SHOREHAVEN PROJECT

PHASE 1B ARCHAEOLOGICAL FIELDWORK REPORT, 1987

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SHOREHAVEN PROJECT

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PHASE IB ARCHAEOLOGICAL FIELDWORK REPORT

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ARTIFACT ANALYSIS

INTRODUCTION

Soundview Associates Co. proposes to develop a large scale residential complex on Clason's Point in the Bronx (hereinafter referred to as the Shorehaven Project). This development depends on various discretionary approvals required by both the city and state of New York. Due to the concern for both historical and prehistorical archaeological potential at this location, professional archaeological assessments were mandated by the review agencies as part of the approval process. Nine loci of potential archaeological sensitivity have been identified ("Shorehaven Project, CEQR 87-010X: Second Level Documentary Study"). According to agreements with the New York City Landmarks Preservation Commission (hereinafter LPC) and the New York State Department of Environmental Conservation (hereinafter DEC), these loci were to be tested prior to any proposed developmental impacts. The purpose of such testing (Phase IB) was to define the presence or absence, the amount of integrity, and the research potential of any cultural resources in the identified sensitive area. (The map defining areas of potential archaeological sensitivity that was created for the Phase IB proposal is included herewith as Figure 1.)

In fulfillment of the requirements of LPC, Historical Perspectives, Inc. conducted Phase IB field investigations at the Shorehaven Project Site, Bronx, New York from October 8, 1987 to November 19, 1987. The fall 1987 field season completed investigations on four of the nine sensitive areas. Figure 2 is a map showing the 1987 tested areas.

The following report outlines the methodology used during this fieldwork and synthesizes the results of the investigations, including photographs, maps, and artifact analysis.

(1) The investigations did not uncover evidence of the seventeenth century farmstead that the documentary research had identified (Area B).

(2) Two strata with prehistoric cultural material were excavated (Area A). However, these artifacts were not significant, and, after consultations with LPC, archaeological mitigation on the four trench locations was not recommended.

(3) a. Deep testing was initiated in Area C and Area D; but because the unconsolidated nature of the heavy fill in Area D and Trench 1 of Area C posed severe safety hazards, the testing procedures, with the approval of LPC, were aborted.

b. The second trench in the Area C locus yielded tentative evidence of a prehistoric cultural presence and was excavated.

METHODOLOGY

The Phase IB fieldwork was comprised of (1) data collection and (2) data analysis. The first consisted primarily of archaeological in-field investigation; the second, analysis of all data retrieved in this manner - stratigraphy, artifacts, features, etc. Both processes were greatly aided by the cooperation and encouragement of the Soundview Associates, Co. Also, Historical Perspectives, Inc. received timely and helpful consultations with LPC throughout the fieldwork.

Before fieldwork began a transit survey was made to establish a uniform site grid pattern with known elevations. The datum base was assigned an arbitrary 10 foot elevation, corresponding very closely with the true elevation, and all subsequent points were recorded in relation to this datum plane. The 0/0 datum point is shown on Figure 2. Due to its use history, documented in prior reports, the site did not reveal any topographic extremes. There is a gradual fall in grade elevation from north to south, with only a maximum variance of 5.92' over a 650 distance. A gradual west to east fall in grade elevation was also noted, with a maximum variance (6.64' over a 725' distance) between the landscaped lawn of the c.1946 pump house and the eastern extremity of the softball field.

The positioning of the machine-cut trenches was dictated by the disturbance record of the site and prevailing field conditions and not by the imposed grid system. The transit survey team returned and took elevation measurements, in relationship to the datum plane, for features and specific test squares. Unit control datum stakes were used in the test squares and these stakes were then related to the transit survey elevations.

As outlined in the "Shorehaven Project, CEQR 87-010X, Phase IB: Archaeological Testing," in field procedures were conducted according to accepted archaeological practices incorporating both mechanical and manual soil removal. After properly surveying the areas to be tested, the deep, twentieth-century overburden was removed by a backhoe from carefully mapped units in the four sensitive areas (Areas A, B, C, and D). Subsequent hand excavations in discrete units were undertaken. For vertical control, arbitrary vertical strata were imposed within naturally occurring soil strata. All of the trowelled soil was water screened through one-quarter inch hardware cloth. Appropriate plan views, profiles, and photographs were taken. Munsell Soil Colors were also recorded. As a precaution for possible prehistoric flotation tests, soil samples were taken.

All artifacts retained in the course of the fieldwork were treated to initial curation at the on-site laboratory. Appropriate procedures were undertaken to stabilize fragile artifacts. Inquiries were directed to Chuck Florance of the New York State Historic Preservation Field Services Bureau concerning the correct artifact accession system. The Lab Director's complete report on the artifact analysis is attached.

RESEARCH DESIGN AMENDMENTS

Certain field conditions dictated amendments to the proposed Phase IB Scope of Services. The unconsolidated nature of the very large, heavy fill both in Area D and in part of Area C posed severe safety hazards to the backhoe operator, archaeological crew, and the public. Metal sheeting these trenches was discussed; but, in consideration of both the sophisticated engineering and expense required for this procedure and in light of the availability of similar testing locations without the dangers of collapse, this procedure did not appear to be realistic. Therefore, some proposed test trenches had to be abandoned.

Both the proximity to the tidal East River and numerous fresh water springs combined to create a water table at certain test locations too high to continue archaeological investigations. The constant suction of a gasoline-powered pump hose lowered into a sump in the base of the trench was essential to withdraw this rising water. In both Areas A and C hand-excavated square size and location was, in part, determined by the necessary de-watering equipment. Progress in these squares was dependent upon the availability of the de-watering equipment, the use of the bulldozer to transport it, and crew to manage the daily set up and break down of the pumping equipment. The water-logged nature of the silt-clayey silt soils and peat stratum made trowelling extremely difficult so that water screening became necessary. For screening, municipal water was piped to the site, a distance of over 400 feet for Area C.

Five separate night-time incidences of thefts were an additional problem. Stolen items included vital staff equipment from the laboratory and storage building: e.g., camera and film, compasses, water pump, wheel barrow, ladder, electric saw, and plywood trench covers. The construction management team, Property Resources Corporation, did provide around-the-clock security, but the expanse of the site made security difficult. Property Resources Corporation made every effort to quickly replace the water pump and hose to reduce delay in the field work schedule. Mr. Vincent J. Neville of the Port Chester, New York-based security company has assured us that his firm will replace our stolen items.

PERSONNEL

Betsy Kearns and Cece Kirkorian, Co-Principal Investigators of Historical Perspectives, Inc., were fortunate to have a highly qualified and dedicated crew working on the Shorehaven Project Site.

Field Director	Lucianne Lavin, Ph.D.
Lab Director	Nancy S. Dickinson, New York University
Lab Consultant	Debbie Crichton, New York University
Surveyors	William Sandy, SOPA
	Allen Lutens
Illustrator	Marina Mozzi, Public Archaeology Survey Team
Crew	Ramona Avallone, University of Texas
	Craig Birrell, University of Bridgeport
	Felicia Burgos, Fordham University
	Marty Cobbs
	Bill Green, Queens College
	Laura Parladore, Queens College
	Theresa Vann, Fordham University
	Richard Schaefer, University of Pennsylvania
	Faline Schneiderman

The cooperation of Dr. Lynn Ceci of Queens College and Dr. Allan Gilbert of Fordham University, in assisting us in pulling together a staff of trained field archaeologists, is sincerely appreciated. We were fortunate to have a sensitive backhoe operator from Cap Equipment, arranged by the on-site construction manager, Michael Guterman. Don Walker operated the backhoe under the direction of the Principal Investigators for four weeks.

FIELDWORK RESULTS
Test Area A
Block 3432
Lot 1, Prehistoric Triangular Area

As outlined in the Phase IB proposal, it was hoped that prehistoric exploitation of a post-pleistocene pond would be detectable around the edges of the pond (as discussed on pages 20-23 of the "Second Level Documentary Study"). Realistic field testing in the vicinity of this fresh water resource was severely constricted by the documented site disturbance record. Adding to our design frustrations were the less than precise cartographic depictions of this small pond. Rather than locating the wetland margin zone at the edge of the pond, we feel that three of the four deep tests were, in fact, just within the pond catchment itself. The recorded fill in Trenches 4, 3, & 2 rests directly on dark gray silt, a pond base. There was no discernible layer of peat between the fill and the silt - such a peat lens indicates that slow inundation of a wetland margin zone, creating an ideal environment for the development of resources tapped by prehistoric cultures. Fragments of peat-like lenses were noted within the context of the fill layers but these lenses, stratigraphically above nineteenth/twentieth century fill, are not reflective of naturally occurring peat but represent, most likely, a dumping episode of organic dredge material.

As per the scope of work, four deep cuts were made in Area A. (See Figure 2.) All four were larger than originally called for because heavy, loose fill and a high water table made it necessary to expand the size for safety's sake. That is, for a crew to hand excavate units within the machine dug trenches, they would need a wide area clear of possible wall collapse. Also, there had to be room for a sump so that the area could be drained of water.

The original testing plan had proposed that a backhoe remove only modern fill after which the crew would place two squares in each trench. The plan was not implemented because of 1) the depth and composition of the fill; 2) ground water; and 3) lack of evidence of conditions favorable to prehistoric occupation.

The Area A trench testing will be discussed in the following order: Trenches 3, 4, 2 and 1. Specifically, in Trench 3 various levels of fill were removed which included primarily slag, wood, and concrete blocks. A decision was made to halt excavation when a huge reinforced concrete block was

removed from the northeast corner at about 5½ feet below grade. In the cavity which its extraction caused, a deep test was made by the backhoe down to 8 feet below grade. Of course, strict stratigraphic control is impossible in such a situation, and the material brought out by the machine's bucket was more fill and silt marked by the pungent odor. An oily sheen also was noticeable on the water which constantly ran into the pit and filled it to a level of about 4 feet below grade unless it was pumped out. Photograph 1 shows the location of a deep test after the trench had been pumped out for examination. Unfortunately, the official photographs of Trench 3 were among the articles purloined in one of the thefts.

Unlike Trench 3 which contained primarily construction debris, the fill in Trench 4 had a more varied assortment of cultural material, such as a cache of broken clay pipes presumably souvenirs or prizes from the amusement park era. We were unable to excavate to a depth of a stratum which could have contained in situ prehistoric material because an underground spring fed into the west wall of the trench at about 33 inches below the bituminous pavement. Stratigraphic control during hand excavation would have been impossible even with a constant dewatering operation. A deep test revealed fine gray silt at 48 inches over reddish-brown silty sand down to 86 inches.

In Trench 2, under 66 inches of fill, a layer of lathing strips and planed wood was found in a portion of the pit. At that point, excavation was halted until an assessment of the archaeological potential in neighboring Trench 1 could be made. (See discussion in following paragraphs.) On the basis of the lack of significant findings in Trench 1, full excavation of Trench 2 was not resumed. Instead, a deep test was made in the east end of the pit down to 8 feet below grade which revealed fill and silt similar to Trench 3. It was then photographed (film stolen) and backfilled.

Like Trenches 2, 3, and 4, Trench 1 was excavated by backhoe through the layers of modern fill. A comparison of the exposed strata in Trench 1 was made with those visible in the other three which we had deduced were located within or on the edge of the prehistoric pond. Trench 1 showed less evidence of being an actual pond catchment and the water table was slightly lower than in the other pits (approximately six feet below grade). It was the last available testing locus in Area A, (based on our knowledge of prior disturbances.) Accordingly, a test square was dug by hand in the northeast section of the trench.

A sump was dug next to the square and a pump worked at all times during excavation. Although water did not gush into the trench despite pumping as it did in the other three, wet conditions made it difficult to maintain stratigraphic control. The crew either stood in 6 to 10 inches of muck or made a platform from a plywood sheet. By the second day, the north and east walls of the trench had to be shored with plywood sheeting to keep them from slumping into the unit. (Photograph 2 shows the water level before pumping.)

The test square was begun at 5 feet 8 inches below grade and taken down to 9 feet 2 inches below grade. (See Figure 3.) It was shovel scraped in 6 inch levels; all material was water screened. The soil matrix of the first four 6 inch levels was primarily gray silt and each level contained historic material. The silt came down on orangey-brown sand with pebbles and cobbles.

The sand stratum was also excavated in arbitrary levels of 6 inches. The first layer contained a few prehistoric lithics but no other cultural material. The second layer was culturally sterile. The third level contained water-worn choppers and flakes (waste material from the knapping, or creation, of stone tools) that do indicate prehistoric exploitation. However, their "smoothed" condition argues against an <u>in situ</u> lacustrine site.

The paucity of lithic materials recovered from Trench 1, while perhaps indicative of prehistoric activity, was insufficient evidence of a significant site. The LPC concurred with our opinion that further expenditure, time, and energy was not warranted in Area A. Trench 1 was drawn, measured, photographed (see photographs 3 and 4), and backfilled.

Test Area B
Block 3432-3434
Lot 1, Historic Oval Area

In the area designated for its historic site potential, the original testing plan was to excavate both where the old part of the Clason Point Inn was thought to be and in portions of the surrounding area in search for outbuildings, trash deposits, privies, or other features associated with early occupations. Digging outside the perimeter of the known building complex also offered the opportunity to study ground stratigraphy even if no features were found. To these ends, Trenches 1, 2, and 3 were excavated by a backhoe constantly supervised by an archaeologist. Later, upon the advice of the LPC archaeologists, Trench 8 also outside the former building complex, was excavated by a combination of hand labor and machinery.

Obvious ground disturbances included walkways, fences, and large trees. However, the depth of the impact of these intrusions was unknown. A large part of the sensitive zone was covered by a level concrete pad, divided into raised shuffleboard courts and interspaces. (See Figure 2.) Before testing was begun, a large portion of the shuffleboard courts was removed, and the debris moved across a narrow road and placed on the handball courts to the east. This was a difficult task because each of the 12 courts was a 4½-inch thick slab of concrete. A 8-12 inch thick slab of reinforced concrete extended around the perimeter of the court area. Three full days of work by both a backhoe and a "jumping jack" were required to accomplish the removal. (See photographs 5 and 6.) Directly below the concrete slabs of the shuffleboard area was a uniform 6-8 inch layer of coal cinder and ash fill. Within the next layer of fill (approximately 10 inches below the slabs) there were run-off pipe drains on the eastern end of each interspace between slabs.

