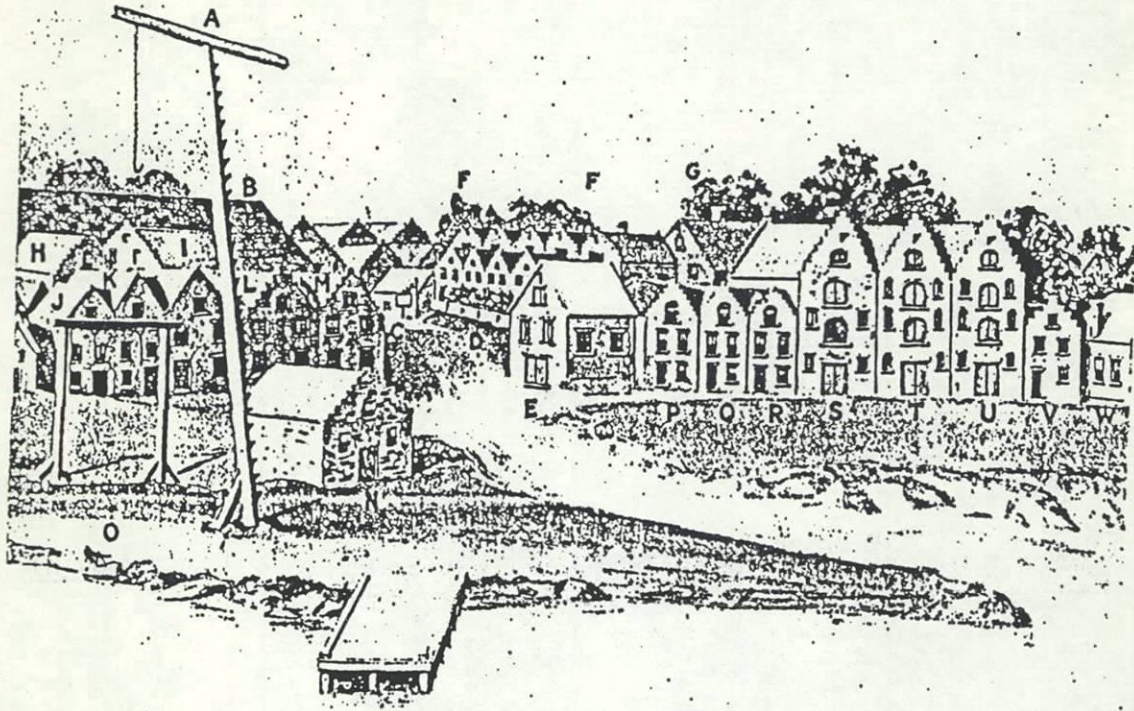


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G Broad Street Plaza Site

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PHASE II REPORT AND MITIGATION PROPOSAL
FOR
AREA II, (LOTS 8 AND 10)
THE BROAD STREET PLAZA SITE, N.Y., N.Y.

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Principal Investigator

October 12, 1983

GREENHOUSE CONSULTANTS, INCORPORATED
Proposal No. 32-83-0005

Prepared For:
Fox and Bowle Architects, P.C.

HRO International, LTD.

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INTRODUCTION

This summary of results and mitigation proposal for the two eastern most lots of Block 10 will address those sectors of the site where archeological testing has documented the survival of intact 17th century occupation surfaces covered by 18th century destruction debris, both sealed undisturbed, beneath the 19th century brick basement floors.

* [Beneath the brick floors of both Lots 8 and 10, the control test units documented the presence of a clear vertical stratigraphic record spanning from the 17th through the 19th centuries and the presence of in situ architectural features, wall alignments, cobble surfaces, a drainage ditch and a 17th century cistern across each of the buried surfaces in both lot areas.

This report will document on a unit-by-unit basis the stratigraphic record as it can be defined to this point, the materials and techniques of construction encountered, the numbers and chronological placement of the diagnostic artifacts associated with each period of occupation and finally, a photographic record of key artifacts recovered which as a group, fix the time ranges of each of the major strata observed during the test excavation phase. A total of 1261 artifacts were excavated, screened, cleaned, stabilized, catalogued, numbered and stored as of December 7, 1983, from Area II.

The following report is divided into 6 sections: 1) an overview of the total testing program contrasting the results between Areas I and II of Block 10; 2) A discussion of artifact processing techniques utilized; 3) A tentative projection of artifact densities expected from Area II based on the testing to date; 4) Data recovery recommendations for the available exposed area of Lots 8 and 10 and finally, 5) a brief discussion of the data recording and documentation procedures presently in use and planned for the mitigation phase.

