CHAPTER 9: PROJECT RESULTS

The field research component of identifying archaeological resources for the project began in early October 2000 and continued intermittently through August of 2001. In addition to a surface survey of the parcel, a total of 30 excavation units were placed in the BOM property. Figure 27 shows the location of each unit and the following discussion provides details of the findings, including stratigraphic contexts and material culture recovered. In general, the findings indicate that significant portions of the property contain buried, intact, undisturbed topsoils. This burial of soil resulted from episodes of filling on the property, interpreted as being largely the result of BOM construction events. Some of the buried soils contain

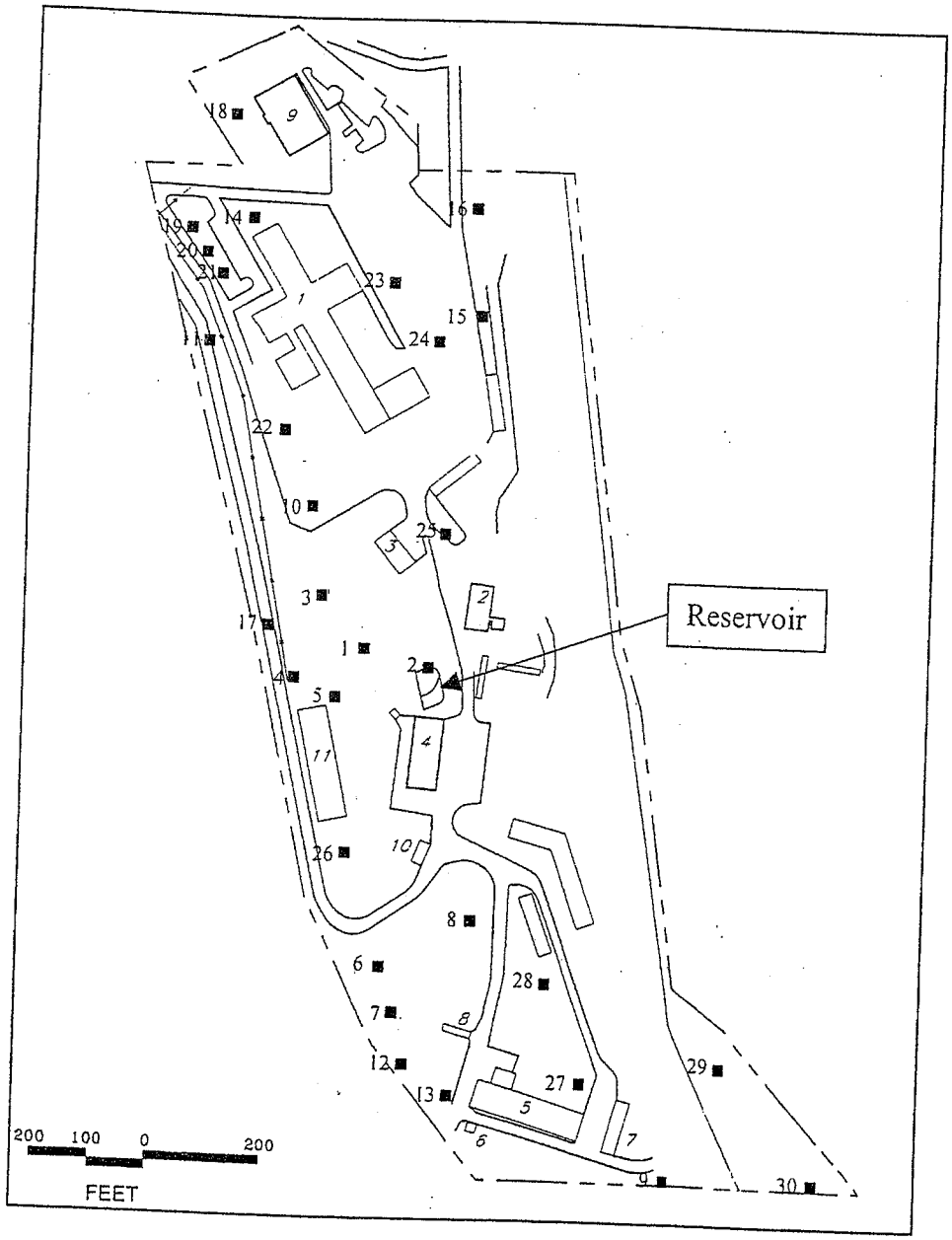

Figure 27 BOM property, numbered buildings and test units excavated between October 2000-August 2001. (Excavation units not to scale)

material culture dating from the first half of the 19th century, the period of earliest documented Euroamerican occupation of this region. Features and material culture dating to the late-19th and early-20th centuries are also present as a result of a number of military uses of the property. While intact soils exist in some locations, there are other areas that are completely devoid of soils that have been cut into the underlying solid bedrock eliminating any possibility of the presence of in situ cultural materials from the period of significance of the site.

As will be evident by the discussions presented below, the most appropriate description of the nature of the strata and material culture findings is one that states "the pattern is one of variability." Of the 30 units excavated, there are at least 16 different patterns recognized in the stratigraphy and/or material culture sub-assemblages. Some of these findings are represented by data found in a single unit that exhibits a structure unlike any others, while a few can be combined with others creating a "grouping" of between 2 and 4 units representing similar cultural and/or natural processes. This diversity and this degree of variability of the recovered data is not surprising due to the long period of historic occupation, the degree and extent of development, and the variable nature of the topography, hydrology and geology in this specific area. It was the historic documentation and the expectation of significant variability that dictated the necessity to use stratigraphic excavation methods for this project to clearly document the context of the material remains. As an example, the area to the west of BOM Building 1 was filled extensively, and while the individual strata represented in the excavation profiles are not identical from unit to unit, the sequence represents a construction episode of filling from variable sources that were placed on the same preexisting surface.

A walkover surface survey conducted throughout the property did not locate any artifacts on the surface but identified 4 features interpreted as belonging to the period of significance of the NHL:

1) Coldwater spring reservoir (ca. 1879),
2) spring house (ca. 1879),
3) military quartermaster department railroad spur grade (ca. 1896), and
4) possible foundation remnant from the pump house--Building H-1(ca. 1879).

The first two of these features are well-defined, readily visible and recognizable at the surface. Features 1 and 2 have been discussed at length above. The latter two are visible, but somewhat less readily apparent. They are represented as surface features respectively as a bedrock cut east of the parking lot east of Building 1 and the latter as a soil covered irregularity protruding out of the steep slope between Building 4 and Building 11.

The area in which the excavations took place is used here as the organizing device in the discussions presented below. The "groupings" in which the data are presented result from similar processes (e.g. cut, fill, use, disturbance) in specific areas of the BOM tract. This manner of presentation is preferred over number or letter designations to avoid confusion with building and test unit numbers and the letter designations used in the 1996 Ollendorf report. The findings from these areas are discussed as units below. To facilitate reader understanding of the data presentation, the groupings are discussed from north to south across

across the property. Frequent reference to Figure 27 will assist in understanding the distribution of finds and the location of research.

