PREHISTORIC ARCHAEOLOGICAL INVESTIGATION

A preliminary assessment of the prehistoric archaeological potential of the proposed Hare's Corner Interchange indicated a low potential for yielding prehistoric archaeological sites. Although the study area has been drastically modified by modern development and extensive soil borrowing, two sectors in the south-central portion of the proposed interchange appeared sufficiently intact to warrant further investigation through surface reconnaissance and subsurface testing (Figure 8). Remaining areas of the proposed interchange, including the grounds associated with Cottage Farm, were subjected to a thorough surface reconnaissance. As a result of the investigation no evidence of prehistoric human occupation was recovered from within the boundaries of the proposed Hare's Corner Interchange. The details of this investigation are presented below.

FIELD INVESTIGATIONS

The prehistoric archaeological field investigation was conducted between December 9 and 11, 1986. Prior to any subsurface testing, a surface reconnaissance was conducted in all sectors of the proposed interchange area excluding the interiors of several extensive borrow pits within or contiguous to the proposed right-of-way, paved parking lots, and commercial properties where access was not granted. However, the sectors of the proposed interchange that received the most attention during the surface

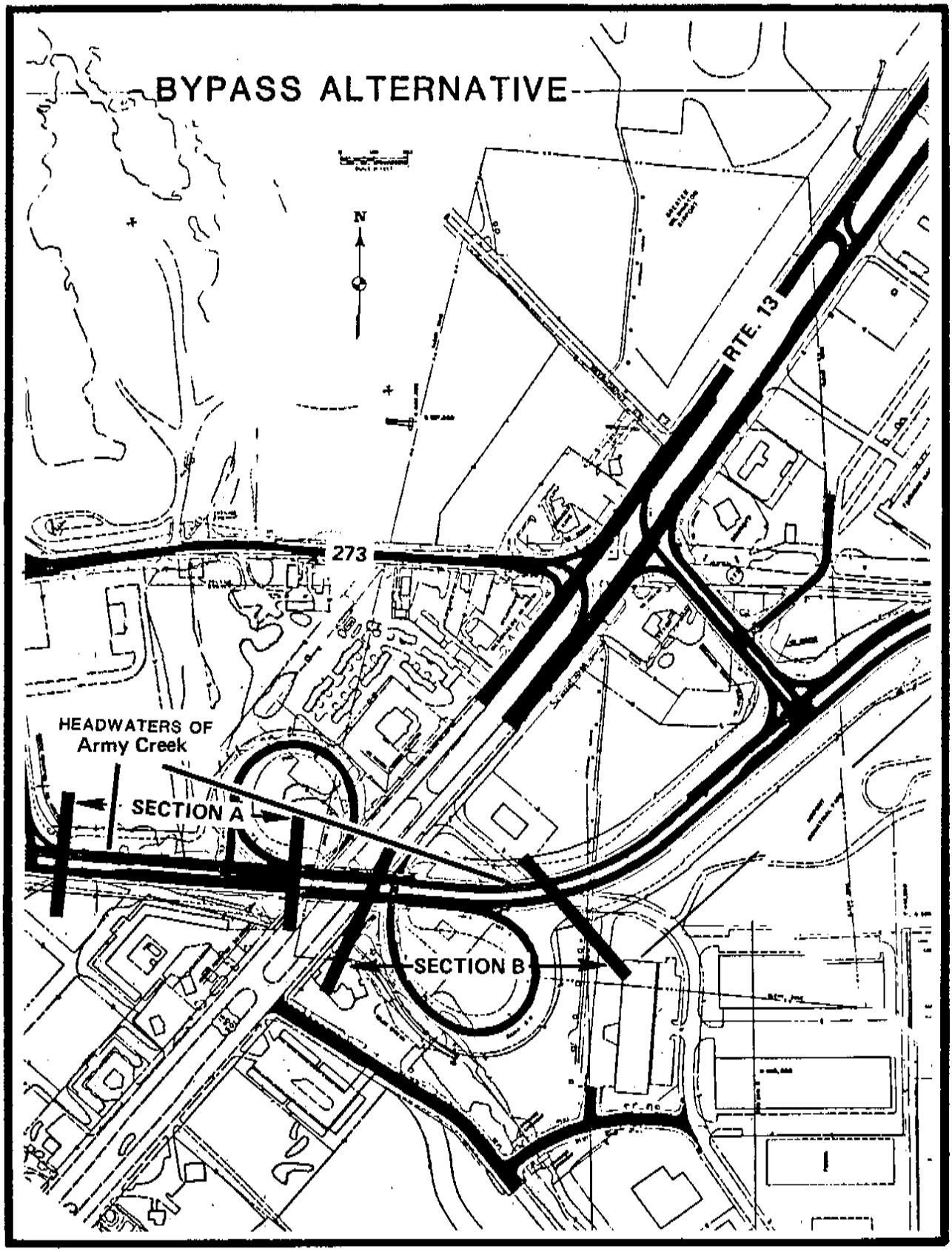


FIGURE 8: Project Area Showing Proposed Bypass

reconnaissance were the floodplain and floodplain terraces (designated as Sections A and B) bordering Army Creek (Figure 8).

Section A encompassed an approximate 1,200 feet of proposed roadway bordering Army Creek and an extensive borrow pit containing the Churchman's Road Industrial Park. Most of this section is comprised of a lower and upper terrace bordering Army Creek on its south side and a less expansive high terrace immediately adjacent to the western edge of Route 13 on the north side of Army Creek. Section B is located directly across from Route 13 on the east side of the highway behind Jack Baker's Lobster Shanty. Section B consists of a high terrace situated on the south side of Army Creek bordering an extensive borrow pit. Based on visual inspection of large areas of exposed surface created by bulldozing activity, Section B has been