Trench 1 ran north-south paralleling the concrete walkway at the western extent of the shuffleboard courts to a walkway running east-west directly north of the courts. (See Figure 4.) It was placed inside the row of trees which old photos (c.1948) showed surrounding the Clason Point Inn and thus would be in the side or back yard of the historic house, depending on the orientation of the building. The trench was 4 feet wide and dug to a depth of 3 feet 6 inches at the north end, 7 feet at the south end (below grade after the concrete removal). It was 28 feet long. Stratigraphy consisted of 6-8 inches of cinders/ash over 1½ to 2½ feet of miscellaneous fill down to naturally occurring soils at 2 to 3½ feet below grade. The natural strata

(stratified glacial drift deposits) contained sand, silt, pebbles, cobbles, and boulders. No cultural material from a period earlier than the twenthieth century was recovered; no features were exposed. (See photograph 7.)

Trench 2 was placed across (east-west) the grassy sward northwest of the inn site and ran 58 feet across almost the entire width of the portion not already obviously disturbed. (See Figure 4.) However, disturbance had indeed occurred, because sub-surface examination revealed 2½ feet of fill over natural soils. A water pipe running north-south was encountered at 2½ feet deep - the interface of fill and sterile soil. Trench 2 was 4 feet wide, 4½ feet deep at the eastern end and 7 feet deep at the western end. The soil profile from 2½ feet down was stratified drift deposit made up of sand pebbles, cobbles, and boulders. The fill stratum contained sparse amounts of cultural material, none of which pre-dated the twentieth century. (See photograph 8.)

Trench 3 was located immediately adjacent to the fourth shuffleboard court from the north end (See Figure 4) running 19 feet long in the east-west direction. Its depth was 6 feet with the natural soil stratum occurring at approximately 1 foot below the concrete cover. The strata above consisted of 6-8 inches of coal ash and cinder directly below grade underlain by 4-6 inches of miscellaneous fill containing one of the utility pipes running east-west which were mentioned in the preceeding paragraph. The sterile soil was sand with pebbles, cobbles, and boulders. No features or significant cultural material were encountered. (See photograph 9.)

Trench 3 was placed directly outside where the northern wall of the old part of the Clason Point Inn was considered to be. However, there was no indication of any kind of architectural feature. In fact, all 3 cuts, which in total traversed a large area, were conspicuously devoid of a stratum containing evidence of human habitation. The historical record clearly shows that several centuries of human habitation had taken place at this locale. As discussed in the "Shorehaven Project: Second Level Documentary Study," the creation of the Shorehaven Beach Club involved considerable earth moving activities. Still, it was thought possible that the depth of this c.1946-1949 construction would have only truncated pre-twentieth deposits and features. However, the archaeological findings suggest that the entire area was cleared (presumably scraped by heavy equipment) down into the original, natural soils before the utility system was installed and fill then placed over all.

The next test cut, Trench 4, was run along a north-south line assumed to be where the Clason Point Inn would have been according to maps, photographs, personal recollections, and measurements based on all three of these sources. It was begun where the north end of the reputedly "historic" portion of the inn was calculated to have stood (11½ feet south of Trench 3) and eventually extended southward for 56 feet. Elevations taken from the shuffleboard court revealed, as expected, a uniformly level surface (.30 - .32 feet below the site datum plane).

As the backhoe preceeded south, a concrete floor was exposed in the east wall of the trench at 5.84 feet below the datum (Catalog no. H-4). This surface extended a total of 37½ feet north-south under the shuffleboard court reinforced concrete perimeter which had been left intact for safety reasons along the east side. (See photograph 10.) The fill between the homogeneous cinder/ash layer and the concrete floor (no. H-4) contained post-Civil War cultural material. The fill in Trench 4 was not made up of homogeneous material within each discrete layer as was the case in Trenches 1, 2, and 3. Instead, the fill, also post-Civil War, contained construction debris and occasional household items within a black/dark gray clayey soil matrix. The unconsolidated fill appeared to have been heaved into a below grade cavity with no subsequent tamping or leveling.

Leaving the reinforced concrete perimeter slab intact to serve as a safety baulk, a 16 x 5 foot extension of the floor was located and exposed east of the baulk in another test cut (Trench 7 - Figure 4 and photograph 11). Here again, the fill from grade down to the flooring 5 feet below consisted of late nineteenth to mid-twentieth century waste material. The portion of the floor in Trench 7 was removed and a test square was excavated under where it had been. The material was shovel scraped and then screened. The plan was to excavate in arbitrary levels of 6 inches unless natural stratigraphy indicated otherwise. Cultural material found in Stratum 1, Level 1 included brick fragments, glass, shell, slag, and a corroded metal fragment in a matrix of light tan coarse sand. Only three inches of Stratum 1 Level 2 were extracated before a noticeable change - i.e. a layer of naturally deposited cobbles - dictated that that level be closed out. It had contained only three small bits of cultural material.

Stratum 2 - from 9 to 28 inches below the surface of the unit, (that is, 6.84 - 8.34 feet below site datum) was made up of decomposing rock, pebbles, and cobbles in a matrix of light tan coarse sand. No cultural material was present. At the 28 inch level ground water seeped in, that is, 7½ feet below grade.

(See photograph 12.) Hand shovel tests adjacent to the floor in both Trench 4 (west) and Trench 7 (east) revealed the same soil conditions. It is our opinion that this was probably the below-grade flooring of the foundation cavity for that portion of the twentieth century structure/inn fronting on the amusement center midway.

Further south along the western side of Trench 4, two exterior building walls (approximately 14-16 inches thick) were found. They formed a corner or right angle and enclosed a portion of a concrete floor. These two abutting walls were composed of undressed cobbles and boulders loosely bonded with a decomposing coarse aggregate mortar; the interior surfaces were "plastered" with a fine aggregate concrete. (See Figure 4 and photograph 13.) The fill inside the feature (Feature 1) - which was apparently a floored cellar space - appeared to be river dredge material (dark gray/black clayey silt) deposited in one episode. Only two diagnostic artifacts (a c.1900 hot peppers sauce bottle and a kaolin pipe stem fragment) were recovered from the consolidated matrix. That the concrete floor was laid on naturally occurring soil was proved by hand tests adjacent to it on both exterior and interior sides. The feature's configuration corresponds to a small (possibly) frame addition off the northwest corner of the inn as can be seen in a c.1948 photograph (See Figure 5.) Supporting that interpretation is the fact that the size and construction quality of those two walls would hardly have supported the large inn structure itself. A plan view was drawn of the feature (Figure 6; Catalog no. H-2). Where the partially destroyed 6 foot-long north wall of the feature abutted the west wall of Trench 4, a profile was drawn (Figure 7; Catalog no. H-3). This profile revealed a builder's trench along the north wall which was hand excavated. It contained only one fragment of brick, one of plaster, a sherd of flat glass, and two small pieces of bottle glass. (See photographs 14 and 15.)

No diagnostic material was found in positive association with the feature with which to date its construction. Besides which, the feature was located in the wrong place to have been the "historic" part of the Clason Point Inn. The fact that the floor was concrete and the walls made of small undressed cobbles and boulders is inconsistent with what the foundation of a substantial seventeenth or eighteenth century dwelling would have been.

In order to test for other features, Trench 5 was opened directly north of the mortared wall and was excavated northward and parallel to Trench 4. It was 14½ feet long and 2 feet wide. (See Figure 4 and photograph 16.) Trench 6 was started directly

east of the mortared wall, perpendicular to Trench 5 and taken east for 18 feet and south for 13 feet. (See Figure 4 and photograph 17.) Similarly, the original Trench 4 was extended 6 feet northward, while Trench 7 was extended north and west. Each trench was excavated sufficiently into sterile soil, approximately 9½ feet below grade. (See Figure 4 for placement of these extensions.) No features or significant cultural material were encountered. The soil profiles in these trenches were similar to others in Area B in the shuffleboard court locale. There were a few inches of ash/cinder fill overlying varying depths of miscellaneous post-Civil War fill directly over stratified glacial drift deposit of yellow-brown fine to coarse sand with pebbles, cobbles, boulders and decomposing rock. The only exceptions were the fill deposits over the concrete floor in Trench 4 and 7 and in Feature 1, described above. Using the backhoe bucket, deep tests were taken beneath the southern end of Trench 4 and the northern extension of Trench 7. They were 3 feet and 2½ feet deep respectively. No soil change was discernible. Ground water filled each of the holes at approximately 9 feet below datum.

Like Trench 2, Trench 8 was placed outside the perimeter of the shuffleboard courts and thus outside the bounds of the known building complex at grid point S90 W50. (See Figure 4.) The Trench 8 locus had functioned during the beach club days as a grassy lawn, landscaped with catalpa and oak trees and yew shrubs, and was adjacent to a sports director's office. As in Trenches 1, 2, and 3, we were hopeful of locating outdoor features associated with the early farmhouse. A 4 x 4 foot test square was opened within the larger space of the trench and taken down 1½ feet in 6 inch increments. The first level contained a few pieces of marine shell and a painted wood fragment. The second and third levels were seemingly undisturbed subsoil made up of pebbly coarse sand similar to what had been found in other trenches. (See photographs 18 and 19 and Figure 8.)

Area B had been originally designated as sensitive for its historic potential. This was due mainly to the documented early and continued homestead activity that probably would have severely impacted prehistoric strata rather than to the lack of prehistoric potential of elevated land on a major riverine system. Precautions were taken so as not to dismiss prehistoric resources: 1) excavated material from the two test squares was screened and examined for prehistoric artifacts; 2) a balanced crew - trained in both historic and prehistoric archaeology - was selected for the area; and 3) test units were dug down into what was identified as sterile glacial till.

Having found no indication of early or pre-nineteenth century occupation despite exhaustive testing, the necessary drawings and photographs of Area B were made and the excavations were then backfilled.

Testing Area C
Bronx River Avenue Roadbed Prehistoric Parallelogram

Based on documents and soil boring logs, this area was flagged for its prehistoric potential. The testing plan proposed that two trenches - each containing two hand-excavated squares - be dug. The loci of the two cuts were not covered with hardtop, but with vegetation which was scraped off by the backhoe. Trench 1 was outside the baseball fence in an abandoned parking field while Trench 2 was inside the fenced ballfield area. (See Figure 2.) Though physically near one another, the sub-surface conditions were quite different with the exception of the ground water level. Trench 1 and Trench 2 elevations in relation to the site datum plane are shown on Figure 2.

In Trench 1 approximately 10 feet of large, loose fill was encountered. See photograph 20 for an indication of the size of the fill involved. Water literally gushed into the pit at about 9 feet below grade. At about 10 feet a possible peat layer was revealed. It was very black, greasy, and had a strong petrol odor. The only way it could be examined was by an archaeologist lowered into the hole in a backhoe bucket. Though she could not be positive, the archaeologist thought that the sludge-like peat was underlain by coarse sand. In order for a crew team to hand excavate test units, the trench would have to be either canted out to huge proportions or the side walls shored with metal sheeting because of the heavy unconsolidated fill. (See photograph 21.) Either procedure would be time consuming and expensive. De-watering under such conditions would be extremely difficult. Therefore, despite the fact that this trench was stipulated in the scope of work, and despite the presence of peat which may indicate favorable conditions for prehistoric occupation, we felt that it was not feasible to continue work in that location because of safety and financial considerations. Also, it was thought that the nearby Trench 2 might supply the data necessary to determine the presence or absence and extent of prehistoric resources. After consultations with LPC, Trench 1 was photographed and backfilled.

Trench 2 was laid out to include the spot where soil boring #227 had been taken which had recorded 5½ feet of fill above peat. The overall trench measurements were 15' x 18', and 5 feet of fill were removed by backhoe. The northern one half of the trench was stripped of several feet of fill and then left intact. The reasoning, in anticipation of water problems, was that it could be used for a platform for the crew to descend into the lowered half and that it could always be excavated at a

later time if the south half proved to contain significant cultural resources.

A test square was begun in the eastern section of the lowered south half. The anticipated peat layer was found between 62 and 70 inches below grade. That is, it had an undulating surface, a stratigraphic condition not unanticipated in a riverine margin zone. Unfortunately, an underground spring was also encountered which meant that constant pumping would be required. It also meant that verticle control would be difficult. It was therefore decided to open another test square in the southwest portion of the trench and to use Square 1 as a sump.

In this square the solid peat layer was exposed at approximately 7 feet below grade although a narrow lens had been encountered above it. The ground surface at Trench 2 was 5.50' below the site datum plane. All measurements within Square 1 were taken in relation to a unit control datum (southwest stake, Square 2) at 70" below the surface, or 12' 2" (12.2') below the datum plane. Between the first peat and the second peat lens, there was a layer of grey silt (with some peat) which contained among other artifacts a 1914 Liberty head quarter. The second layer of peat was removed in arbitrary levels of 6 inches and water screened by hand, a torturous process that required at least three crew persons at all times. The second, lower peat layer was over two feet thick and contained historic materials as well as bone and shell, but no recognizable prehistoric artifacts. The peat gradually gave way to silt which in turn slowly gave way to clay.

During a consultation with LPC archaeologists, we were requested to adequately test the strata below the peat before closing the test square which had yielded no significant cultural material. Therefore, the silt and clay was shovel scraped in 6 inch levels and screened until we were confident that we had reached a depth below which the possibility of finding archaeological resources was remote indeed. The excavated soil contained a number of historic era fragments such as brick and slag. Some, but certainly not all, of them may have fallen from the side walls or worked their way down through the porous lens floated in with water that filled the trench every night. One white quartz point tip was recovered but one artifact does not deserve a site designation. What appeared to be glacial cobbles and boulders hampered the workers in removing the silt and clay. At 136" below grade, the test square was closed at Stratum 9. The appropriate drawings were made and photographs taken then the trench was then backfilled. (See photographs 22 and 23 and Figures 9 and 10.)