TEST UNIT DISCUSSIONS

Building 9 Area. Test Unit 18 (hand-excavated 0.5 x 0.5 cm unit)

Located 10 meters from the northwest corner of building 9, Test Unit 18 produced two layers of fill (Loci 59 and 60) over what appeared to be a black silty clay "A" horizon (Locus 61)

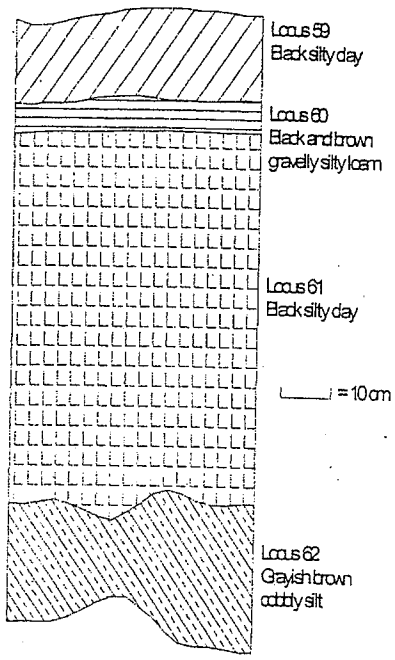

Figure 28 West wall profile of TU 18

that graded into a grayish brown cobbly silt (Locus 62). Locus 62 also contained iron staining and small manganese concretions that develop and are commonly found in soils that remain wet for extended periods. A single fragment of a whiteware ceramic vessel was recovered from locus 60 and is interpreted as fill imported to the site. This area corresponds to Ollendorf's "Area A". The conclusions from the current project found similar results to those from the 1996 work suggesting that the area has not yielded archaeological data that contributes to the National Register significance of the Fort Snelling Historic District. The nature of the soils in this area and the general information depicted on historic maps (see above) suggest that it may have been pasture or cultivated fields associated with either the military or squatter settlement in the area.

North and Northwest of Building 1. Test Units 14, 19, 20, 21 and 22 (machine excavated units measuring approximately 3 x 7 meters)

Machine excavation was used to penetrate fill deposits indicated on BOM construction documents. Backhoe excavation was conducted by stratigraphic layer and both monitored and directed by the author to prevent inadvertent damage to material culture or intact buried soils. Soil from each of the strata identified (see below) was set aside in separate piles, labeled, and a sample was screened for material culture. Samples of strata likely to contain in situ material culture and features had a sample hand excavated. All 4 units excavated in this area document a broad range of fill deposits over water-saturated soils. Water was encountered in each unit at depths of between 1.1 and 2.5 meters from the surface. Natural soils below fill layers consisted of greenish gray sandy clay or encountered water before natural soils were visible at depths of between 1.1 and 1.5 below the surface (See Figures 29-31). These gleyed soils contained iron and manganese concretions, strong indicators of formation in saturated conditions. Sediments immediately above the greenish sandy clays also exhibited some evidence of gleying and Fe and Mg concretions providing evidence of saturated conditions although the sediments appear to be from filling episodes since the soil types are not consistent with natural formation processes and soils that have been documented in this area (Hundley 1976).

Samples of each of the strata were screened for artifacts. A single piece of a whiteware ceramic saucer with a Veterans Administration base-mark was recovered from the light yellowish brown gravely coarse sand in TU 14 (Figure 31). There is no corresponding letter designation from this area since it was not tested during the 1996 research project (see Ollendorf 1996). The area appears to represent a major filling episode with relatively coarse-grained sediments to both fill in a spring-fed wetland for a small parking lot and provide a sloping grade to force surface water to runoff to the east towards the major parking lot and then towards the river. The gleyed soils and the lack of any material culture dating to the period of significance of the NHL or NR District suggest that this area does not appear to contain material culture that contributes to the Fort Snelling NHL or NR significance. Although it is uncertain if this area has always been in such a hydrologic setting, a 1903 map (Figure 10) also indicates, at that time, this area was marshy. This immediate area may have served as a water resource for cattle and/or horses during the early historic period if similar hydrological conditions existed at that time.