Detailed strata specific excavation unit summaries are incorporated into the captions accompanying the photographic record. In addition, tabular summaries of the number of artifacts from each context, or stratigraphic entity, within each excavation unit, are detailed in Appendix 1. These quantified summaries also indicate the key chronological indicators from each level of each unit encountered in both lots. Primary emphasis has been placed on the identification and photo-documentation of the latest dateable artifact or T.P.Q., (Terminus Post Quem) from each unit of natural stratigraphic deposition.

OVERVIEW OF TESTING PROGRAM AND RELATIVE DATA POTENTIAL
OF SITE

The four week testing program which ended on December 7, 1983, provides a controlled basis for characterizing different lot areas of the surviving historic waterfront block at three different levels, each reflecting the relative stratigraphic integrity and information potential, as well as accessibility during the testing phase. At the same time, the differences in past impacts and differential levels of information potential within each of these site areas will, to a large extent, also determine the timing and data recovery strategy being proposed.

The results to date contrast sharply with the expected depths of 19th and 20th century basements suggested by the available, but fragmentary documentary record. While preliminary documentary work indicated considerable variation in the 19th and 20th century basement depths, the exposed remains reflected a radically different situation. Instead, some time in this period, lots of the six basements, excluding the uncleared Lot 11, were cleared throughout most of their lengths (in studied areas) to uniform depths of between 6 and 9 feet below the sloping modern grade of the former parking lot. Although generally deeper and more uniform in depth than indicated by the documents, this difference of up to 2 feet appears to have determined the relative survival and integrity of many of the earlier remains throughout the site.

This consistent difference in basement depths between the eastern and western ends of the site provides a basis for dividing the proposed mitigation plan into three phases and, at the same time, three levels of intensity based on the information available to date. As indicated on the schematic site plan (fig 1), Area I consists of the three lots adjacent to Whitehall Street (Lots 12, 13 and 14) of uniformly deep 19th century basement depths. Area II, made up of Lots with 8' basements, defines the well preserved early historic remains defined in Lots 8 and 10, next to the Clearing House. Area III incorporates all of the as yet unexposed portions of the site, including Lot 11 between Areas I and II, the trailer area along Bridge Street and the unexposed ca. 15 foot wide heavy equipment access ramp running along Pearl Street.

AREA I: 4200 sq. ft.; 27% area of total Block 10.

The three historic basements adjacent to Whitehall Street, (Lots 12, 13 and 14) were consistently 0.9 feet deeper than the basement floors exposed at the opposite end of the site in Lots 8 and 10. (The upper surface of Lot 14 was at +1.08 feet Manhattan datum; Lot 8 at 1.96 feet above Manhattan datum). This contrast was enhanced by consistent difference in the thickness of the floors themselves. In Lots 12-14, the test cuts consistently revealed a ca. 1 foot thick, 4 course

series of brick and cement floor deposits. However, the higher basement floors in Lots 8 and 10 were, in contrast, composed of only one to two courses of brick, topped by a layer of blacktop in Lot 8. Taken together, these two patterns at either end of the project site mean that the western basement floors intruded into the earlier deposits nearly 1.8 feet deeper than was the case at the opposite, Clearing House end of the block. These different patterns of basement depth determined the relative survival of the earlier basement remains identified throughout the site.

In summary, Area I (Lots 12, 13 and 14) suffered greater levels of disturbance from subsequent 19th century remains. The six controlled and deep tests within these three lots however, have consistently documented the survival of architectural elements, truncated pits, and cisterns and/or wells, below the thick brick and cement basement floors. Wall alignments are still identifiable, large stone slabs, possibly relating to earlier building elements remain in place, and the one truncated well and/or cistern identified in the limited area tested contained 3314 late 17th and early 18th century artifacts and remains. Thus, although partially disturbed, the surviving remains warrant expanded area exposure to identify overall patterns and interrelationships of the architectural remains and truncated features.

AREA II: 2700 sq. ft. 22% of Total Area

The second area within the six lots of Block 10 consists of the identified remains under the higher and shallower basement floors of Lots 8 and 10. Immediately under the brick floors in both lots, the four 5x10 foot test units revealed a dense mass of heavy stone destruction debris.

As the overhead photographs document, not only does this upper destruction zone contain diagnostic artifacts and information on construction materials and technology, but also within in the rubble, this birds'-eye-view permits the definition of structural details, building outlines and spatial patterns which are clearly and accurately discernable from above, but not often recognizable on the ground. (Plate XII).

In each of the test units investigated, once this rubble and destruction stratum was removed, the field crews came down on what appear to be undisturbed surfaces and features dating to the 17th and 18th centuries. In both lots, these surfaces varied between cobble and plaster destruction debris from collapsed walls. (Given the limited area exposure, it is not possible to identify interior versus exterior surfaces). Within Lot 10, the first test unit revealed a brick lined drain running under the walls between the two lots, bounded on the south (Pearl Street) side by cobbles and by fallen wall plaster on the stone slabs on the opposite (Bridge Street) side. On this surface in Lot 10, was a 17th century pipe stem, (1630-1700), and a late 17th to early 18th century

sherd of yellow slip decorated "combware".