subjected to severe landscape modification. Alternatively, approximately 900 feet of Section B situated along the south side of Army Creek appeared to be relatively intact. Furthermore, preliminary testing of the soils on the lower terrace indicated the presence of a localized buried A-horizon approximately 600 feet west of Route 13. The surface reconnaissance failed to yield any prehistoric artifacts within the project area.

Subsurface investigations of Sections A and B entailed the excavation of 36 posthole tests and one 2.5 by 5 foot test unit. A total of 26 posthole tests were excavated in three locations in Section A: Locus 1 encompassed the first terrace bordering the southern bank of Army Creek; Locus 2 consisted of a portion of

the higher second terrace adjacent to Locus 1; Locus 3 was a remnant of high terrace on the north side of Army Creek immediately adjacent to the western edge of Route 13. A total of 16 posthole tests were excavated at 50 foot intervals to depths of between 1.2 to 4.2 feet below surface depending upon the compactness of the underlying gravels above the coarse silty or clayey sands. Figure 9 illustrates a sampling of several of these test excavations. Pea-size to medium-size quartz gravel was present in nearly all of the posthole tests and increased in size and frequency with depth until they become too compact to penetrate. Several fragments of redware, whiteware and creamware were recovered along with pieces of clam and oyster shell to depths of between 1.4 and 2.0 feet below surface. These artifacts were all confined to posthole tests in the westernmost portion of Section A and only on the lower terrace bordering Army Creek.

Of interest was a buried A-horizon that occurred in the portion of Section A from which the historic artifacts were recovered. A 2.5 by 5 foot test unit was excavated to a depth of 2 feet below surface in order to further investigate this buried organic horizon. Figure 10 illustrates the profile of this unit (Test Unit 1). The soils above the A-horizon consisted of two strata consisting of coarse sands and containing small and medium pebbles and several small pieces of creamware and brick fragments. The organic surface was encountered between 1.0 and 1.6 feet below surface. It contained several small brick fragments and a piece of redware. The pebbles within this stratum