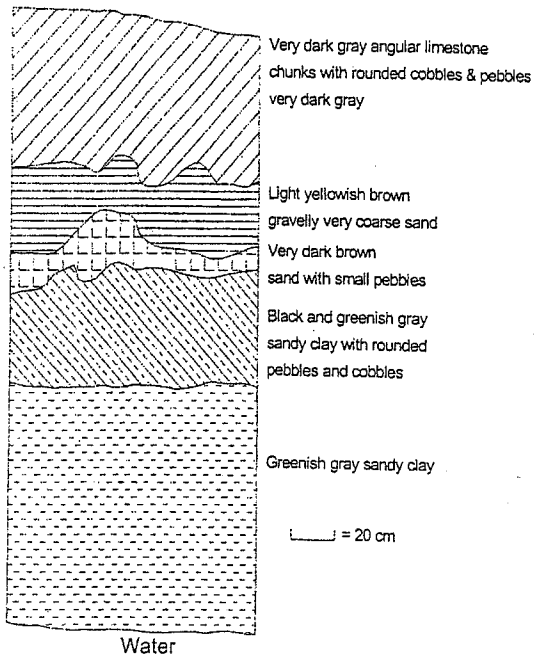

Figure 29 North wall profile of TU 14

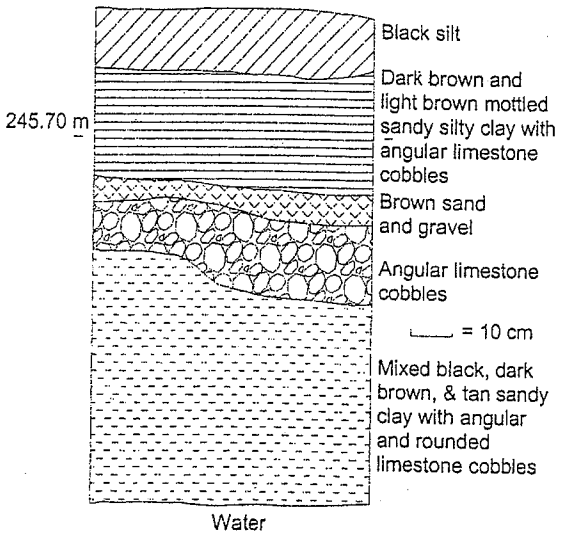

Figure 30 West wall profile of TU 19

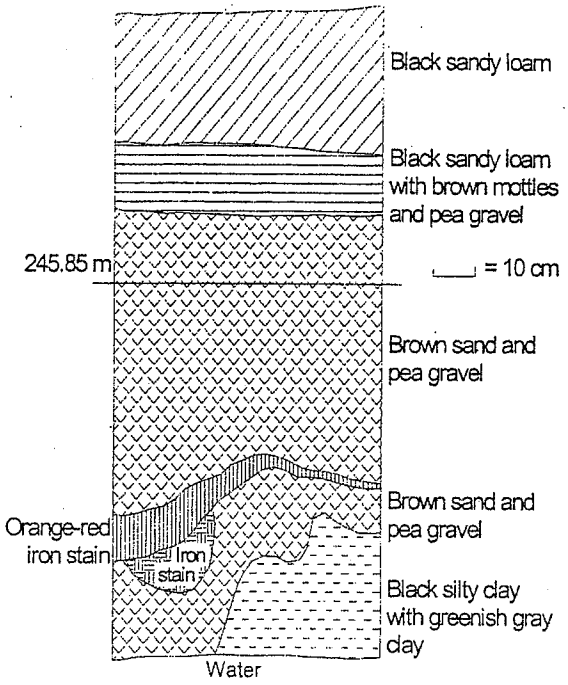

Figure 31 West wall profile of TU 20

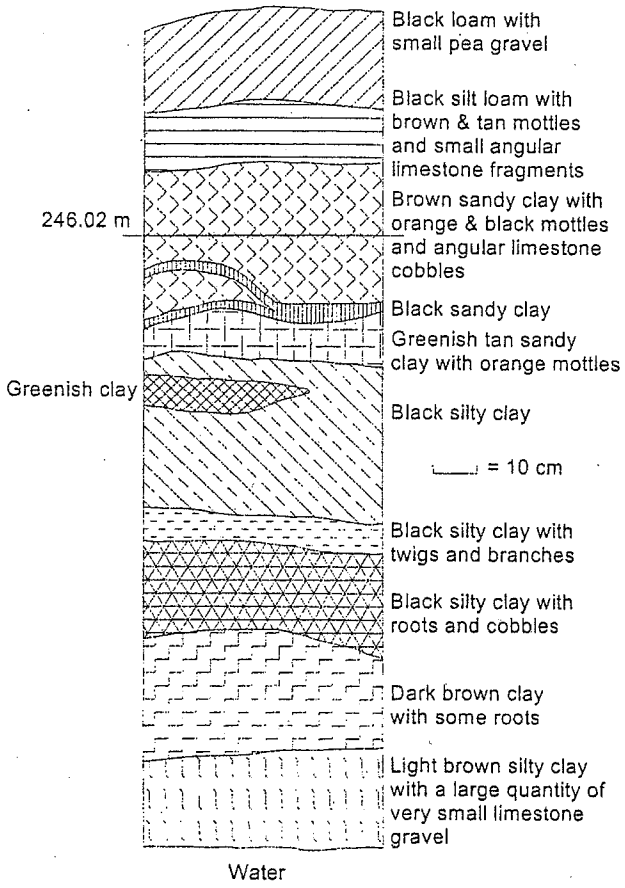

Figure 32 West wall profile of TU 22

Test unit 22, 10 meters north of TU 10, based on BOM construction plans, was also suspected to contain considerable fill over natural soils. Again too the stratigraphy in TU 22 was different from that of the other units grouped here. Figure 32 documents the stratigraphy of this unit with the black silty clay and dark brown clay with roots interpreted as the land surface before BOM filling in the 1950s. The surface immediately above these layers, black silty clay with twigs and branches was a literal mat of broken and imbedded vegetal matter that appeared to have been pressed into the existing land surface, possibly from land clearing activities preceding the construction of BOM facilities. Evidence of gleying existed in the lowest three strata, while reaching the water table served to end the excavations. This may have been in or at the edge of a wetland similar to that documented in Test Units 14, and 19-21. No artifacts were recovered from TU 22.

Parking lot east of BOM Building 1. Test units 23 and 24 (machine excavated units measuring approximately 1.5 x 1.5 meters)

Machine excavations with a backhoe were used to penetrate the asphalt parking lot to evaluate the accuracy of BOM construction documents and attempt to locate any buried soil horizons. The testing in this area documented the removal of all natural soils overlying limestone bedrock. That testing also documented that deeper cuts were made the farther east one progresses through the parking area which also removed some of the eroded upper surface of the Platteville formation leaving it with a sharply angular and yellow rock surface like that documented in Test Unit 24 (Figure 34). Test Unit 23 showed a reddish brown staining on the upper surface of the bedrock and slightly rounded edges along cracks and fissures on the upper surface of the rock. The more eroded and softer nature of the rock in Unit 23 is also evident from the fact that the backhoe could more easily and deeply penetrate the rock in this location. Once sufficient depth was reached for the parking lot, variable fill layers were added as a sub-subgrade for placement of a class 5 crushed limestone gravel that in turn served as the subgrade for the asphalt parking lot. Additional documentation of limestone bedrock removal is present in Test Units 15 and 16 where the bedrock is 1.1 to 1.6 meters higher in elevation than that of the adjacent parking lot.

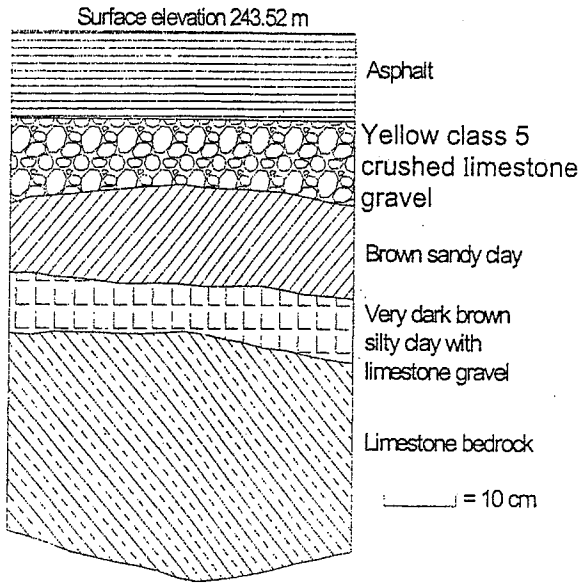

Figure 33 East wall profile of TU 23

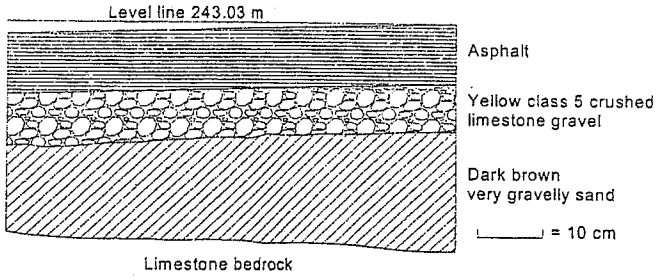

Figure 34 West wall profile of TU 24

Ridge remnant east of main parking lot for building 1. Test Units 15 and 16, hand excavated 0.5 x 0.5 m units

Soils remaining on the "ridge" area tested with TU 15 and 16 were very shallow—less than 10 cm in depth. Soils appeared natural and there were scattered oak trees that appear to have an age greater than 50 years. No profiles were drawn due to the fact that no soil change was visible—a black sandy loam was present from the surface to bedrock.

The fractured and weathered nature of the upper surface of the bedrock here suggests that it has remained undisturbed for a relatively long period of time and that it was not disturbed by recent construction. The upper bedrock surface is also brownish in color resulting from organic material staining from overlying soil. No material culture was recovered from either of these two excavations. This apparent ridge is in actuality a remnant of the original elevation that has been cut deeper for the parking lot to the west and the army railroad spur to

the east. This area corresponds to Ollendorf's "Area B" which also produced no material culture during that research (1996).

Soil berm west of fenced area near west property boundary. TU 11 (backhoe trench excavated to greater than 5 meters depth and measuring 25 x 10 m at surface—hand excavated unit 0.5 x 0.5 m. at base of backhoe trench)

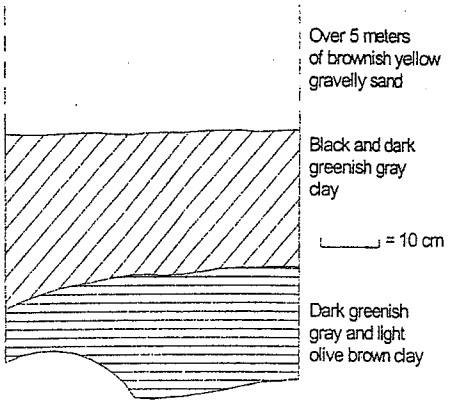

Figure 35 West wall profile of TU 11

Profile documents intentional filling as represented in BOM construction plans. A highly unusual green-colored deposit was at the base of the fill, possibly due to wet conditions obtaining in the past or from copper salts. No artifacts were recovered from this excavation unit.

South west of Building 1 – Test Units 1 and 3, hand-excavated (1 x 0.5m) and 3 (0.5 x 0.5 m) and TU 10 (3 x 6 m) with a backhoe trench with 0.5 x 1.0 m hand excavated unit into profile and into base of trench

This area is visible in historic photographs as a relatively flat to gently eastward sloping "terrace" occupied during the last quarter of the 19th century by the waterworks engineer's house and some outbuildings (Figure 19). Available historic documentation makes it uncertain if this specific location was use for residential structures during the earliest documented use of the area by soldiers or squatters. The test units were excavated in a broad pattern to evaluate the potential for intact earlier ground surfaces that appear to have been buried during the construction of Buildings 1- 4 (cf. Figures 23, 24 and 27).