Testing Area D
Block 3434
Lot 1, Prehistoric Rectangle

The placement of a test trench at this locale was done at the request of LPC because of Soil Boring #124 which indicated a peat lens under 8 feet of fill. (See Figure 2.) Area D was known to be near the c.1875 shoreline which was subsequently expanded by filling. Immediately to the west of this testing locus is an above ground tank and pump house whose construction and piping system would have caused considerable sub-surface disturbance. A stand of phragmites and the slumped nature of the ground surface adjacent to the chain fence between the pump house and the test trench area - a graded, loose gravel parking area - attest to these past disturbances. The grade level at Area D, Trench 1, northeast stake was 5.08' below the datum plane.

Excavation by the backhoe revealed extremely heavy unconsolidated fill which made the side walls totally unstable. Wood pilings were exposed at 3 feet below grade; large boulder rip rap had been placed around the pilings. Gray/black very fine river silt was found close to the pilings and other wooden members where it would have naturally collected. The silt had a very strong petrol odor. Ground water was at 6 feet below grade. The 12 x 4 foot trench was dug out to a depth of 9½ feet and no peat layer was located. Further excavation either by machinery or hand would have required either expensive sheeting or canting out at least 2 walls to a very gentle slope which would involve an enormous area. Either alternative would still have posed safety hazards both to the archaeological crew and to the public. We did not feel that the potential for archaeological resources was great enough to warrant the expense and risk; LPC concurred. The trench was measured, photographed, and backfilled. (Unfortunately, the photographs were on an undeveloped roll of film among the items stolen in one of the break-ins.)

CONCLUSIONS

The assessment of historic and prehistoric archaeological potential made in the Shorehaven Project "Phase IA" and "Second Level" studies was well founded. The sensitive Shorehaven Project area most probably hosted prehistoric sites and was definitely the location of one of the borough's earliest homesteads. During the Phase IB proposal process for the 1987 fieldwork, Historical Perspectives, Inc. was able to identify areas of the entire project site that had undergone documented sub-surface disturbances. This documentary evidence severely restricted the realistic testing field. The subsequent fieldwork, described in the previous pages of this report, focused on those areas that: (1) according to the lack of documented sub-surface disturbance, might have retained undisturbed evidence of past cultures, or (2) were not expected to be covered with a fill layer so deep as to preclude reasonable accessibility.

Until the late nineteenth century landscape changes, Clasons Point was a small peninsula dotted with alternating sandy hummocks and low-lying marshlands. One fresh water post-pleistocene pond was situated approximately in the middle of the Point. Both prehistoric and historic peoples would have exploited the riverine, marsh, and pond resources of this ecological biome. Settlement pattern data indicates that both prehistoric and historic peoples preferred to settle on elevated, well-drained areas. Clasons Point would have afforded both an ideal shellfish processing site and a farmstead site.

During October and November of 1987, sub-surface investigations were carried out in four distinct loci: Areas A, B, C, and D. Fieldwork progress was inhibited by: (1) the heavy, unconsolidated nature of the fill mantle on the southern-most portion of the tested areas (Trench 1 of Area C and Area D) and (2) the high water table in the easternmost areas (Area A and Area C).

Heavy machinery was employed to remove the twentieth century overburden and then controlled hand excavations tested for historic (Area B) and prehistoric resources (Areas A, B, C, and D). The archaeological investigations did uncover a small amount of lithic materials to confirm the presence of Native Americans (Areas A and C). However, the water-worn nature of the lithics suggests post-depositional movement and argues against an *in situ* discovery. It was hoped that possible both lacustrine and estuarine archaeological features and artifacts would be noted. However, although the post-pleistocene pond was located (Area A), there were no indications of Native American

site exploitation; and, although the presence of peat lenses (Area C) identified a possible resource-rich marsh margin zone, there was no indication of Native American site exploitation. Indications of estuarine site exploitation, versus random artifact scatter from alluvial deposition or the occasional hunting and/or processing tool dropped during a foray, would likely involve concentrations of mollusk shells and associated tools, fire-cracked stones, and possibly evidence of ceramics and burials.

The Clasons Point undulating, sandy topography that existed into the twentieth century was adapted to the Shorehaven Beach Club design that included swimming and wading pools, sunning decks, ball courts, ball fields, shuffleboard courts, large-scale, multi-story buildings, and a massive underground utility system. As noted in Historical Perspectives, Inc. documentary studies, major landscape changes were carried out between 1945 and 1950 during the creation of the Beach Club complex. However, the documented evidence of land changes suggested that the original seventeenth century homestead site might have escaped drastic sub-surface changes. It was anticipated that intact, although possibly truncated, residential features (e.g., privy vaults, cisterns, foundations) could be discovered. However, the fieldwork investigations in Area B (8 trench tests) failed to reveal any such features or any evidence of the known, long-term human usage of the locus. Remarkably absent from the site was the normative pattern of sheet scatter associated with early home sites. Remnants of a concrete pad and a mortared, undressed foundation were located in Area B at a depth of approximately 5 1/2 feet below grade; however, they post-date the area of anticipated sensitivity. The drainage and compaction specifications for the shuffleboard construction, subsequent to the c.1949 demolition of the Clasons Point Inn, must have dictated the severe land alterations noted during the fieldwork. Apparently, bulldozers completely removed all backyard surfaces that would have accumulated over 300 years of use. There was no evidence of an early historic occupation/ living floor (i.e., cultural materials, organic soil layers); the post-Civil War fill materials rested directly on top of sterile, stratified drift deposits.

Designed to test only a portion of the Shorehaven project area (subsequent testing phases will investigate the remaining portion of the project area), the 1987 fieldwork concentrated on those loci where it was anticipated that intact resources could be found. Although the archaeological potential was high, no prehistoric or historic sites or features of significance were recovered. Despite the thorough and professional investigation completed to date, there exist the possibility that subsequent

construction work on the remaining portion of the tested project parcel could uncover a random archaeological artifact. However, in accord with LPC, we feel the archaeological investigations have adequately tested the designated portion of the project area and that no further fieldwork for Blocks 3432, 3434, and the Bronx River Avenue roadbed of the Shorehaven Project is indicated.

Shorehaven Site Photographs
Fall 1987

Photograph 1: Area A, Trench 3, looking east

Photographs 2 and 3: Area A, Trench 1, Square 1, looking east, showing water level before and after pumping

Photograph 4: Area A, Trench 1, Square 1

Photographs 5 and 6: Area B. Photograph 5 is looking north. Photograph 6 is looking east.

Photograph 7: Area B, Trench 1

Photograph 8: Area B, Trench 2

Photograph 9: Area B, Trench 3, looking west

Photographs 10 and 11: Area B, Trench 4, H-4 Concrete Floor. Photograph 10 is looking south. Photograph 11 is looking west.

Photograph 12: Area B: Trench 7, Square 1, H-5 Stratum 1, H-6 Stratum 2

Photograph 13: Area B: Trench 4, H-1 Feature 1

Photograph 14: Area B: Trench 4, H-3 Builders' Trench, Feature 1

Photograph 15: Area B: Trench 4, looking west

Photograph 16: Area B: Trench 5

Photograph 17: Area B: Trench 6

Photographs 18 and 19: Area B, Trench 8, Square 1. Photograph 18 is looking north. Photograph 19 is looking south.

Photograph 20: Area C, Fill from Trench 1. Scale in feet.

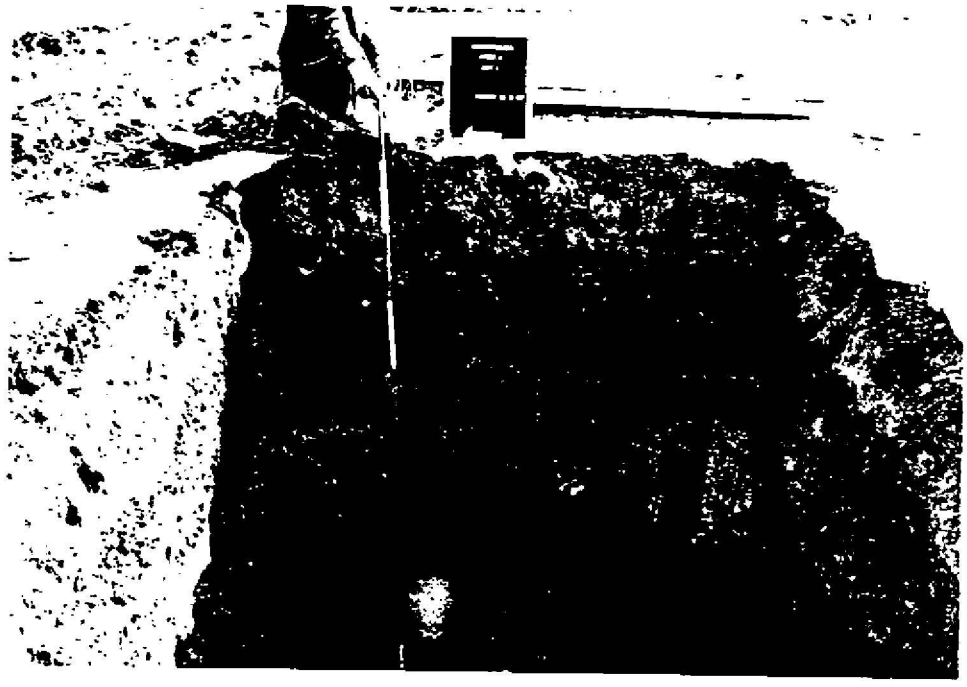
Photograph 21: Area C, Trench 1

Photograph 22: Area C, Trench 2, Square 2, Stratum 9

Photograph 23: Area C, Trench 2, Square 2, looking south

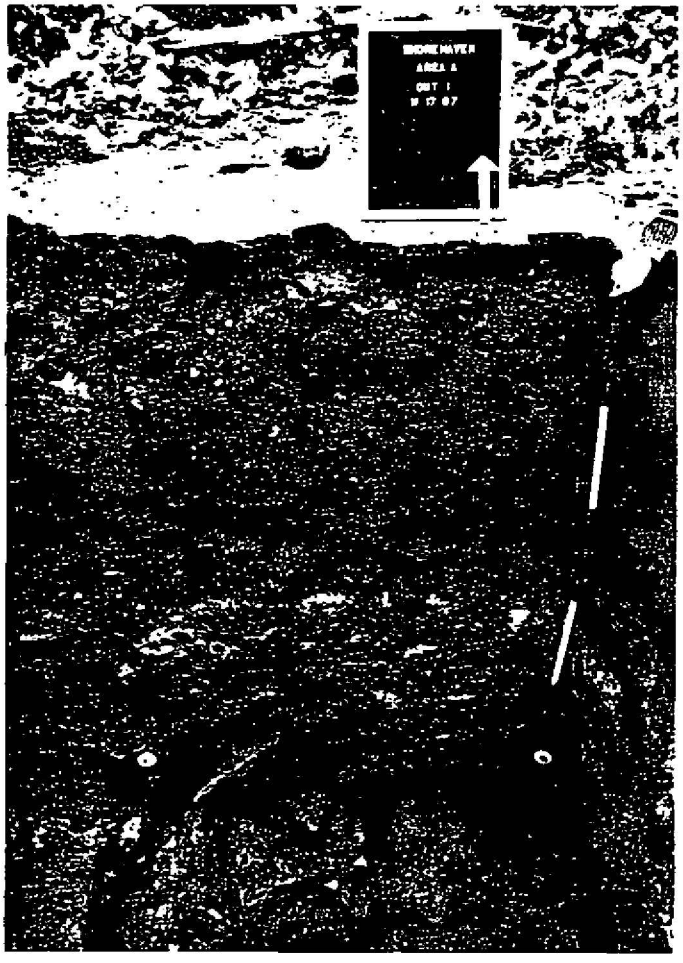
Photograph 1

Photograph 1: Area A, Trench 3
Looking east



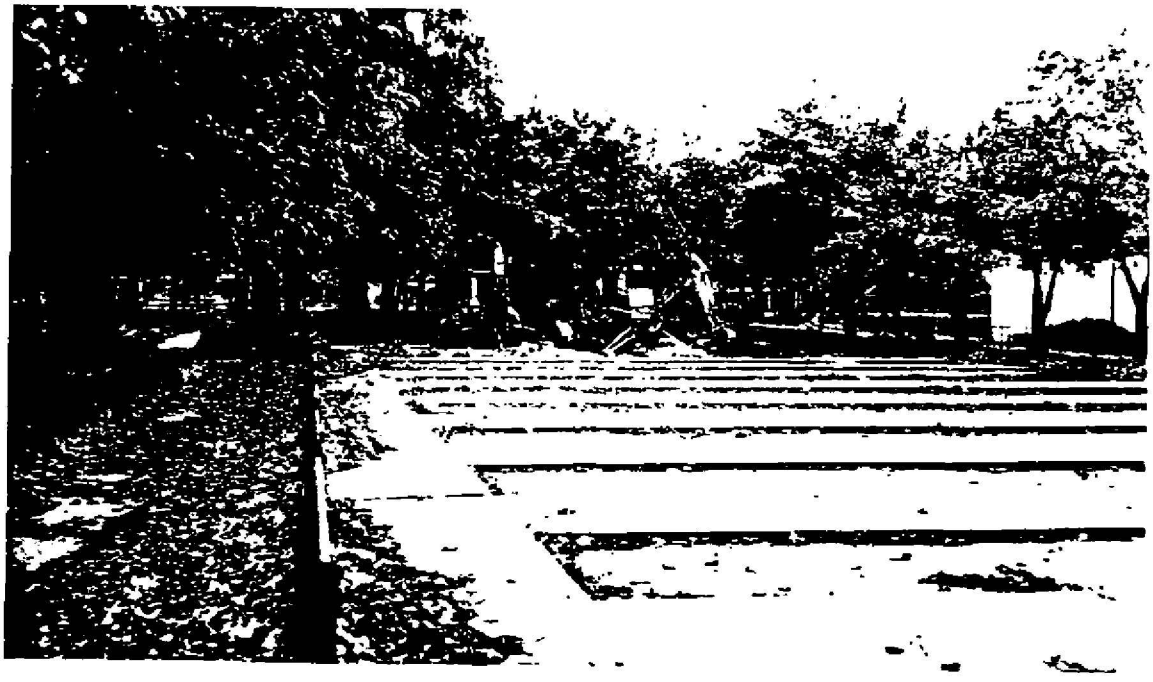
Photographs 2 and 3: Area A, Trench 1, Square 1
Looking east, showing water level before and after pumping