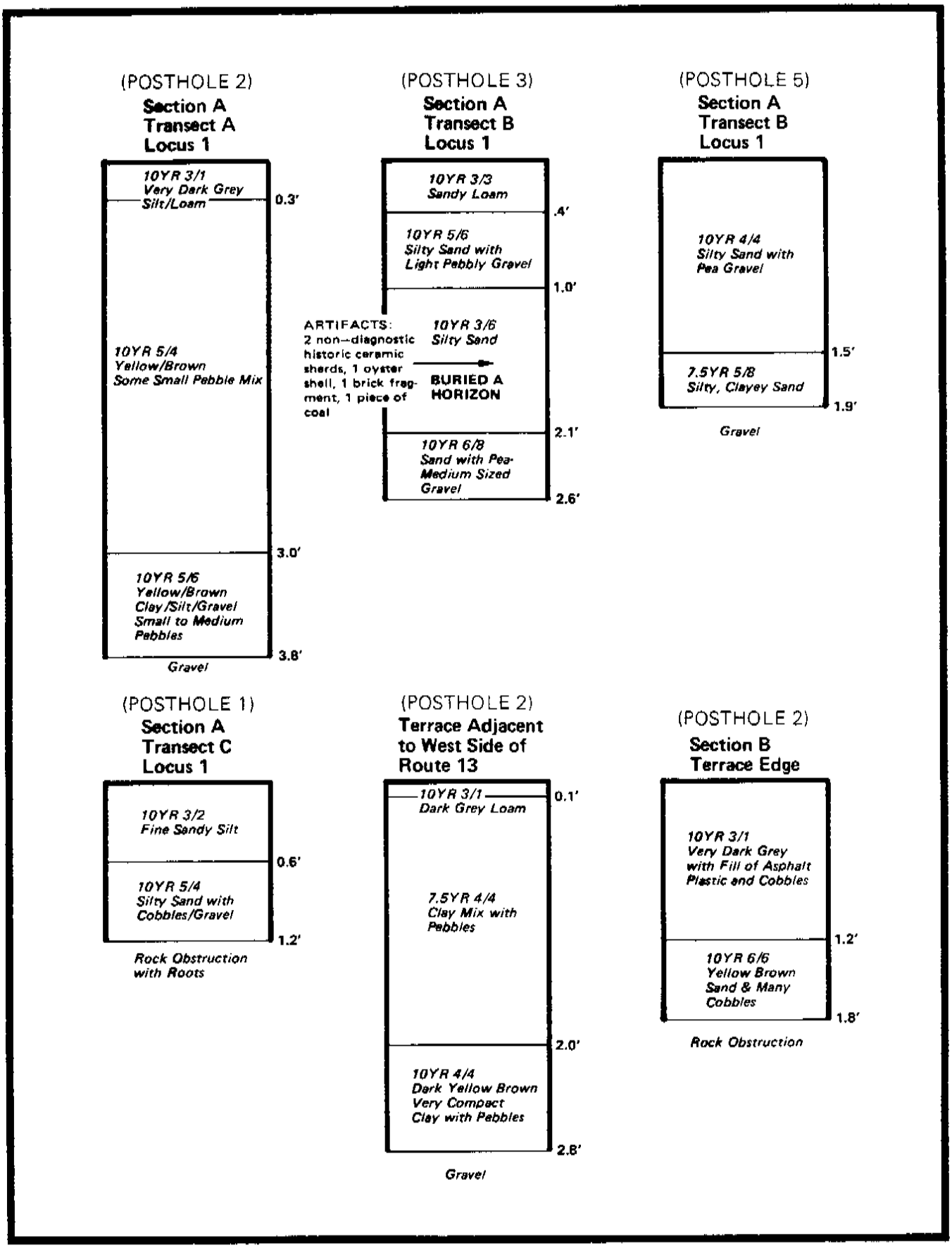
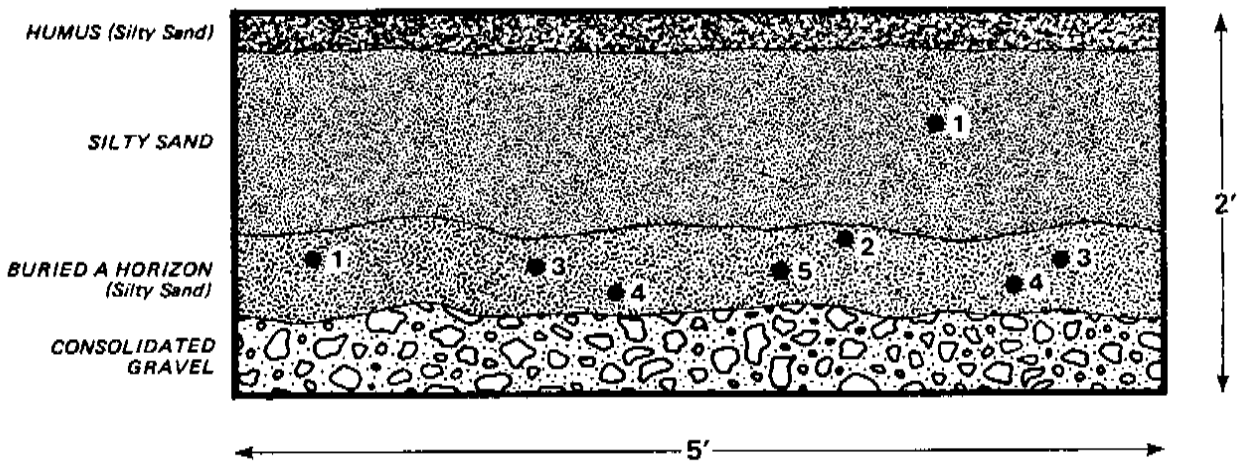


FIGURE 9: Sample of Posthole Profiles From Sections A and B



Artifact from silty sand overlying Buried A horizon.