TU 1 documents a major filling effort with angular limestone boulders that have fresh fracture planes visible on the surface. This 50-60 cm deep deposit with virtually no soil in the interstices between the stones (Locus 2) overlies black sandy loam 'A' and 'B' horizons (locus 3) interpreted as topsoil once exposed at the surface. The layer of boulders is in turn overlaid with a sandy loam top soil. The limestone boulders are interpreted as a fill deposit generated during the excavation for building foundations or other features that was placed

during the BOM construction phase in the 1950s and subsequently covered with topsoil to create a lawn. The buried soil horizon (Locus 3) slopes down slightly to the east and is consistent with historic documentation showing the same configuration of the landscape. Beneath Locus 3 lies a dark gray clay, sandy in texture near the interface. This layer exhibits some evidence of gleying possibly from shallow groundwater. Cultural material recovered from TU 1 included coal, cinders, fragments of blue transferprint whiteware, undecorated ironstone and porcelain, pane glass, cut nails, black olive and clear bottle glass, and fragments of a glass tumbler. Test Unit 3 produced coal and a large number of architectural fragments consisting largely of window glass and nails.

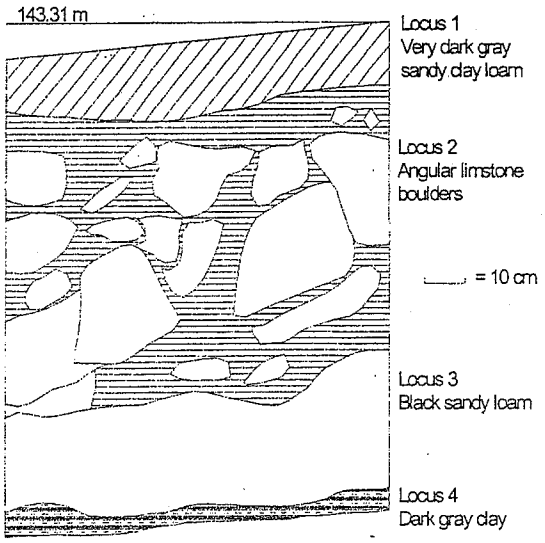

Figure 36 South wall profile of TU 1

TU 3 is in nearly an identical topographic setting to TU 1 and the strata document filling episodes (loci 10-12) albeit of very different material from that recorded in TU 1. What appears to be a buried 'A' and 'B' horizon (Locus 13), sloping slightly down from west to east, is almost certainly the same surface that was documented in TU 1. Beneath locus 13 lies a dark gray sand with some rounded gravel. The subsequent layer, Locus 15, exhibits some evidence of gleying possibly from shallow depths to groundwater. Cultural materials recovered from this unit included brown transferprint whiteware, blue bottle glass fragments, lime mortar fragments and coal. Based on the dates of popularity for brown transferprint whiteware ceramics and the ceramics recovered from TU 1, it is the tentative conclusion that these objects, like those in TU 1, are related to the occupation of the waterworks engineer's residence that dates to the late nineteenth century.

Test Unit 10 was placed west of the south end of BOM Building 1 near the sharp bend in the entrance road. Relying on construction documents for building the BOM facility in the 1950s, the upper 90 cm was excavated by a backhoe under the direction of the author.

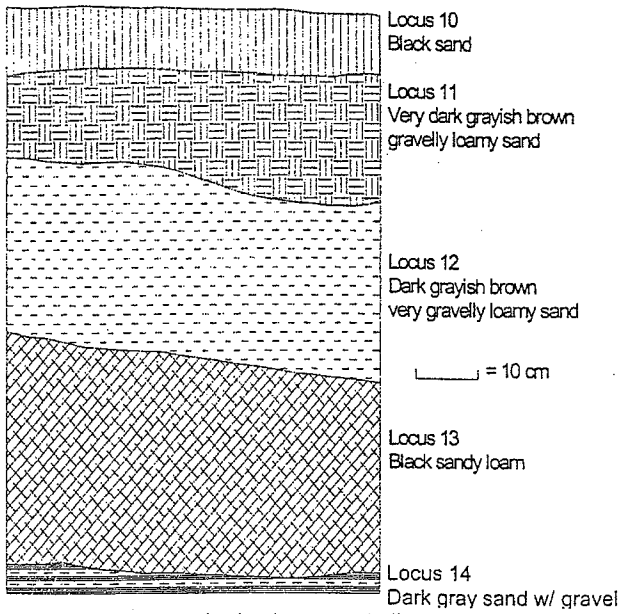

Figure 37 North wall profile of TU 3

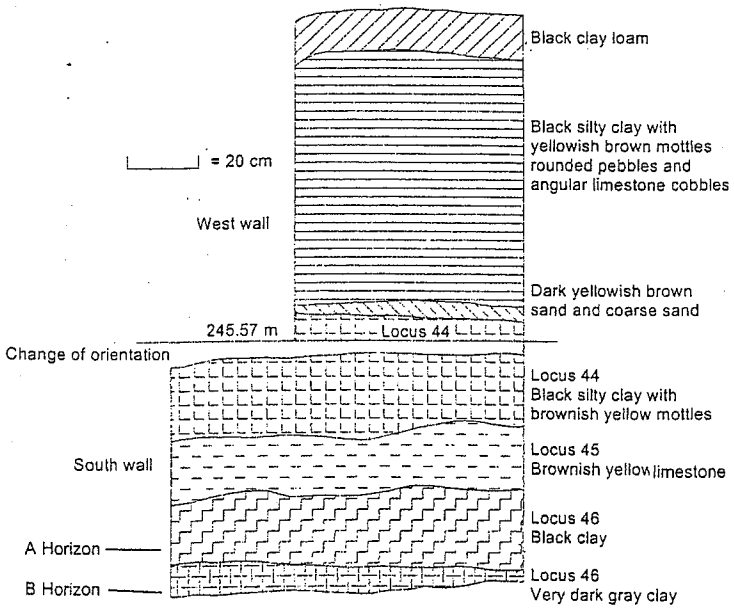

Figure 38 West and south wall profiles of TU 10

Machine excavations were terminated at what first appeared to be an old buried land surface, the black silty clay labeled as Locus 44 and excavations continued from that surface as a 0.5 x 1.0 m unit. Suspecting that the locus may be natural soil, excavations proceeded into a mottled black silty clay using arbitrary 5 cm levels until a change was evidenced. Locus 44 contained large and small wire nails, brick fragments and fragments of clear bottle glass. At

32 cm from the surface of the deposit the strata abruptly ended on what appeared to be Platteville limestone bedrock. Closer inspection of the limestone deposit showed some irregularities that did not appear to be natural and a pick was used to break through the compacted limestone slabs to yield earthen layers below. The nature of the soil and artifacts contained below the limestone in Locus 46 (containing a 15cm thick A horizon and the exposure of 5 cm of a B horizon) were a clear indication of a previously occupied surface with a ball clay pipe stem fragment, brown and clear bottle glass fragments and cut nails.

This area corresponds in part to Area C in Ollendorf's 1996 report. The strata discovered in the two shovel tests conducted in 1996 west of the south end of BOM Building 1 discovered artifacts near the surface in what was characterized as fill. The research undertaken on this project concurs with this aspect of the conclusions reached by Ollendorf. However the bedrock terminus reached by the 1996 work is almost assuredly a fill layer of redeposited bedrock like that found in TU 10. The units excavated during 1996 reached bedrock at 81 and 50 cm from the surface—much too shallow for bedrock in this area of the site. The work conducted in 2000-2001 does not reach the same conclusions as that in the Ollendorf report and finds cultural resources in an undisturbed and buried context that are considered contributing to and eligible for inclusion in the Fort Snelling National Register District and National Historic Landmark.

