



Photograph 23. Concrete slabs observed in first level of Trench 4.



Photograph 24. Debris near Trench 2.

APPENDICES

Boring No.	Mapped Elevation	Level 1	Level 2	Level 3	Level 4/5	Termination & Water	
B-1	8'	0 -1' stone fill	<i>1'-12'</i> <i>peat, soft moist clay & bog</i>	12'- 16' moist clay & sand	16'- 25' poorly graded sand	termination @ 25' groundwater @ 16'	
B-2	6'	0 -1' fill	<i>1'- 4'</i> <i>peat, moist soft clay & bog</i>	4'- 11' moist clay & sand	11'- 25' poorly graded sand	termination @ 25' trapped water @ 4' groundwater @ 11'	
B-3	> 6'	0 -1' fill	1'- 8' silty sand & gravel	8'- 25' poorly graded sand	Not present	termination @ 25' groundwater @ 8'	
B-4	4'	0 -1' organic soil	1'- 5' silty sand & gravel	5'- 12' moist clay & sand, some gravel	12'- 25' poorly graded sand	termination @ 25' groundwater @ 12'	
B-5	< 4'	0 -1' organic soil	1'- 4' poorly graded sand	<i>4'- 7'</i> <i>peat, moist clay & bog</i>	7'- 25' poorly graded sand	termination @ 25' trapped water @ 4' groundwater @ 7'	
B-6	6'- 8'	0 -1' organic soil	1'- 7' fine sand, some silt, trace of gravel	7'- 10' moist clay & sand	10'- 25' poorly graded sand	termination @ 25' trapped water @ 4' groundwater @ 10'	
B-7	6'- 8'	0 -1' organic soil	1'- 7' fine sand, some silt, trace of gravel	7'- 10' moist clay & sand	10'- 25' poorly graded sand	termination @ 25' Trapped water @ 4' groundwater @ 10'	
B-8	4'	0 - 2' fill	2'- 10' silty sand & clay, trace of gravel	10'- 25' poorly graded sand	Not present	termination @ 25' groundwater @ 10'	
B-9	< 6'	0-1' organic soil	<i>1'- 6'</i> <i>peat, soft, moist clay & bog</i>	6'- 14' soft, moist clay	14'-17' moist clay & sand	17'-25' poorly graded sand	termination @ 25' trapped water @ 4' groundwater @ 10'

Note: In the above table, levels containing peat are italicized and levels containing silty sand with gravel are bolded.

Appendix A: Soil Boring Logs with Mapped Elevations (HPI, 2023).

Trench	Level	Quantity	Functional Group	Class	Material	Type	Object	Part	Description
1	3	2	food related	glass	manganese-tint	machine made	bottle	fragment	milk bottle; 1 body fragment- faceted with partial embossment: "1Q"; 1 base fragment- embossed "36 B" inside of ejection mark from machined-manufacture, possibly a Buck Glass Co. mark ca. 1931-ca. 1941 (Lockhart et al. 2013); very faint purple tint may be result of exposure to sunlight (Lockhart 2006)
		2	food related	glass	aqua	machine made	bottle	fragment	likely beer bottle; 1 body fragment- partial embossment: "NEW YORK...BREW"; 1 neck fragment with crown finish, definitively post 1892 and likely post 1910-12 since its machine made (Lindsay 2024)
		5	food related	glass	brown	mold made	bottle	fragment	beer bottle; 2 body fragments- unmarked; 3 base fragments- partial embossment: "VAN NOSTRAND...RED", partial "...B" in center, dates to 1934 (Brooks 2023)
		4	food related	glass	aqua-tint	machine made	bottle	fragment	4 body fragments- unmarked
		7	food related	glass	green	machine made	bottle	fragment	machine made liquor bottle; 5 body fragments- unmarked; 1 base fragment- unmarked; 1 neck fragment with crown finish, definitively post 1892 and likely post 1910-12 (Lindsay 2024)
		8	food related	glass	colorless	machine made	bottle	fragment	20 th century milk bottle; 7 body fragments- faceted with embossment: "BORDENS FARM PRODUCTS CO INC" and "1 QT"; 1 neck fragment with circular embossment: "BORDENS TRADEMARK QUALITY SERVICE" and capseat finish
		14	food related	glass	brown	machine made	bottle	fragment	liquor bottle; 12 body fragments- partial embossment: "FEDERAL LAW PROHIBITS SALE OR..." indicates manufacture between 1935 and mid-1960s (Lindsay 2024) and "4/5 QUART"; 1 base fragment- embossment: Thatcher Mfg. Co. makers mark dating to 1923-ca.1954 (Lindsay 2024), "2 3-D-2 46" and "B"; 1 neck fragment with collar finish with ring

Appendix B: Catalog of Recovered Cultural Material from Trench 1.