1. Fragment of 19th Century stoneware with Albany slip interior (ca. 1800–1910). Probably of local manufacture.

Artifacts from Buried A horizon (various refined earthenwares ca. 1810–1860).

2. Late creamwares.
3. Late pearlwares.
4. Whitewares.
5. Oyster shell fragments.

FIGURE 10: Test Unit 1, Section A, Locus 1

increased in size and frequency. A layer of medium-to-large size consolidated pebbles and cobbles lay immediately below the buried A-horizon and could not be penetrated. No prehistoric artifacts were recovered from above or within this buried surface or any of the posthole tests in Locus 1. Based on the coarse texture of the soils and the mixture of pebbles of varying sizes within and below the buried A-horizon, these strata appear to have been created by periodic stream erosion and deposition while the upper strata were probably deposited by colluvial action. Collectively, the posthole test and test unit yielded a total of 9 historic ceramic sherds together with several fragments of shell, brick, and glass (Table 1); all from disturbed contexts.

Locus 2, situated on the upper terrace above Locus 1, was also comprised of sandy soils with varying amounts of silt, clay, and gravel. Excavation of two random posthole tests on the top of this terrace failed to yield any cultural material with the exception of recent glass and metal fragments on its surface. In Locus 3, adjacent to Route 13, augering with a split-spoon indicated that the upper soil horizons had been removed leaving three sandy silt horizons. Excavation of four posthole tests in this location failed to yield any prehistoric or historic artifacts.

In Section B, the 10 remaining posthole tests were excavated at 50 foot intervals along the edge of the high terrace between the Jack Baker Lobster Shanty rear parking lot and a small swampy area approximately 1,000 feet east of the parking lot. The tests were located on the south side of Army Creek and on the edge of

TABLE 1

HARES CORNER ARTIFACT INVENTORY

Transect C, Posthole #3, Level 2 = 3 Creamware Fragments (ca. 1760-1820)
Transect B, Posthole #1, Level 2 = 1 Polychrome Whiteware Fragment (ca. 1820-1860)
Transect A, Posthole #3, 1.9 B.S. = 1 Non-Diagnostic Brick Fragment
Transect B, Posthole #4, Level 2 = 1 Non-Diagnostic Redware Fragment
Transect A, Posthole #4, ST. B(1.4 B.D.) = 2 Redware Fragments (ca. 18th or 19th century)
Transect B, Posthole #1, Level 2 = Clamshell Fragment
Transect C, Posthole #2, Level 2 = Oyster Shell Fragments (3)
Transect B, Posthole #3, Level 3 = Clamshell Fragment
Transect C, Posthole #2, Level 2 = 2 Non-Diagnostic Refined earthenware Fragments, 1 Non-Diagnostic Glass Sherd

Random Posthole 2, Upper Terrace, Level 1 = Recent Glass Fragments

an extensive borrow pit. Preliminary testing with a split-spoon indicated that a considerable portion of the upper soil horizons in this area had been removed by borrowing operations leaving only one foot of coarse, pebbly, sandy soil over a consolidated layer of cobbles and pebbles in most of the posthole tests (see Figure 9). As a result of testing, no prehistoric or historic artifacts were recovered in Section B.

CONCLUSIONS AND RECOMMENDATIONS

An intensive surface reconnaissance and subsurface testing of the proposed Hare's Corner Interchange area failed to produce any artifacts indicative of prehistoric aboriginal occupation. This investigation also revealed that the majority of the project area has been heavily modified by fluvial and colluvial process and continuous development. These natural and cultural processes have directly and indirectly impacted pre-Euro American and historic landscapes and totally disrupted any previously intact archaeological deposits. Based on the results of the investigation, no further archaeological studies are warranted in the project area.