North edge of reservoir – Test Unit 2, 0.5 x 1.0 m hand excavated trench

Test Unit 2 was excavated 1.5 meters north of the northeast corner of the limestone walled Coldwater spring reservoir. Excavations began in the late fall of 2000, but due to the high water table was not able to be finished until August 2001 when a prolonged drought lowered the water table and permitted excavations to the depth of the base of a lime cement wall. The unit produced two features interpreted in association with the changing nature of the reservoir and that have been buried by natural forces over time. The two features are shown in Figures 39-41 are a defined as red clay soil drain pipe over which was poured a lime cement cap (Locus 9) and a poured lime cement foundation wall (Locus 7).

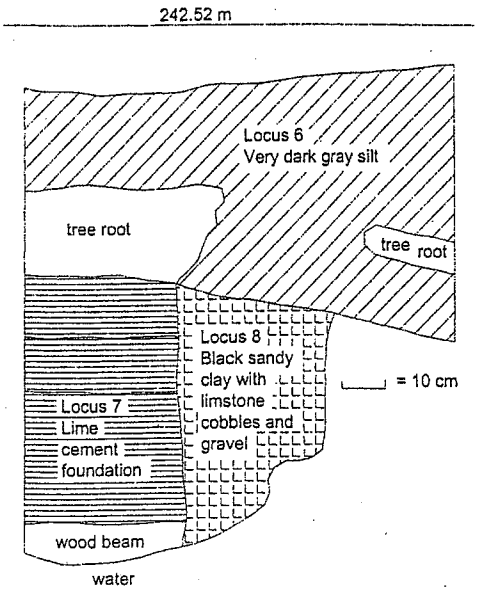

Figure 39 West wall profile of TU 2

Locus 7 is interpreted as the foundation for the east wall of the reservoir, possibly the one depicted in Figure 19 that was likely built ca. 1879. The top of that wall is now buried below what appears to be slope wash that is now interlaced with roots from large trees that were present in the vicinity of the reservoir. At the base of the foundation, as the unit began to encounter ground water, was a wood beam aligned to the edge of and beneath the lime cement foundation. Because the exploratory nature of the excavation unit and the presence of a high water table, we were not able to resolve an issue as to whether this wooden beam may have been part of the wooden form into which the cement was poured or if it might be a remnant of an earlier wooden structure that may have bounded a reservoir. Fill placed to the north of Locus 7 appears to be backfill for a builders trench (Locus 8). In the east trench wall and at the base of Locus 6 was another feature, a drain tile with cement cover. This tile apparently ran along the outer edge of the cement wall, likely to carry away ground water that seeped down the hillside on the outside of the reservoir. The tile is now crushed in place and it was not possible to determine its point of origin or terminus. However, it is suspected that it terminated at the outfall for the Coldwater creek water from the reservoir. Locus 6 contained cut and wire nails while Locus 8 contained fragments of the drain tile, lime cement, coal, cinders, wire and cut nails, clear bottle glass, unidentified iron fragments, and an undated 5 cent trade token.

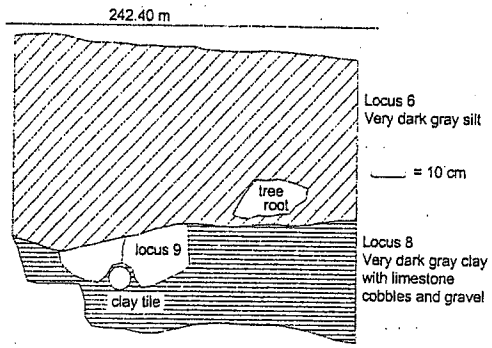

Figure 40 East wall profile of TU 2

Today the walls of the reservoir are dry-laid limestone blocks. It is suspected that those stones serve as a facing or lining, possibly due to deteriorating structural conditions of the old lime cement walls, to assist in stabilizing the reservoir walls. A series of bricks set into the soil was discovered by Ollendorf's testing project adjacent to the east reservoir wall near the southeast corner of the reservoir. This "patio" may have been constructed as part of a walk or viewing location that would have been dry in the very moist soils surrounding the reservoir proper.

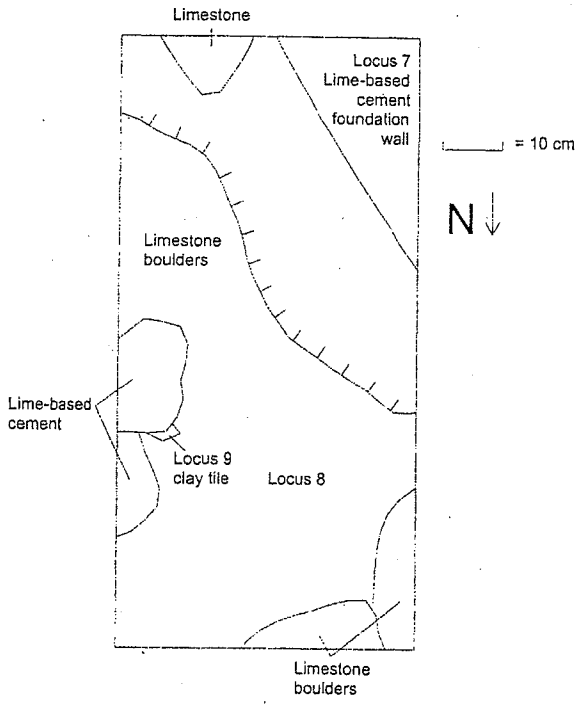

Figure 41 Plan view of TU 2

Area north of BOM Building 2– TU 25 (ca. 2 x 8 m) machine excavated trench

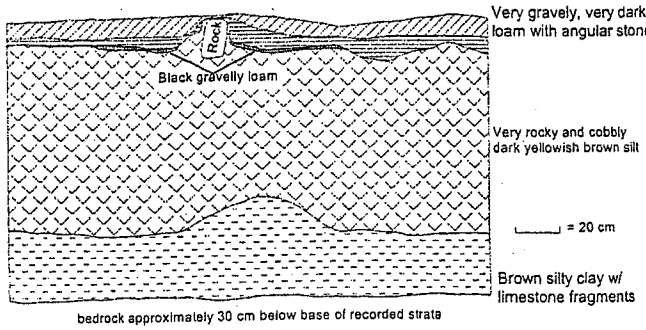

Figure 42 East wall profile of TU 25

BOM construction plans indicated considerable filling in this area. A backhoe was used to excavate an approximately 3 x 6 m trench under the direction of the author. Test Unit 25 continued to a depth of 1.6 m from the surface where limestone bedrock was encountered. Bedrock was also below the water table and as a result quickly filled up a portion of the hole and with the cold weather it soon turned to ice. Measurements taken at the time of the initial excavation, before the water froze, indicated approximately 30 cm of water lying on the bedrock. This was not able to be determined precisely since the water froze before final profile drawings were made of the unit.

All five strata were clearly fill deposits and the lowest two strata contained sharp angular limestone fragments, brick fragments, cinders and chunks of Portland cement concrete. No other material culture was recovered. All fill levels are interpreted as being fill placed either during the initial BOM construction events or during subsequent additions to the facility.