Photograph 4



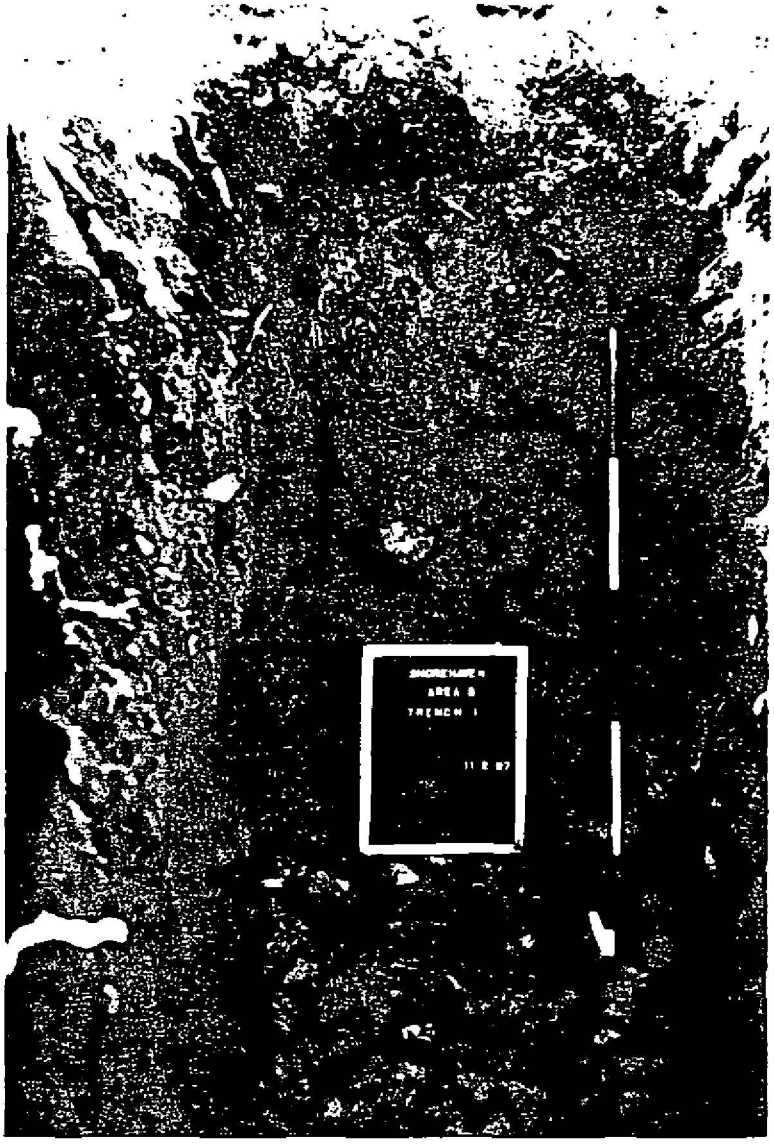
Photograph 4: Area A, Trench 1, Square 1

Photographs 5 and 6



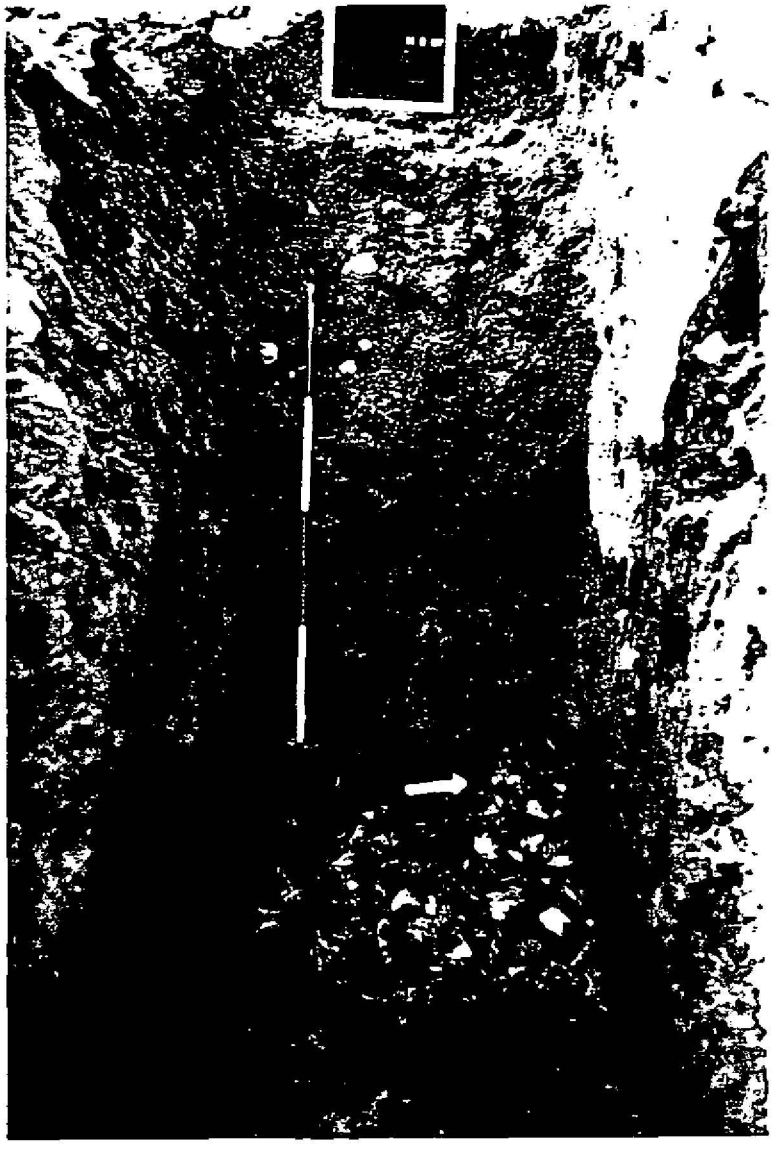
Photographs 5 and 6: Area B
Photograph 5 is looking north. Photograph 6 is looking east.