In the adjacent 5x10 foot unit in Lot 8, (Fig. 1) the test cut revealed a similar pattern of heavy stone destruction debris, and beneath this a fragmentary cobble surface overlying a thick oil impregnated lower stratum containing a variety of diagnostic 17th and 18th century artifacts. The concentration of oil had originally filled a post 1820 builder's trench associated with the most recent stone wall separating Lots 8 and 10. In addition to an early ca. 1630 Dutch pipe bowl, the mud fill of the builder's trench contained a well preserved thimble and copper token with the date of 1590 clearly visible. Also recovered was an early glass press molded "raspberry" prunt, diagnostic of 17th century table glass. The latest artifact within the builder's trench fill indicates that the wall was built through the early 17th century surface, after 1820.

In the northern end of Lot 8, next to both Bridge Street and the Clearing House, a 5x10 foot test unit revealed the same upper stratum of stone rubble with three stone alignments visible in the overhead photographs. Beneath this upper deposit, two deeper exposures under the rubble revealed a thin deposit of refuse overlying an off-white silt stratum on the south side of one wall. A three foot deep cut indicated that the substrate was sterile below. On the opposite side of this "wall" the stratigraphic situation was different. Here, beneath a ca. 5 inch layer of historic refuse, the field crew exposed and defined the bottom of a plastered cistern within a thin arc of brick which ran under the stone "wall" alignments of the rubble. On the top of this plaster base of the cistern, the crew recovered a multicolored "Venetian" glass bead similar to 17th century examples recovered from a contact period burial site in Rhode Island. Also in this fill covering the cistern, were 2 diagnostic pipe stems, postdating 1680 and 1710, which, together indicate that the cistern was abandoned after the first decade of the 18th century.

Based on these insights, it is apparent that the exposed areas of Lots 8 and 10 contain at least two distinct strata, one dating to and reflecting the 17th century occupation surfaces of the original Dutch settlement in Block 10, and above this a distinctive later historic stratum of apparently 18th century destruction and architectural remains. The tests to date further indicate that in addition to being characterized by a demonstrably high degree of stratigraphic integrity with vertical and horizontal patterning of temporal and spatial significance, the historic deposits are vertically confined to a ca. 2 foot thick zone of study in Lots 8 and 10. Once exposed, of course, intrusive pits may extend into the substrate below.

AREA III: 6100 sq. ft. 50% of Total Area

Given its position between the two areas, the uncleared area of Lot 11 remains undefined in terms of the depths of recent basement intrusions. Until determined, its information potential and the relative stratigraphic integrity of any materials which may be present, remains undefined. However, given the uniform depths of basement floors and the high degree of integrity encountered in the buried historic strata in the central portions of Lots 8 and 10, it is reasonable to project that the front and rear sectors of these lots under the dirt ramps along Pearl Street and under the trailer areas along Bridge Street contain similar in situ buried 17th and 18th century historic deposits.

DATA RECOVERY RECOMMENDATIONS: AREA II

Based on the stratigraphic record from the testing in Lots 8 and 10, the mitigation of Area II will focus on the vertical and horizontal sampling as each of the three deposits: 1) the 18th century destruction debris; 2) the original 17th century cobble surfaces and 3) the underlying white clay-silt substrate which may contain intrusive features. Together, these deposits could help understand both the chronology, architectural history, trade patterns and early solutions to the problem of living in a near water table setting during the first century of New York's initial Dutch settlement.

^{1 crew}
^{17 people} Depending on relative crew availability and the rate of data recovery in Area I, 2-4 field crews of equal size (1 supervisor, four diggers and two screeners) will concentrate under two 400 sq. ft. heated shelters within Area II (the exposed areas of Lots 8 and 10) for a period of four weeks. The exposure strategy of an alternating rectangular 5x10 foot grid will be used as in Area I, but here the exposure rate will be slower and stratigraphic and spatial data more complicated and data intensive. Based on the limited sample of this area during the testing phase, field records show that at least 15 person days are required to clear down to the original 17th century occupations per 50 ft. area.

The actual strategy for the locations and orientations of the 5x10 excavation units will be determined by the available area, and the timing and speed of the Area III fill removal process which will be ongoing during the initial controlled excavation phase for Lots 8 and 10 of Area II. At present, and during at least the first week of the excavation, Area II is exposed and available for study within a 30x60 ft. rectangle beginning 30 feet from Pearl Street. Given the simultaneous excavation of Area I under the four steel-ribbed quanset huts available, it will be necessary to construct 2 20x20 plastic frame shelters for Area II which will provide an 800 square foot rectangular excavation enclosure.