West of fence line --Test unit 17 (ca. 4 x 7 m) machine and hand excavation of 0.5 x 0.5 m unit

A backhoe was used to excavate through fill placed as a ridge along the western BOM property boundary. This ridge extends along the northern half of the BOM property, west of the fence line near the west property boundary. 1950s BOM construction plans clearly depict the intent of constructing a ridge along this part of the tract. Machine excavations were terminated at the surface of a black and dark brown sand layer that underlay numerous and variable fill deposits largely composed of thick and thin brown sands. At the completion of excavations of TU 17, the terminus was nearly 3 meters in depth. This stratum appeared to be natural and showed gradual color change from black near the surface to a brown at the base of the excavation, suggesting A and B horizons. The dark sand at the base of the profile, suspected as representing the natural soil surface prior to recent filling, showed a gradual color change but no distinct stratigraphic differences and was therefore hand excavated using 5 cm arbitrary levels. Artifacts were only recovered from Locus 58, the lowest stratum in TU 17. The three uppermost 5 cm levels of this locus produced material culture likely associated with early 19th century occupations including the fragment of a bone comb and an English

style gunflint (Figure 44). Other objects recovered with less specific temporal association were cut nails and cinders. No material cultural items were recovered from the lower 30 cm of Locus 58 and the unit was terminated at 45 cm from the surface of the locus.

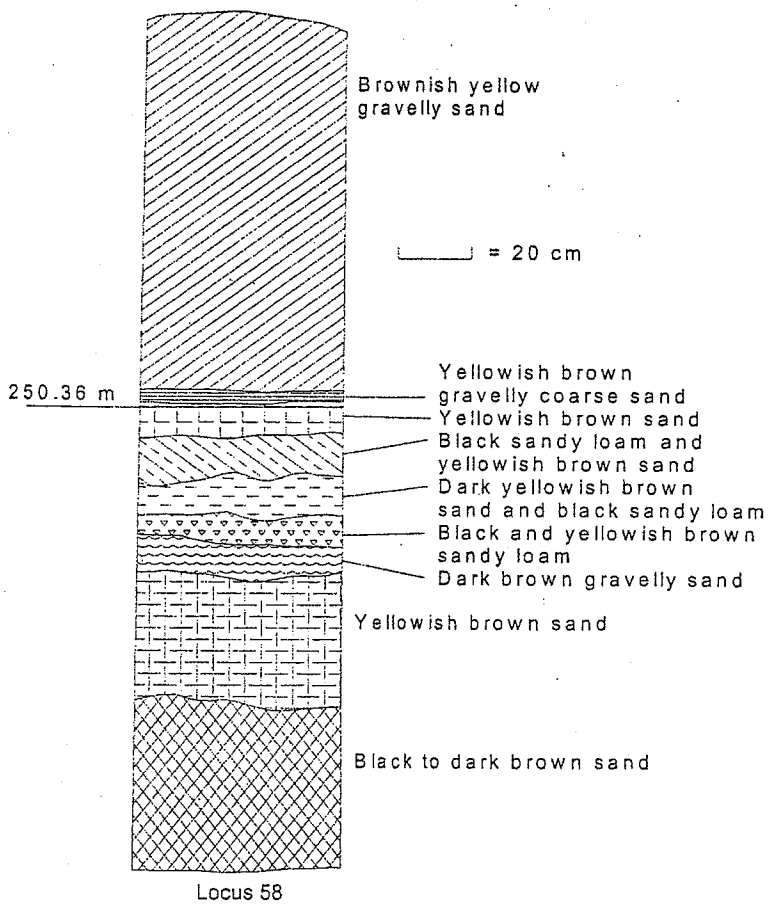

Figure 43 West wall profile of TU 17

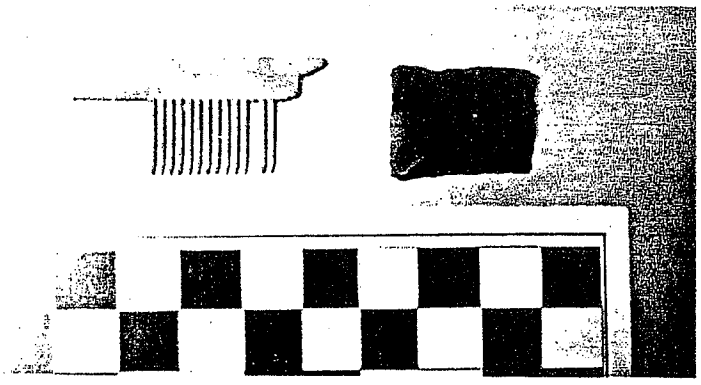

Figure 44 Early-19th-century artifacts from Locus 58 in TU 17. Left-bone comb fragment; right-English style gunflint.

Ridge near west edge of property north and south of BOM Building 11 – Test Units 4, 5, and 26, hand-excavated 0.5 x 0.5 cm units

Each of the units in this area exhibited some fill over a dark grayish brown sand that is interpreted as a now-buried probable natural surface. All three units in this area were dominated by dark grayish brown sand and contained artifacts dating to the 19th century. Test Unit 4 contained no material culture in the uppermost layers of fill (Loci 16-18) but yielded a plain whiteware sherd, cut nails and window pane fragments from Locus 19. Excavations continued to a depth of 55 cm from the surface, but no other material culture was recovered from TU 4.

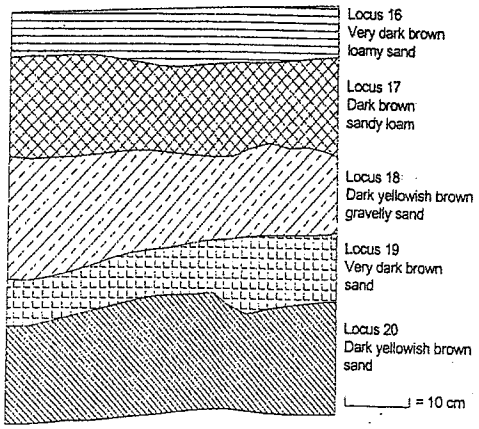

Figure 45 West wall profile of TU 4

Test Unit 5 was more productive than TU 4 yielding 36 objects in the uppermost two strata, Loci 22 and 23. Locus 22 yielded a clay smoking pipe stem fragment along with a plastic cigarette filter liner and a fragment of window pane glass. The upper half (40 cm) of Locus 23 yielded cinders, clear and brown bottle glass, window pane and concrete fragments. The lower 40 cm of Locus 23 produced black olive, light-green and clear bottle glass, an undecorated fragment of porcelain, a piece of undecorated whiteware, cut nails, unidentified metal fragments, coal and cinders.

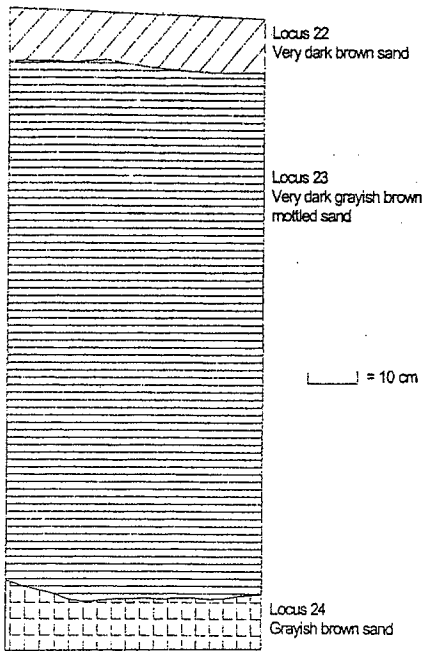

Figure 46 East wall profile of TU 5

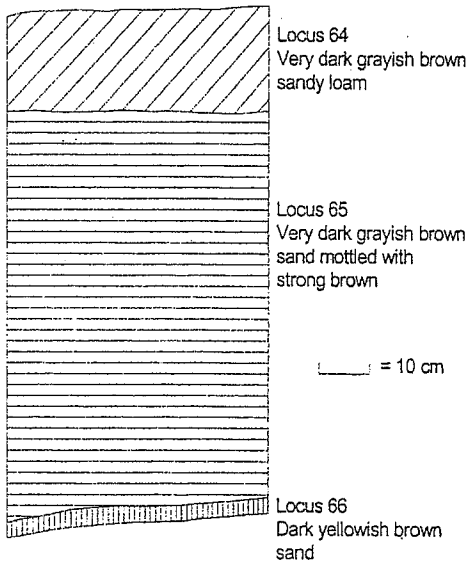

Figure 47 South wall profile of TU 26

Test Unit 26, at the south end of BOM Building 11, produced brick fragments, coal and cinders, pane glass, cut nails, and an undecorated whiteware fragment in Locus 65, a soil apparently representing the same strata as Locus 23 in Test Unit 5. Both Locus 65 and 23 contain large amounts of material culture. Test Unit 26 corresponds to Ollendorf's (1996) Area G. The findings of the 2001-2001 research do not agree with those from the 1996 report. The Ollendorf (1996) report erroneously assumes that only structural remains are of significance. Deposits documented in the most recent research contained in situ cultural