Photograph 7



Photograph 7: Area B, Trench 1

Photograph 8

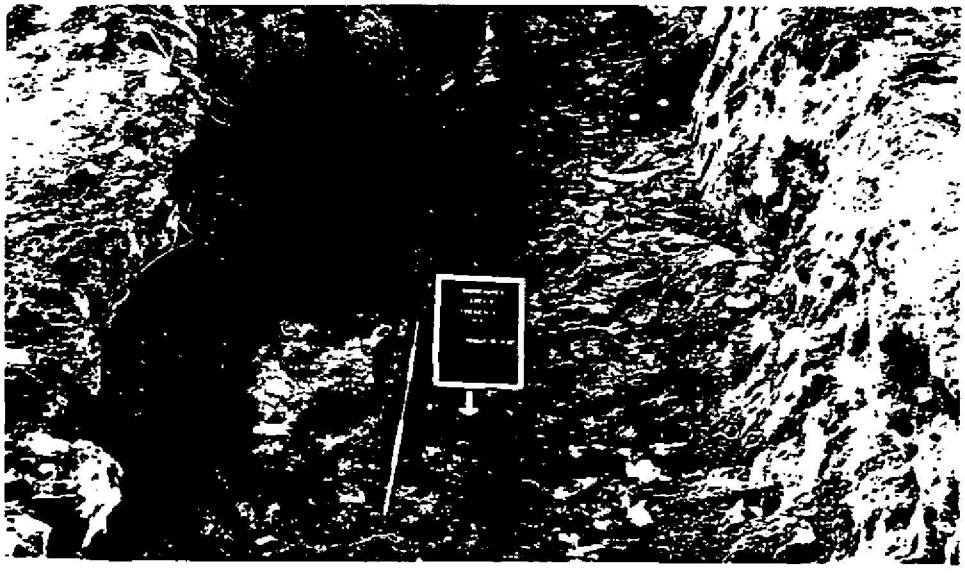


Photograph 8: Area B, Trench 2

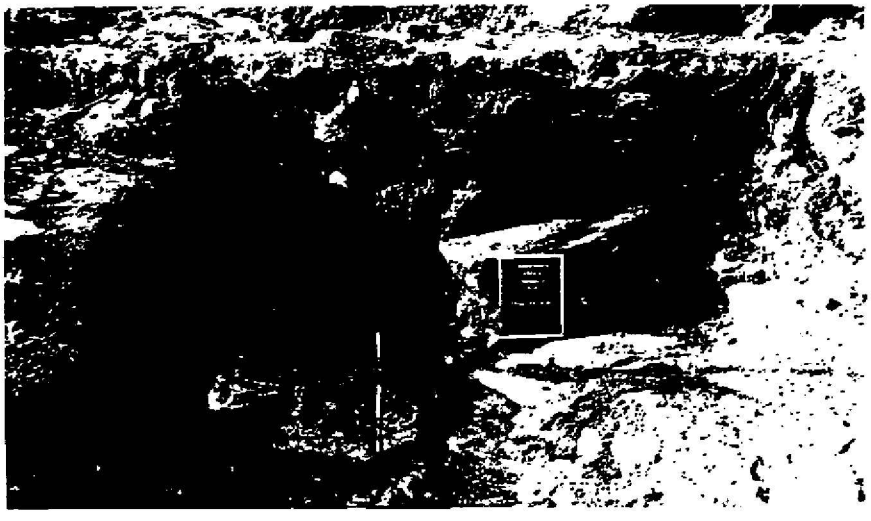
Photograph 9

Photograph 9: Area B, Trench 3
Looking west

Photographs 10 and 11



Photograph 10: Area B, Trench 4, H-4 Concrete Floor



Photograph 11: Area B, Trench 7, H-4 Concrete Floor

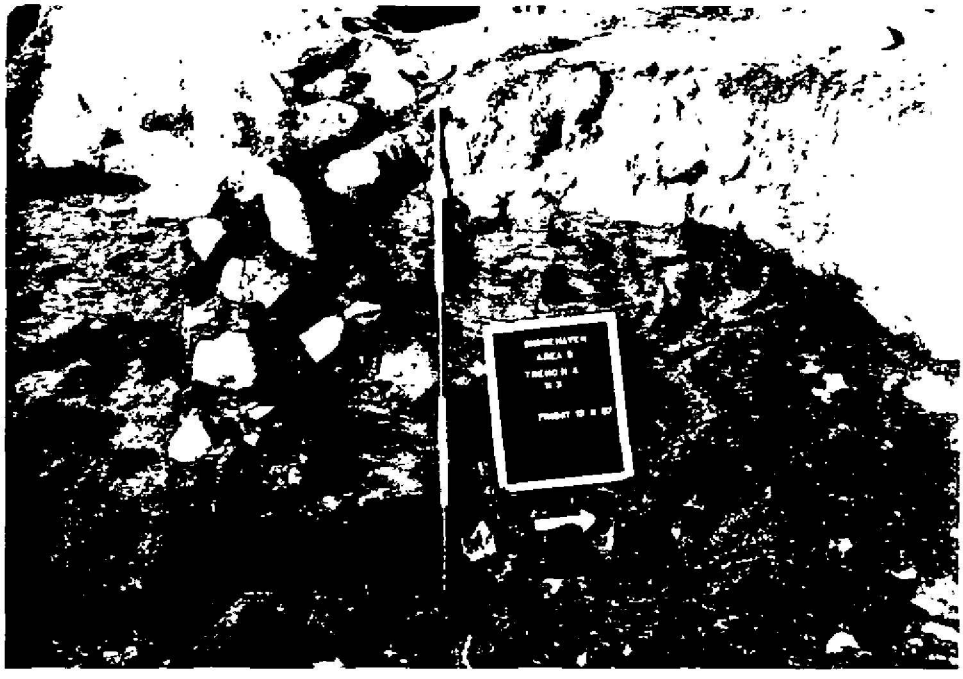
Photograph 12

Photograph 12: Area B, Trench 7, Square 1
H-5 Stratum 1
H-6 Stratum 2

Photograph 13

Photograph 13: Area B, Trench 4, H-1 Feature 1

Photograph 14

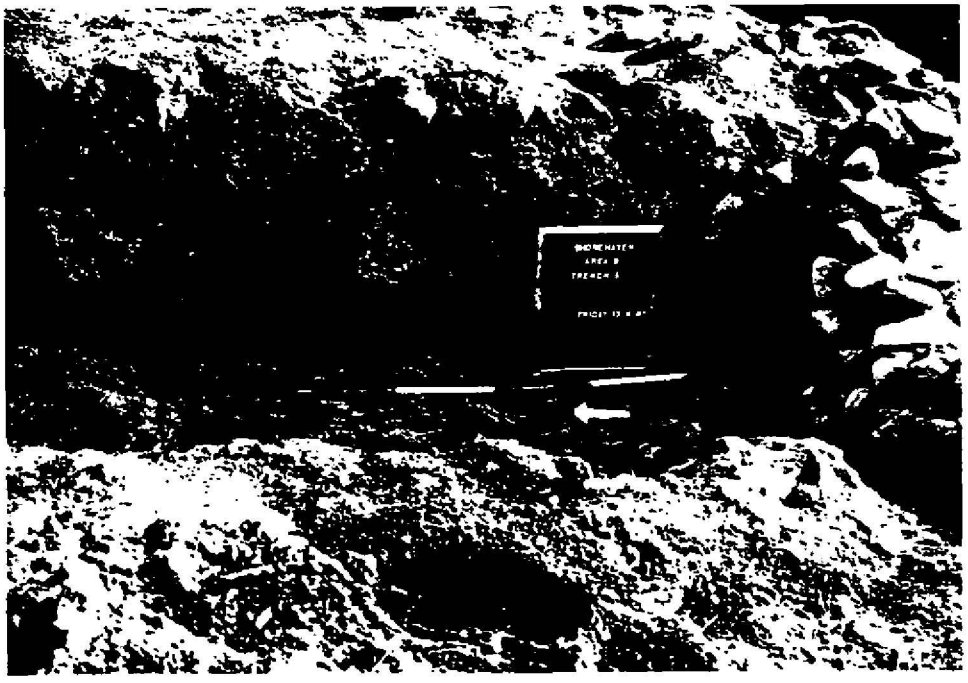


Photograph 14: Area B, Trench 4, H-3 Builders' Trench, Feature 1

Photograph 15

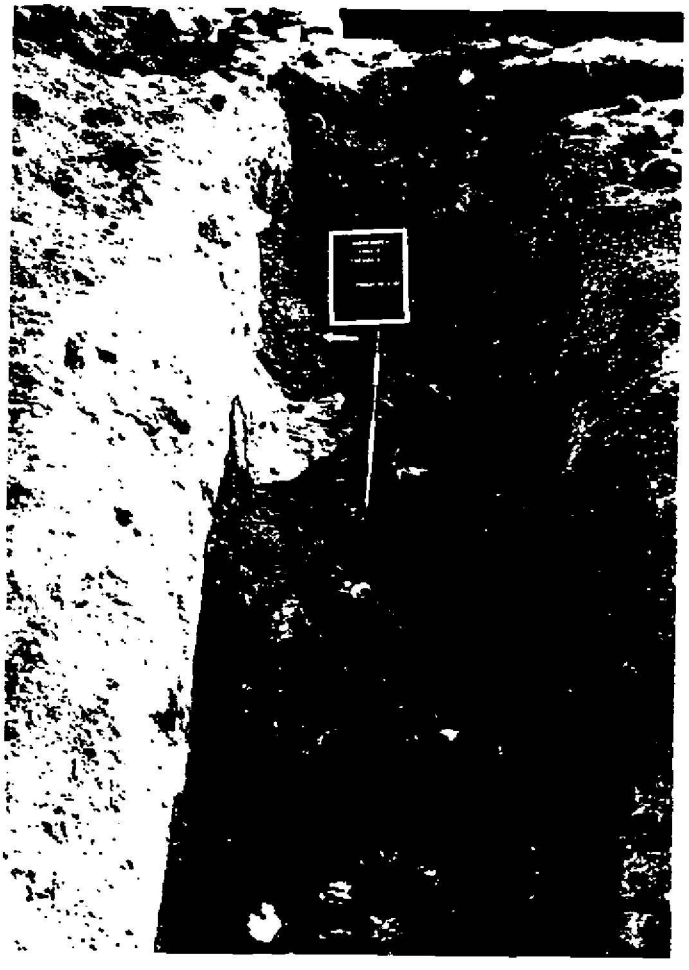
Photograph 15: Area B, Trench 4
Looking west

Photograph 16



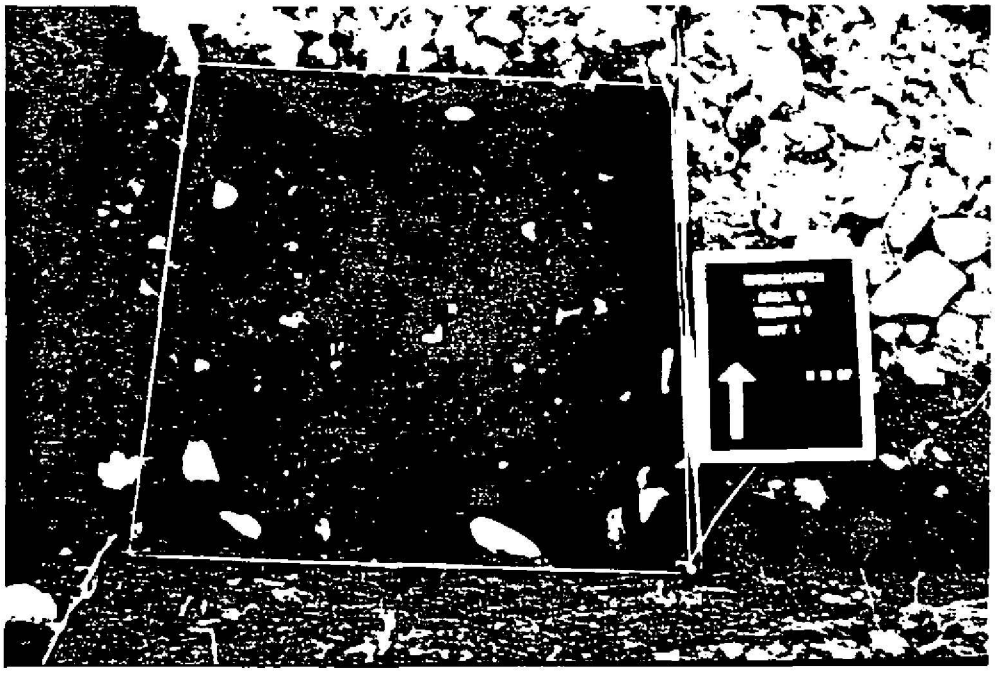
Photograph 16: Area B, Trench 5

Photograph 17



Photograph 17: Area B, Trench 6

Photographs 18 and 19



Photograph 18:
Area B,
Trench 8,
Square 1

Photograph 19:
Area B,
Trench 8,
Square 1,
Looking south

Photograph 20

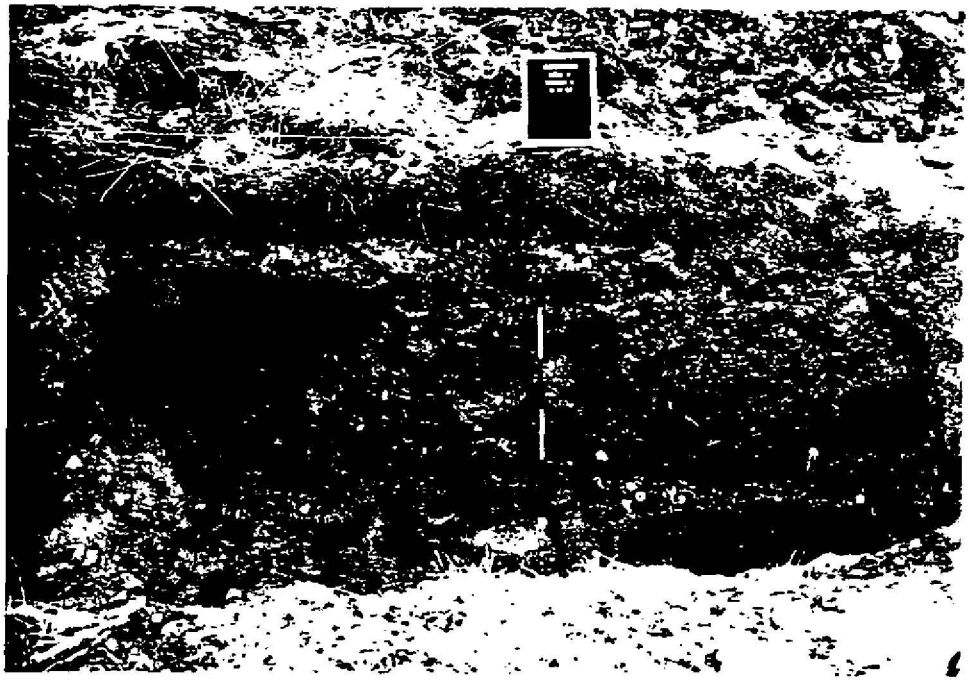
Photograph 20: Area C, Fill from Trench 1
Scale in feet

Photograph 21

Photograph 21: Area C, Trench 1

Photograph 22: Area C, Trench 2, Square 2, Stratum 9

Photograph 23



Photograph 23: Area C, Trench 2, Square 2
Looking south

Shorehaven Site Figures
Fall 1987

Figure 1: Phase IB Proposal Sensitivity Map

Figure 2: Shorehaven Test Trench Locational Map

Figure 3: Area A, Trench 1, Square 1

Figure 4: Area B, Plan View

Figure 5: c. 1948 Photograph of Historic Inn

Figure 6: Area B, Feature 1, Plan View

Figure 7: Area B, Feature 1, Profile

Figure 8: Area B, Trench 8, Square 1

Figure 9: Area C, Trench 2, Profile

Figure 10: Area C, Trench 2, Square 2

SHOREHAVEN PROJECT

CEQR 87-010X

Phase 1B: Archaeological Testing

prehistoric potential

historic potential

0 50 100 200 300
SCALE-FEET

Block 3432/Lot 1, Prehistoric

Block 3432, 3434/Lot 1, Historic

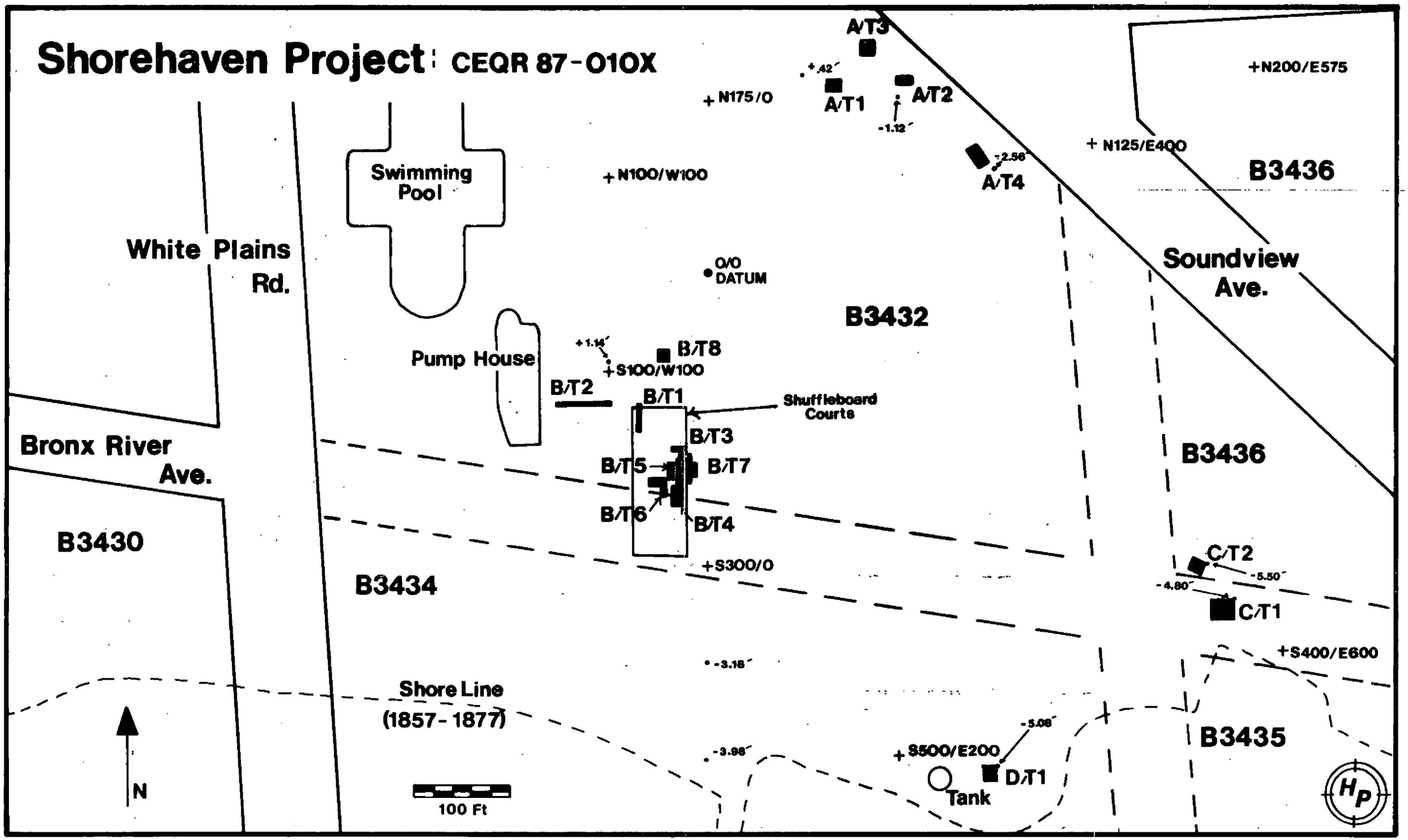
Bronx River Avenue roadbed, Prehistoric

Block 3434/Lot 1, Prehistoric

GILDERSLEEVE AVE.
BOLTON AVE.
WHITE PLAINS RD.
PUGSLEY AVE.
CORNELL AVE.
SOUND VIEW AVE.
BRONX RIVER AVE.
Pugsley Creek
(1857-1877)
EAST RIVER

Figure 1
HISTORICAL PERSPECTIVES

Figure 2


Shorehaven Project: CEQR 87-010X
A/T3
+.42'
A/T1
A/T2
-1.12'
+N175/0
+N200/E575
+N125/E400
-2.56'
A/T4
B3436
Swimming Pool
+N100/W100
White Plains Rd.
O/O DATUM
Soundview Ave.
B3432
+1.14'
B/T8
Pump House
+S100/W100
B/T2
B/T1
Shuffleboard Courts
B/T3
B/T5
B/T7
B/T6
B/T4
Bronx River Ave.
B3430
B3434
+S300/0
C/T2
-5.50'
-4.80'
C/T1
+S400/E600
-3.18'
Shore Line (1857-1877)
-5.08'
-3.98'
+S500/E200
D/T1
Tank
B3435
N
100 Ft
HP