material related to use of the area during the last quarter of the 19th century, likely associated with the waterworks and the later locus of Building 252. The "mystery tower" referred to in the Ollendorf report was the remnant stone foundation for the wooden water tower built ca. 1879.

Terrace near south end of property – Test Unit 8, hand-excavated 0.5 x 0.5 m and expanded to 1.0 x 1.0 m

Test Unit 8 produced the most unusual and baffling feature of the 2000-2001 research effort. Beginning initially as a 0.5 x 0.5 m unit, a wooden beam was discovered at the base of the unit. In order to better understand the structure of this location, the unit was expanded to a 1 meter square. The unit expansion fell upon more wooden beams, flattened on the upper surface and rounded at the sides, at the same depth. Upon cleaning soil from between the beams, it became apparent that the excavations had come upon stacked railroad ties, likely associated with the military railroad spur constructed in the 1890s. The wood, due to the wetness of the setting, was in an excellent state of preservation. While the elevation of the upper surface of this feature was about 1 meter above the level of the military railroad grade, it is though that the feature may have either been a stack of replacement ties for the tracks or possibly a stack of ties remaining from the removal of the tracks after WW II. Due to the limited visibility of the wooden beams no conclusion was made in relation to whether or not the ties had been used. Subsequent to the stacking of the wood ties, the entire area was filled with one-half meter of loam and sandy loam.

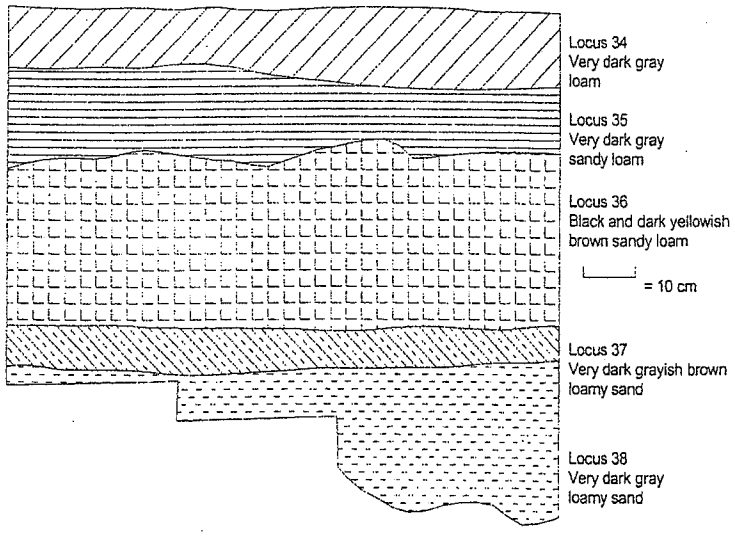

Figure 48 East wall profile of TU 8

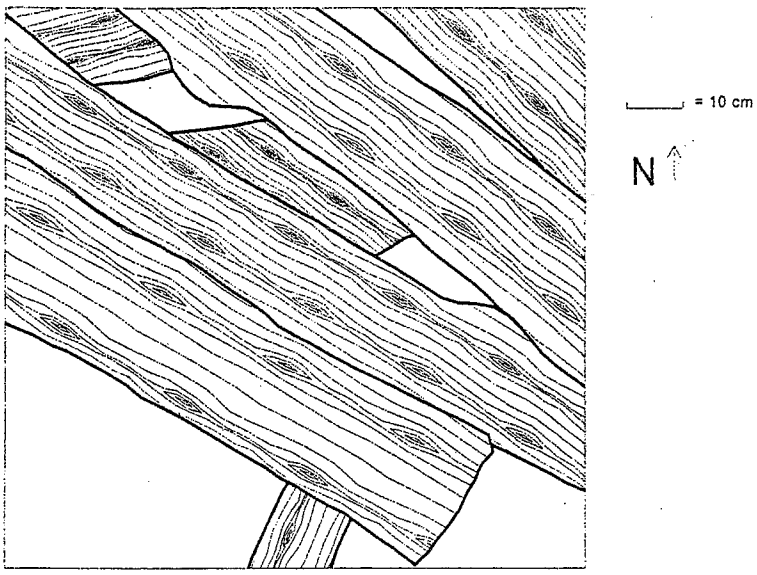

Figure 49 Plan view of Locus 39 in Test Unit 8

Large quantities of artifacts were recovered during the excavation of TU 8-- more than any other unit excavated during this research effort. The various strata contained both 19th and 20th century material culture with wire nails found in Locus 37 at the level of the ties. A broad assemblage including bone, blue transferprint whiteware, white ironstone, stoneware, various colors of bottle glass, buttons, cut and wire nails, window pane, and mortar were all found in the unit. The broad range of material culture is representative of refuse created by general domestic activities. Due to the underlying wooden members, the fill is interpreted as resulting from a deposit brought in from the vicinity of a residence and dumped at this location creating a terrace above what was once a railroad grade.

Ridge at west property edge in southwest part of property – Test Unit 6, hand-excavated 0.5 x 0.5 m unit

Excavations in shovel test 6 on a ridge near the west boundary and the south end of BOM property contained mid to late-19th-century material culture including red transfer pint whiteware, brick, cut nails, and window pane fragments. The unit exhibited a very dark grayish brown sandy loam that terminated on limestone bedrock at less than 20 cm from the surface. Locus 25 is interpreted as fill due to the abrupt nature of the boundary between it and the underlying Locus 26. Locus 26 in turn lies directly on a decomposing Platteville limestone surface. This unit falls within Area F as described by Ollendorf (1996), although the stratigraphy does not match that documented in 1996. Ollendorf's work also produced a thin scatter of artifacts, but concludes that no additional work is necessary here nor is the area eligible for inclusion in the NR District. The research conducted during 2000-2001 lead this team to a different interpretation, one in which buried, in situ natural soil with 19th-century material culture is present. The relatively sparse scatter is consistent with the documented historic use of the area.

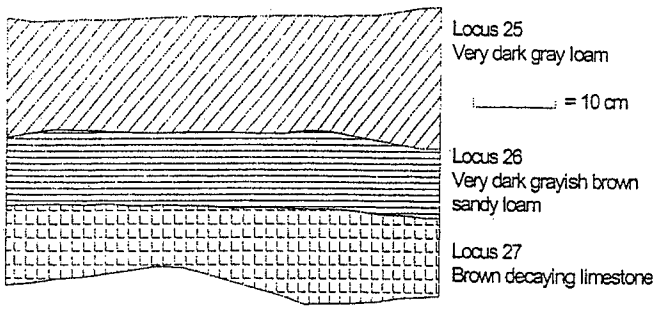

Figure 50 East wall profile of TU 6

Ridge at west property edge near southwest corner of property—Test Unit 7, 0.5 x 0.5 m hand-excavated and Test Unit 12, ca. 3 x 4 m. machine excavated

Test Unit 7 began with a black loamy sand fill with cobbles over what was interpreted as a possible earlier ground surface (Figure 51), however subsequent discoveries showed a series of strata with abrupt interface boundaries contraindicating a natural stratigraphic sequence. Subsequent strata encountered were of different texture classes and/or contained variable inclusions also indicating cultural activities were responsible for the deposits. The uppermost stratum, Locus 29, contained two artifacts—a brick fragment and an iron ring that may be a harness part. The relatively sparse scatter is consistent with the documented historic use of the area. Excavations were terminated at a depth of 70 cm with no further discoveries of material culture.

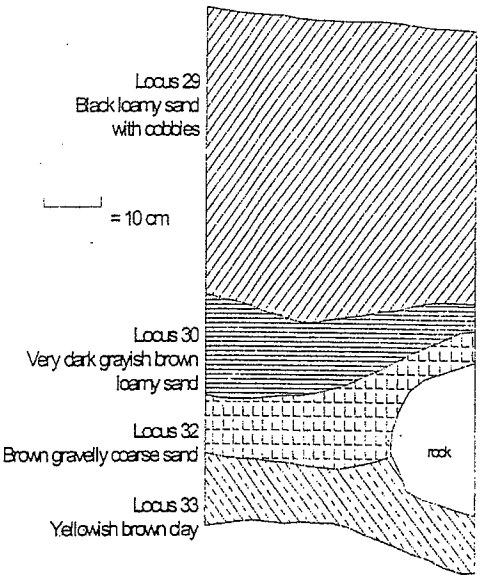

Figure 51 East wall profile of TU 7

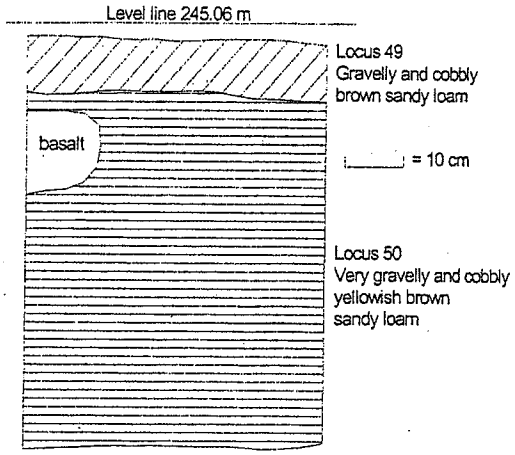

Figure 52 ' East wall profile of TU 12

A second unit placed to the south of TU 7 produced a stratigraphic sequence that appeared to be natural, but with the absence of a surface horizon. The sandy and cobbly strata appear similar to those naturally deposited in a post glacial environment and may be fill in a pro-glacial or pre-glacial tributary valley common in the vicinity of the project and previously documented at the American Fur Company site (21DK31) across the river in Mendota.

This area appears to be in part what is discussed as Area F in Ollendorf's 1996 report. However, Area F also includes a shovel test that was likely in close proximity to Shovel Test 6 excavated during the research conducted in 2000. As is in evidence in the current investigations, she found limited material culture and does not see the area contributing to the NHL or NR District. The 2000-2001 research effort suggests that cultural strata with probable 19th century material culture are located in this area and, while sparse in nature, are considered a contributing element of the NR period of significance of the site/district.

Base of slope west of Building 5—Test Unit 13, 0.5 x 0.5 m hand-excavated unit

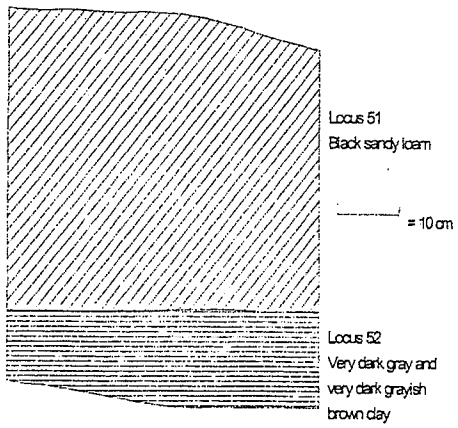

Figure 53 North wall profile of TU 13

Unit 13 produced what first appeared to be natural soil comprised of a black sandy loam surface horizon overlying a very dark gray clay. The abrupt boundary between the two strata indicate a likely cultural origin for the interface and it is currently thought that Locus 51 (see Figure 53) is either the result of colluvial processes or from cultural deposition. This uppermost strata was excavated in arbitrary 5 cm levels and produced clear bottle glass, brick fragments, a fragment from a door lock, as well as aluminum, rubber and an electrical fuse in the upper 20 cm. No material culture definitely attributable to the period of significance of the NHL or NR district was recovered from TU 13. Although difficult to be certain due to what appears to be an error in the alignment of the north arrow, five shovel tests conducted in Area E in 1996 are likely in the immediate vicinity of TU 13. No cultural resources were located in Area E in 1996. No in situ deposits containing cultural resources were recovered in this area during the 2000-2001 research.

Area north of buildings 5 and 7—Test Units 27 and 28, hand-excavated 0.5 x 0.5 m units

This two unit grouping was created from the virtual surface exposure of bedrock. Test units 27 and 28 contained virtually no soil over bedrock. No artifacts were recovered from either of these units. IT is likely that this area originally contained soil horizons over the bedrock surface since the upper surface of the rock did not exhibit the degree of weather that would be expected if it had been exposed at the surface.

Southeastern corner of property—Test Units 9, 29 and 30, hand excavated 0.5 x 0.5 m units

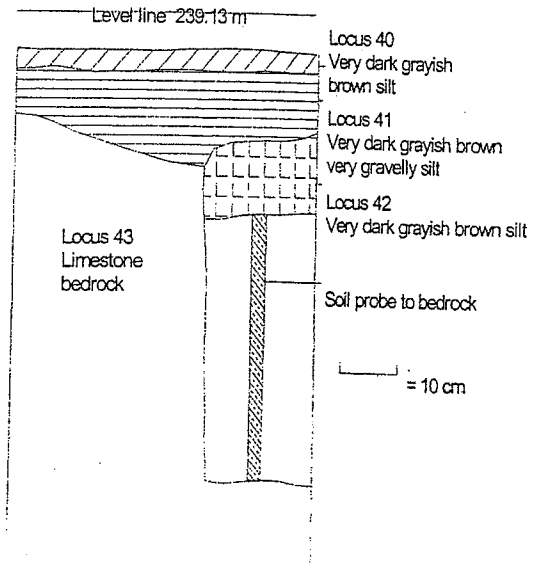

Figure 54 West wall profile of TU 9

Test Unit 9 contained less than 10 cm of black gravely silt over bedrock in one corner of the unit, while stepping 50 cm deeper along a vertical interface, to a ledge on the rock face that is

common to the Platteville formation. Test units 29 and 30, outside of the BOM fence line and east of the post-Civil War railroad grade that now serves as a multipurpose trail, both showed natural soil development horizonation typical of the natural soils documented in the area. Profiles were not drawn of these two units since they exhibited no evidence of cultural activity and showed natural A-B soil horizonation with the 40 cm depth of these two test units. No artifacts were recovered from any of the three units in this grouping. The findings of the 2000-2001 research in the area of this grouping contains Ollendorf's (1996) Area D which also found no cultural resources. However, because of the limited nature of the testing from both forays and a lack of evidence of disturbance of the natural soil conditions obtaining in this area, it is possible that pockets of occupation debris or structural remains related to the period of significance of the NHL could be present but remain undetected in this area.