Shorehaven Project: CEQR 87-010X
Area A, Trench 1, Square 1
Profile: North Wall

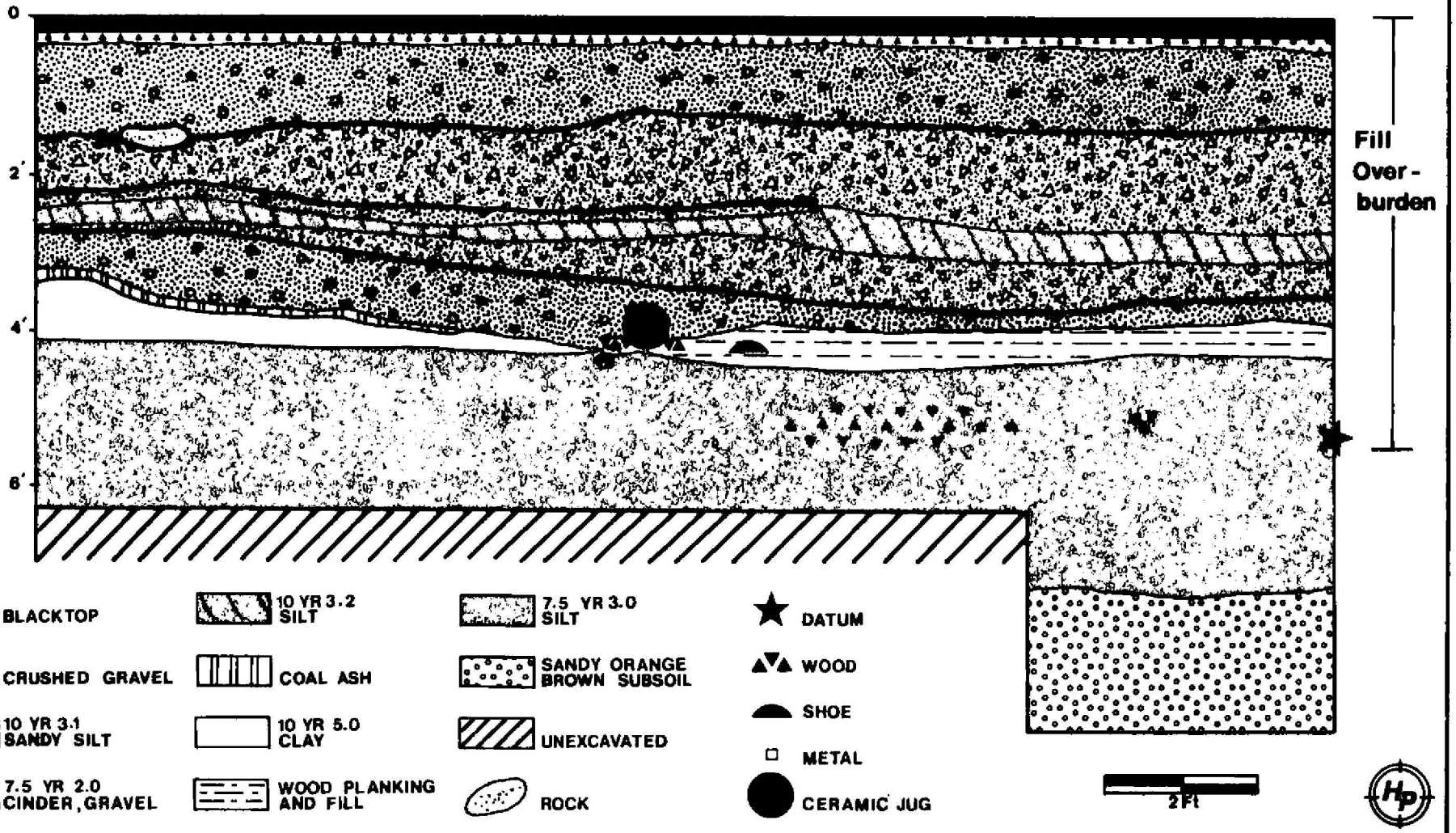


Figure 3

Catalog no. 38

Shorehaven Project : CEQR 87-010X
Area B

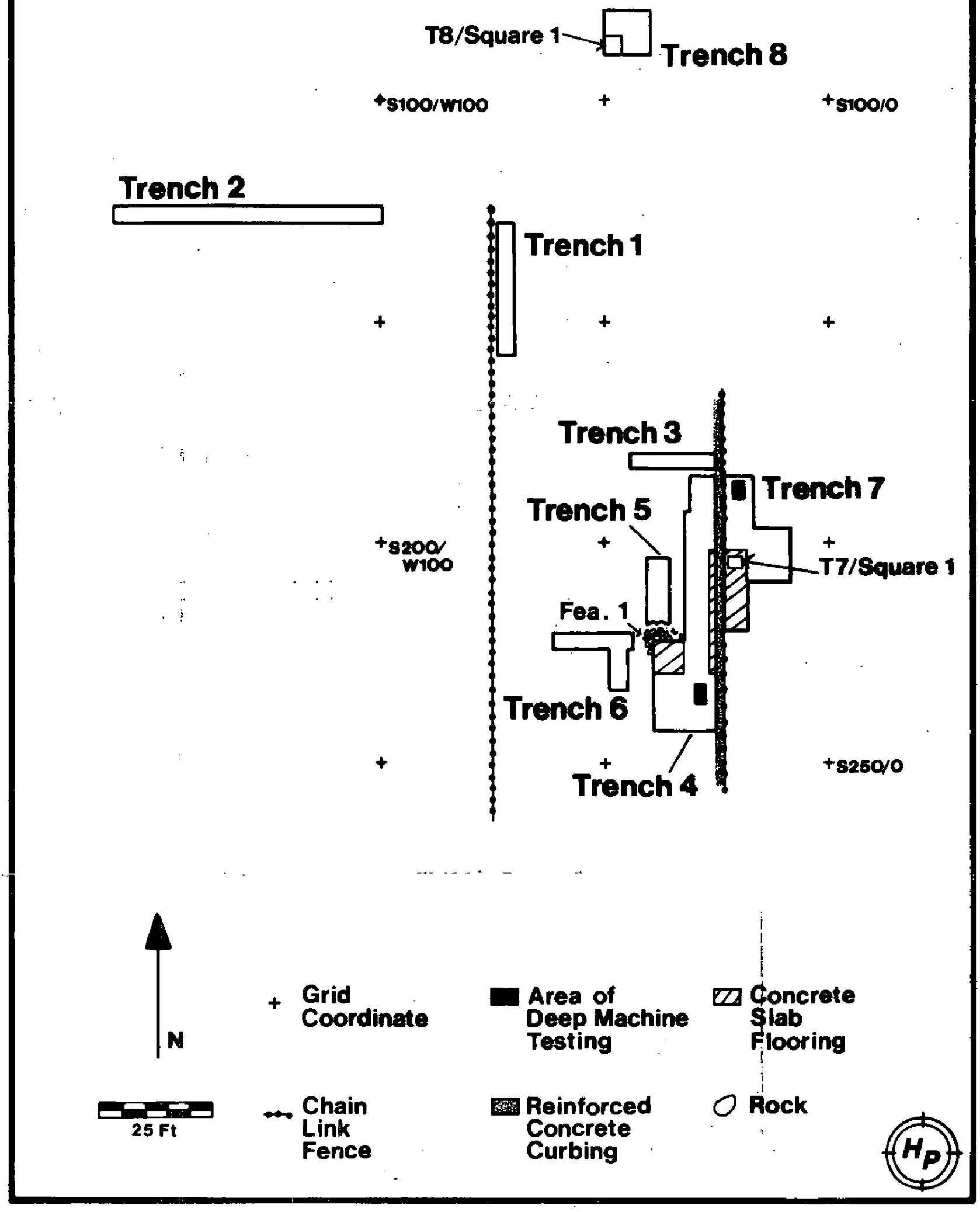
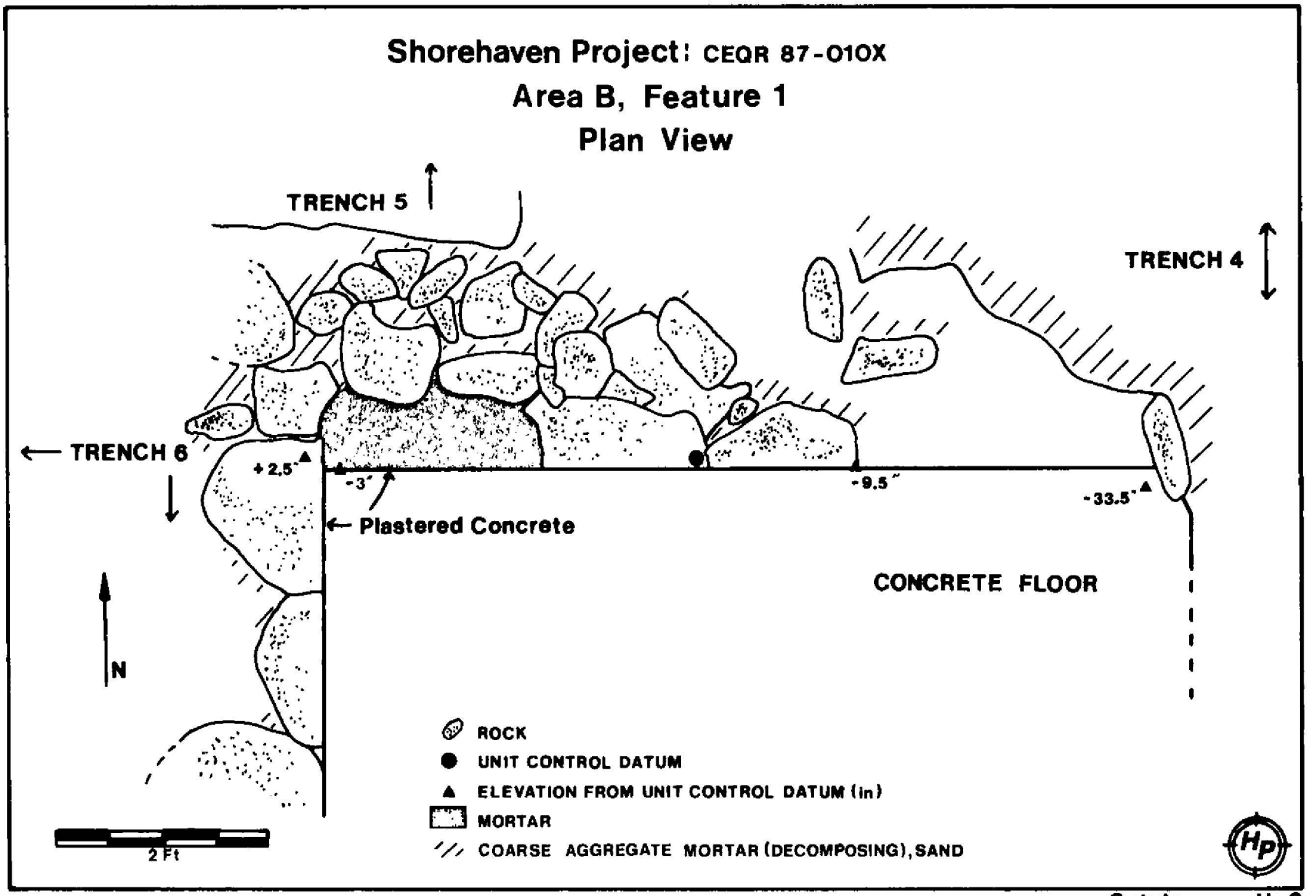


Figure 4

Figure 5

c. 1948 Photograph of the Cornell/Willett/Clason farmhouse, later renovated and expanded into Clinton Stephens' Clason Point Inn. View is west to east.

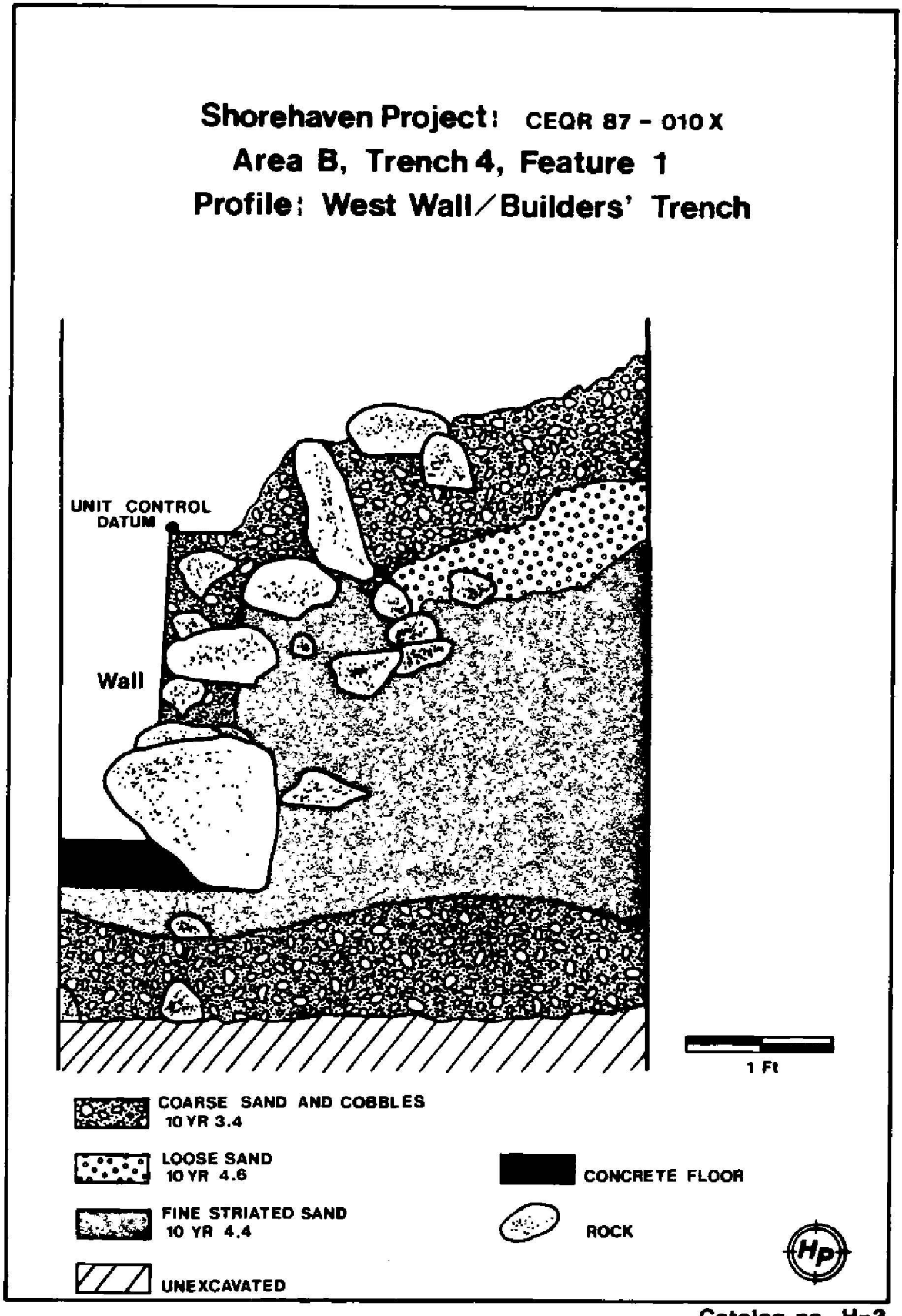
The frame addition is noted by an arrow.



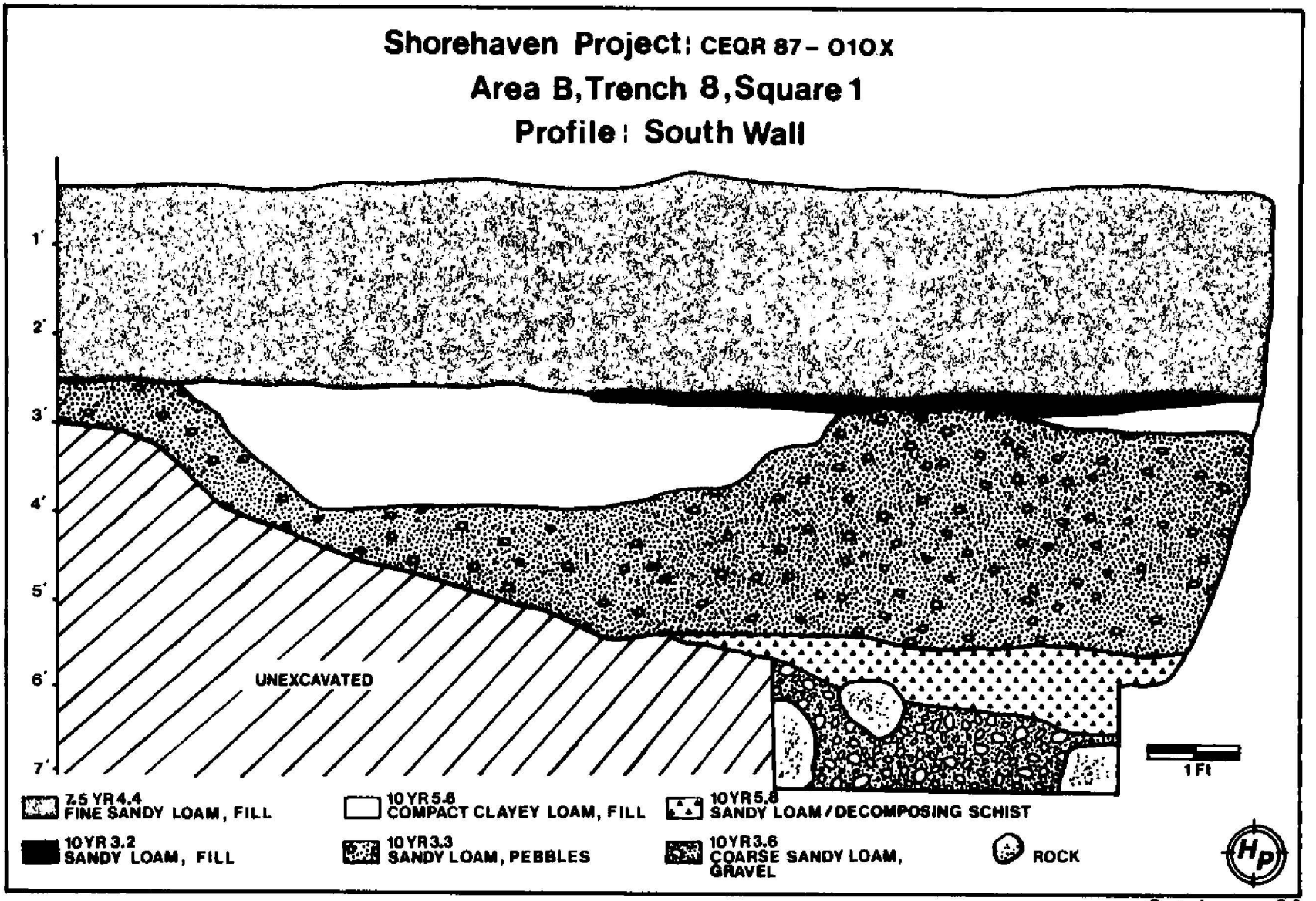
Catalog no. H-2

Figure 6

Figure 7

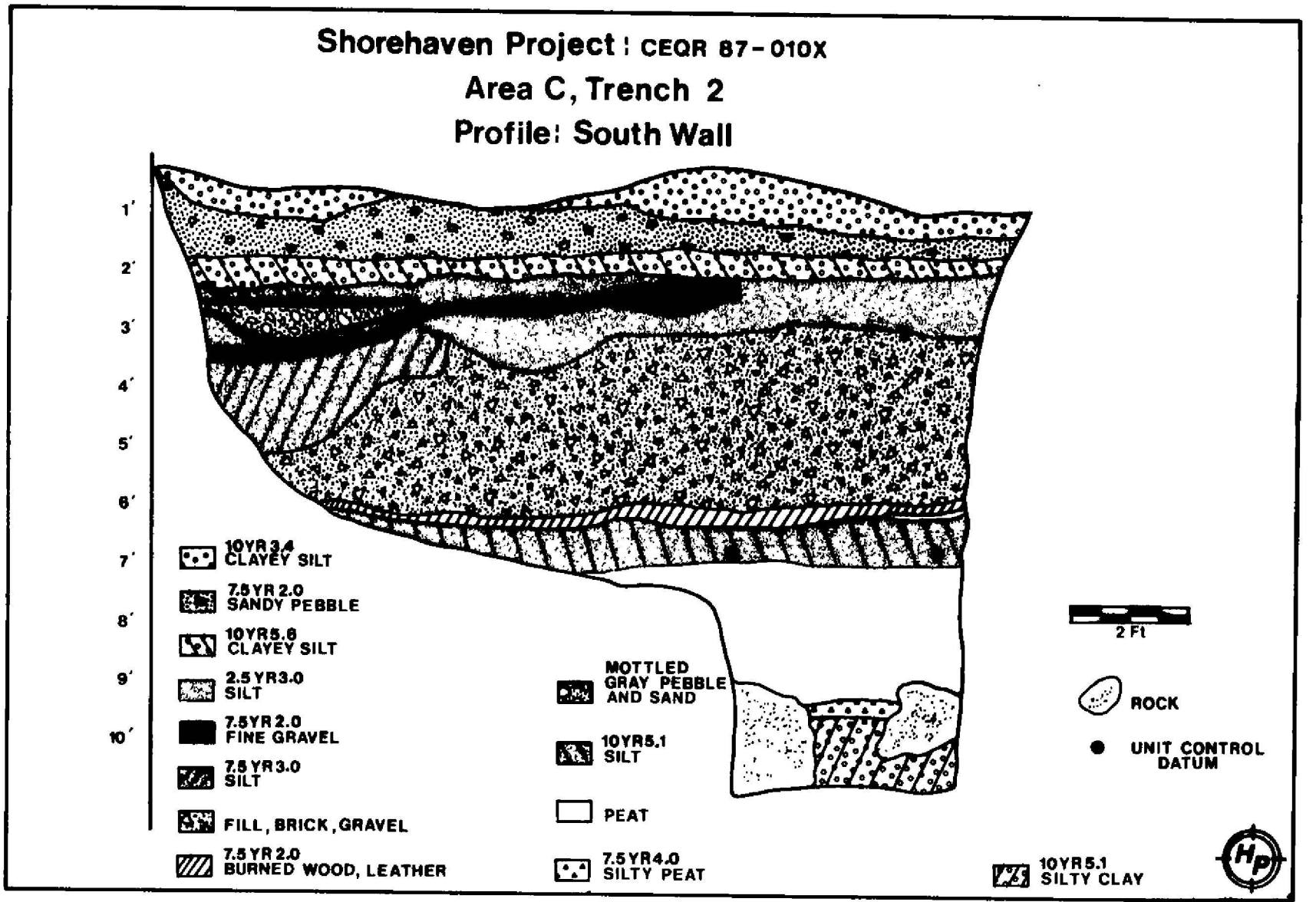


Catalog no. H-3



Catalog no. 36

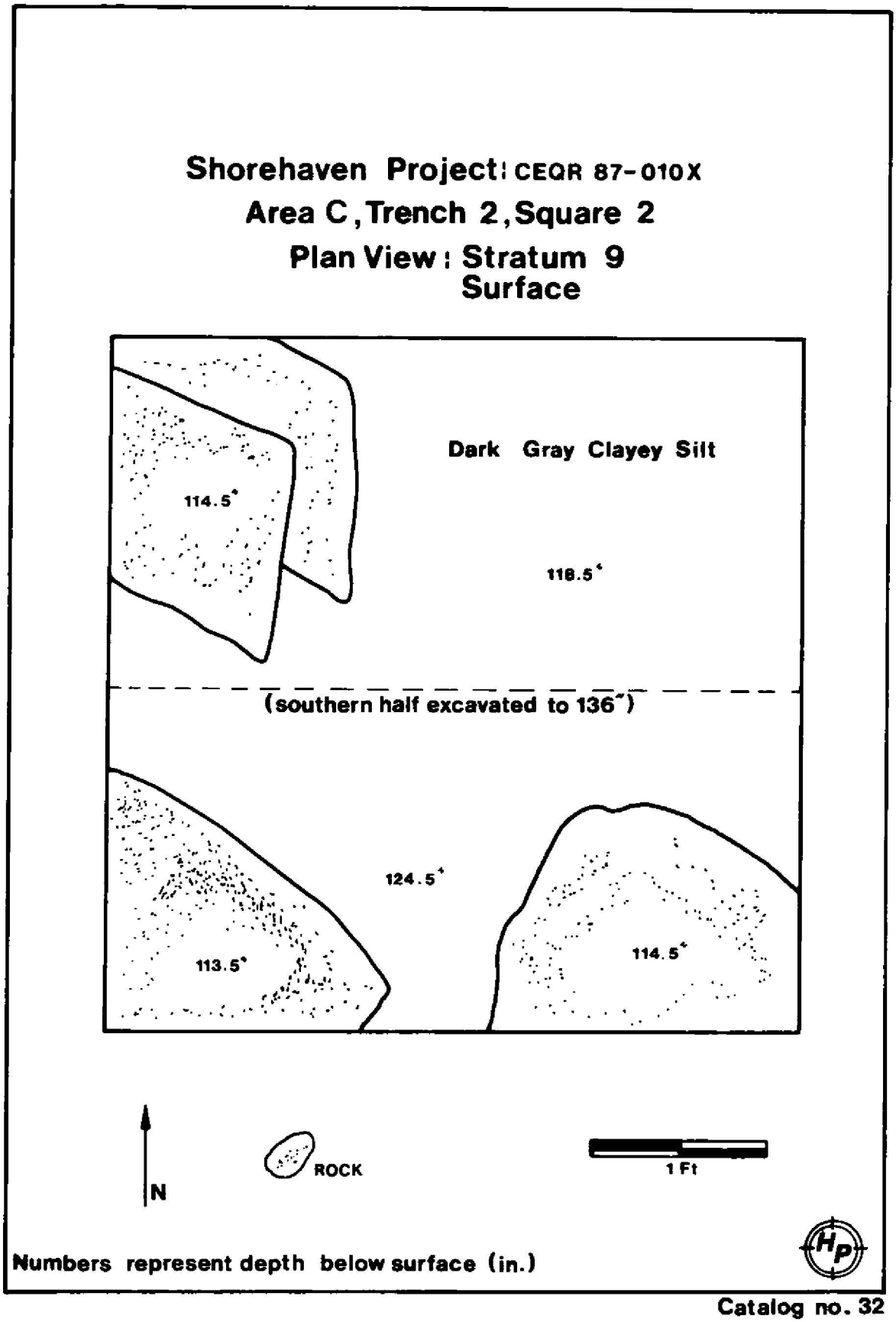
Figure 8



Catalog no. 31

Figure 9

Figure 10



Catalog no. 32

Shorehaven Project, Bronx, New York, CEQR 98-010X:
Phase 1B
Archaeological Laboratory Report

The Phase 1B archaeological study of the Shorehaven Project included artifacts and ecofacts retrieved from Areas A, B, and C. Due to safety considerations, Area D was closed without having any artifact collection. The excavated cultural materials were given catalogue numbers that related the artifacts to a combination of natural and arbitrary strata. See Appendix A for a break-down of 28 artifact categories by 33 catalogue numbers.

PREHISTORIC MATERIALS

Out of 33 catalogue numbers in Areas A, B, and C, there were 3 catalogue numbers with prehistoric materials only. These artifacts in Area A included a lithic core and flakes in an upper layer and lithic tools, cores, flake, and preform in a lower layer. There was neither any floral, faunal, nor ceramic evidence within the matrix of these two strata. These 2 catalogue numbers (9 and 15) sandwiched a culturally sterile zone, catalogue 13. Together, the 3 contiguous layers formed a discrete component in the lowermost 18 inches in Area A. These lithic materials were water-worn and considered not to have been found in situ.

In Area B, in the prehistoric test unit in an otherwise historical test area, catalogue 34 included only a possible jasper flake.

Two other catalogue numbers had prehistoric materials within matrices that also included historical materials. Catalogue 4 contained quartzite flakes and lay 12 to 18 inches above catalogue 9 in Area A. In Area C, catalogue 26 had a quartz point tip in silt below the peat layer. Both catalogue numbers 4 and 26 contained floral and faunal material in addition to the lithics and historical artifacts.

HISTORICAL MATERIALS

Thirty catalogue numbers in Areas A, B, and C, contained historical materials, with 3 of those catalogue numbers also having prehistoric artifacts. The bulk of the historical materials can be placed in two general categories: construction materials and carbon fuel (coal) and its by-products.1 A very small number of artifacts fall into the personal-clothing category. The functional categories of food storage and automobile transportation are represented in some of the glass artifacts. As for the category of monetary exchange, there is a single coin, a 1914 quarter.

FLORAL AND FAUNAL MATERIALS

Except for a couple of seeds, there is no other floral material besides the milled or worked pieces of wood that are included in the construction materials category under historical materials. As for the faunal material there is evidence for bone, carapace, marine shells, and a tooth. The floral and

faunal materials appeared only in the strata that contained both prehistoric and historical materials.

For a micro-level of analysis, soil samples were taken for every catalogue number. With the absence of significant prehistoric or pre-Civil War historical material culture, the decision was made not to proceed with soil flotation.

INTERPRETATION

Documentary and cartographic evidence, personal recollections, and the results of early twentieth-century archaeological investigations strongly suggested that the Shorehaven project Areas A, B, and C had a potential for undisturbed cultural remains. Historical Perspective, Inc.'s Phase 1B assessment for the Shorehaven project demonstrated that whatever cultural material was undisturbed as late as 1946, was intruded upon by the land-grading and land-filling episodes that were a part of the development of Shorehaven as a New York City summer club. To what extent cultural resources had survived intact was to be ascertained by the field testing described in this report.

The test pits in Areas A, B, and C indicated that the demolished seventeenth- through twentieth-century residential and recreational structures and other associated material culture were no longer part of the archaeological record. The negative evidence suggests that there must have been a tremendous land-scraping and removal of evidence for prehistoric encampments or occupations in addition to evidence for Clason Point Amusement Park structures as well as for the Clinton Stephens' Clason Point Inn, that was previously, in the seventeenth, eighteenth, and nineteenth centuries, the Cornell/Willett/Clason farmhouse. This removal of material evidence and the subsequent land-filling was in preparation for the 1946-1949 construction phases in which Shorehaven's swimming pools, shuffleboard courts, handball courts, and baseball fields became part of the cultural landscape.

Household ceramics are cultural indicators for both prehistoric and historical archaeologists, and there were none from the prehistoric time period and very few from the historical era. Of particular current concern to the New York City Archaeologist is the poorly documented pre-1865 era. The Principal Investigators, after consultation with LPC, designed the historical component of the investigations to concentrate on the possible resources that dated prior to 1865. Six of the total of 8 household ceramics sherds could possibly date to before the Civil War. Yet those 6 sherds that represent 3 ware types are also in production today, which limits their usefulness as a dating tool or as an indication of household function in the absence of other datable material culture.2

Not only is there an absence of the greater number of varieties of household ceramics ware types that were available to coastal New York during the seventeenth, eighteenth, and

nineteenth centuries, but there is also, with the exception of 1 fieldstone-laid wall and 1 concrete floor pad, an absence of the remains of the farmhouse, farm buildings and outbuildings, as well as amusement park structures. Based on the last 10 to 15 years of New York City archaeology, artifacts of glass, to a greater extent, and metal, to a lesser one, like much of the ceramic and architectural evidence, should have been part of the archaeological record, but they were present only infrequently.3

As a way of illustrating the lack of artifacts and ecofacts it is noted that from the thousands of cubic feet of earth excavated, the retrieved and catalogued artifacts fill only 5 post office trays, each of which measures 12" x 26" x 5". These 5 trays can be lifted by two people. The catalogued artifacts, by and large, are twentieth-century construction materials. See endnote 1 for a listing of the groups of materials. Other cultural material includes the coal and its by-products, which are more difficult to date. Coal heating stoves were available as early as the 1790s, but they and coal cookstoves did not become prevalent until sometime toward mid-nineteenth century.4 In the relative absence of other late eighteenth- and nineteenth-century datable material culture, it is hazardous to conclude that the cinders and clinkers date to the late eighteenth or early nineteenth century.

A combination of factors suggests that the evidence for pre-1946 cultural activities was removed before remarkably clean land-fill from another source was deposited on top of the peat, salt marsh, and the glacially deposited sands inland from the coastal zone. First of all, with the exception of the 3 lowermost strata in Area A, there was, in Areas A, B, and C, an admixture of historical and prehistoric material culture.

Besides the admixture of prehistoric and historical artifacts, other factors lead to the assumption that the boulder-, construction-material-, and clinker-filled soil matrix did not represent the material evidence from the demolishing of the farmstead and amusement park episodes of the project area's history. Not only was there a relative dearth of material culture in respect to the amount of earth removed in areas documented to have had occasional prehistoric or continuous historical activities, but there was also a relative absence of any pre-twentieth century artifacts. This suggests that, as part of the land-leveling and filling in 1946 and 1949, there was a great deal of land-scraping followed by hauling away to an unknown location of the material evidence for aboriginal activities and Euro-American settlement.

As for the 3 lowermost strata in Area A that included either only lithics or culturally-sterile soil, particularly in the absence of either marine shell or ceramics, it is tempting to interpret the data as evidence for a possible Amer-indian stone-tool manufacturing area. Yet 14 lithic artifacts show evidence of being water-worn and do not necessarily make for a stone-tool fabricating or retouching station. Their presence needs to be duly noted; nonetheless, the early twentieth century

archaeologists' excavated and documented evidence gives us a better picture of daily and ceremonial life of the Native Americans in the project area before the intrusion by Euro-American explorers and settlers.

In two important ways Historical Perspectives, Inc.'s Phase 1B assessment adds to our knowledge about the development of what in 1988 is coastal New York City. First of all, by excavating test pits through at least 2 layers of peat or into glacially-deposited sands, Historical Perspectives, Inc. provides LPC with stratigraphic geological- and floral-matrix data about prehistoric coast lines. Secondly, particularly in respect to historical land-fill, which in itself is evidence of cultural adaptation, Historical Perspectives, Inc.'s Phase 1B assessment of the Shorehaven area of the South Bronx demonstrates yet another pattern of soil moving and grading. The prevailing pattern that urban archaeologists have discerned over the last 10 to 15 years is that redevelopers of urban spaces either built through previous structures or else graded the demolished structures and constructed the next phase of urban development immediately above.

In the project area of Shorehaven it seems that nearly two thousand years of evidence of human accommodation to the site was removed in preparation for a mid-twentieth century coaptation of land use. The pre-1945 natural topography of the site, that is undulating hillocks and wetlands, seemed, at first glance, unsuitable for a swim club design incorporating ball fields, ball courts, sunning decks, and shuffleboard courts, all requiring flat, dry surfaces. Yet the presumed grading of the hillocks in addition to the leveling and draining action accomplished by a combination of large-grade geological aggregate and relatively uniform coal ash provided a solid base for an even, well-drained surface.

The Shorehaven Beach Club therefore adapted a coastal environment to summertime recreational activities so that the New York City club members could enjoy beachfront activities without sand in their shoes and the East River in their bathing suits. Thus, Historical Perspectives, Inc.'s Phase 1B assessment increases our understanding of the physical environment's changing impact on mankind's exploitation of its natural resources in addition to the mid-twentieth century's impact on the natural and cultural environment.

1. See Appendix A for a tabular form of what follows. The artifacts that make up the construction materials category include: a bakelite fragment, brick, ceramic conduit, cinder block, concrete mortar, window glass, metal, mortar, plaster, Plaster of Paris, slate, and wood. Within the category of metal there are: a "female" coupling, screws, U-rods, wire, and wire nails. Within the wood category are: bark, a barrel lid rim fragment, a cylinder, a painted fragment, planks, a plywood disc, a quarter round fragment, a chair (?) rung, a shingle, and slats. The coal and its by-products category include: cinder, clinker, coal, and slag. The artifacts that compose the personal-attire category include: a milk glass button, leather shoe soles, and a piece of textile. Brown, green, as well as clear, bottle glass makes up the food storage category for glass. There are also some tin can fragments, some with evidence of "church key" openings. Other man-made artifacts include flat strips of rubber and a plastic disc. Then there is the 1914 quarter.

As for the marine shell category, it includes: mussel (?), oyster, periwinkle, quahog, scallop, slipper shell, soft-shell clam, and whelk. Other faunal material includes: a carapace (turtle?), a scapula, a tooth (sheep or goat designated by R. Schaffer), and a cow vertebra (designated by S. Baugher). The floral material includes: a Sycamore (?) flower head or seed (designated by R. Schaffer), a miscellaneous squash or pumpkin seed, and an English walnut hull.

2. There were a total of 6 sherds excavated and 2 sherds picked up in a walk-over. The excavated sherds include: 1 yellow ware bowl rim sherd found in Area A, catalogue 1; 1 white ware possible foot rim sherd found in Area A, catalogue 3; 1 parian sherd and another 2 white ware sherds, possibly a foot rim, in Area A, catalogue 4; and 1 white ware sherd found in Area C, catalogue 6. The 2 sherds found in the walk-over include: 1 fragment of brilliant blue Fiesta ware and 1 white ware sherd with a transfer-print mark that reads:..."Key/...York/...ng & Co Ltd/...NGLAND."

The Fiesta ware is clearly twentieth century and the marked piece is probably post-1891 when the McKinley Act required country of origin noted on imported goods. While the earliest dates of manufacture for the yellow ware, white ware, and the parian were antebellum, they continue to be produced today. Thus, with so few sherds and without other categories of datable material culture, it is not possible to give a date for either the acquisition or deposition of the material.

See G. Bernard Hughes, The Country Life Collector's Pocket Book of China (London: Country Life, 1977); William C. Ketchum, Jr., Pottery and Porcelain, (New York: A Borzoi Book published by Alfred A. Knopf, Inc., 1983); Ivor Noel-Hume, A Guide to Artifacts of Colonial America (New York: Alfred A. Knopf, 1976); Stanley South, "Evolution and Horizon as Revealed in Ceramic

Analysis in Historical Archaeology, " in Robert L. Schuyler, ed. Historical Archaeology: A Guide to Substantive and Theoretical Contributions (Farmingdale, NY: Baywood Publishing Company, Inc., 1978), pp. 68-82; John Spargo, Early American Pottery and China (Rutland, VT: Charles E. Tuttle Company, originally printed 1926, reprinted 1974).

3. Sydne B. Marshall, "Survivals of Prehistoric and Early Historic Archaeological Resources in Urban Contexts," in Olga Chesler, ed., Historic Preservation Planning in New Jersey: Selected Papers of the Identification, Evaluation, and Protection of Cultural Resources (Trenton, NJ: Office of New Jersey Heritage, Department of Environmental Protection, CN 402, 1984), pp. 6-41; Roy S. Dickens, ed., Archaeology of Urban America: The Search for Pattern and Process (New York: Academic Press, 1982); Edward Staski, ed., Living in Cities: Current Research in Urban Archaeology, Special Publication Series, Number 5, edited by Sarah Peabody Turnbaugh for The Society for Historical Archaeology, 1987.

4. Frank G. White, "Stoves in Nineteenth-Century New England," in Antiques at Old Sturbridge Village, reprinted from The Magazine Antiques, September and October 1979, pp. 592-599; J. Ritchie Garrison, "The Cookstove in Franklin County, Massachusetts," a paper presented at the 1982 Dublin Seminar for New England Folklife conference on Foodways in the Northeast, June 26, 1982.

Appendix A

Shorehaven Artifact Categories Listed by Catalogue Numbers 1-12

Artifact Category	Catalogue Number											
	1	2	3	4	5	6	7	8	9	10	11	12
Bone				4								
Brick				4	5	6	7	8		10	11	12
Button												
Carapace												
Ceramics	1		3	4		6						12
Cinder				4	5		7					
Cinder Block											11	
Clinker												12
Coal					5	6					11	12
Coin												12
Concrete Mortar						6				10	11	12
Glass			3	4	5	6	7			10	11	12
Leather					5							
Lithics				4					9			
Marine Shell				4	5	6		8		10	11	
Metal			3	4		6					11	12
Mortar				4								
Paper												
Plaster										10	11	
Plaster of Paris						6						
Plastic				4								
Rubber										10		12
Seed				4							11	
Slag				4	5	6	7					
Slate												
Textile												12
Tooth												
Wood		2		4		6				10		12

Shorehaven Artifact Categories
Listed by Catalogue Numbers 13-24

Artifact Category	Catalogue Number 13	15	16	17	18	19	20	21	22	23	24
Bone							20				
Brick			16	17	18	19	20	21	22		24
Button											
Carapace											
Ceramics											
Cinder						19	20				24
Cinder Block											
Clinker			16	17							
Coal			16								24
Coin											
Concrete Mortar					18	19	20	21	22		24
Glass				17	18	19	20		22		
Leather							20				
Lithics		15									
Marine Shell			16	17	18	19	20		22	23	24
Metal				17	18						
Mortar											
Paper										23	
Plaster									22		
Plaster of Paris											
Plastic											
Rubber											
Seed											
Slag					18	19	20		22		24
Slate											24
Textile											
Tooth							20				
Wood			16	17	18	19	20		22	23	24

Shorehaven Artifact Categories
Listed by Catalogue Numbers 25-34 and H1-H8

Artifact Category	Catalogue Number									
	25	26	27	28	29	34	H1	H5	H6	H8
Bone			27							
Brick	25	26	27	28			H1	H5	H6	H8
Button								H5		
Carapace	25									
Ceramics								H5		
Cinder			27					H5		
Cinder Block										
Clinker										
Coal		26		28				H5		
Coin										
Concrete Mortar		26	27							H8
Glass		26	27				H1	H5	H6	H8
Leather										
Lithics		26				34				
Marine Shell		26	27					H5	H6	
Metal		26	27					H5	H6	H8
Mortar										
Paper										
Plaster	25		27				H1			
Plaster of Paris										
Plastic		26								
Rubber										
Seed										
Slag		26	27	28	29			H5		
Slate										
Textile										
Tooth										
Wood	25	26								

February 1, 1988

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