This configuration will permit ample room for the simultaneous exposure of 6 alternating rectangular 5x10 excavation units along a existing grid lines and if encountered features warrant, the lateral exposure of adjacent five foot squares on either side of these six units. As initially planned, each of these six units would be taken down first to the rubble surface throughout the enclosure area, photographed with the overhead camera system, measured with the electronic transit and then excavated in two additional stage, first to the level of the original 17th century cobble surface and then as a group, down to the underlying white clay soil which has been previously documented for this end of the site. Finally, this original surface will be examined in each exposure unit for subsurface intrusions or features and, where encountered, recorded and excavated.

This pattern would provide three 15 foot long continuous profiles and two continuous 40 foot profiles of the vertical stratigraphic sequence across all of one lot and one third of the adjacent lot. Once available, the addition of one or two 12x20 foot hemisphere steel-ribbed quanset huts along the rear wall of the New York Clearing House would provide an additional 480 feet of excavation area and continuous stratigraphic profiles across both lots. This addition would be possible once the 9 5x10 excavation units projected for Area I are completed and the shelters from this sector of the site become available. Assuming 2 additional 12x20 enclosures, it will be possible to excavate 10 5x10 units in Area II at any one time after the first ten days of the mitigation phase and the completion of Area I.

Excavation Rates

Excluding the irregular exposure test area in the northeast corner of Lot 8 next to Bridge Street and the New York Clearing House, task effort or labor intensity estimates can be tabulated from three 5x5 excavation units cleared within Lots 8 and 10. Although the actual person day effort per 5x5 unit varies according to the relative stratigraphic complexity, the labor intensity records taken during the test phase in Area II indicated 12-14 person days per 5x10 foot square without the presence of a complex internally stratified feature. Where features were encountered, the labor intensity required an additional 10-20 person days to completely excavate a 5x10 unit. These projections suggest that at a minimum a checkerboard grid pattern would require no less than 500 man days to excavate on the order of 36 5x10 units within the presently exposed lots in Area II. Assuming three crews of seven each, this would require twenty-four days for this area alone. At least one additional crew would simultaneously be involved with the testing of Area III which incorporates all of Lot 11 and the presently uncleared field areas along both Pearl and Bridge Streets.

Didn't we agree on a 50% sample

This would be a 100% sample

If this is smaller than area I, which had a total size for 36 units, how do you get 36 units?

DATA RECORDING AND DOCUMENTATION PROCEDURES

In general, at least 50% of archeological field activities are taken up by recording procedures. Conversely, this fact implies that the rate of a rescue excavation project depends on the efficiency and precision of the recording techniques utilized. Given the diversity and integrity of documented 17th Century Dutch remains beneath the basement floors, it is reasonable to assume that the overall speed of this data recovery program will depend on two factors: 1) the ability to work continuously with large crews under deep winter conditions with minimal interruptions and 2) the ability to augment the rate and scope of the recording procedures so as to complete this mitigation plan within the allotted time frame. Three immediate solutions are being actualized to meet these goals:

1. Protective Structures: The project staff has designed and is presently constructing two kinds of heated, wind-resistant protective structures. The first will consist of four 12x22 foot, double skinned, plastic covered and steel ribbed modular enclosures. These four units would cover 1056 sq. ft. of Area I for both excavators and screeners, and can be easily moved as the excavation progresses.

The second units would consist of larger 20x20 foot modules which when connected would provide coverage of 20x40 foot areas for a total of 800 sq. ft. and would be used for the intensive exposure of Area II, Lot 8 and 10. At present one is near completion and the elements of the second unit are ready for assembly. Together, these two systems will provide coverage for all areas sufficient to accommodate the projected crew size of 6 teams.

2. High Speed Measurement: In order to circumvent slowness and relatively low speed of precision of optical and manual recording, the project team has applied a recently developed electronic transit, together with an infield data recording and memory unit, capable of recording XYZ provenience points to a hundredth of a foot every two seconds. Recently developed by Zeiss Corporation, this Elta-46R unit consists of an electronic infrared EDM transt connected to a portable HX-20 computer. In order to meet the needs of this project, Zeiss programmers have developed an immediate measurement and conversion package which eliminates the human interface of angle-to-distance conversion. After each 2 second reading, the coded XYZ measurement is recorded in memory and printed out for immediate availability to field crews and stored for subsequent transfer to the onsite computerized data base. This unit is in place and fully operational.

3. Overhead Recording: As an additional time saving device, the project staff has adopted their previously designed overhead bipod system to run without interruption along a two-track overhead unit within each greenhouse to provide continuous stereoscopic, photomosaic, black light, color and infrared coverage of all excavation services. This approach will drastically reduce the time frame required to manually draw the location and spacial relationships of features and artifact patterns within the alternating rectangular 5x10 grid units under each greenhouse structure, without the need of repeatedly moving the structures during the excavation.

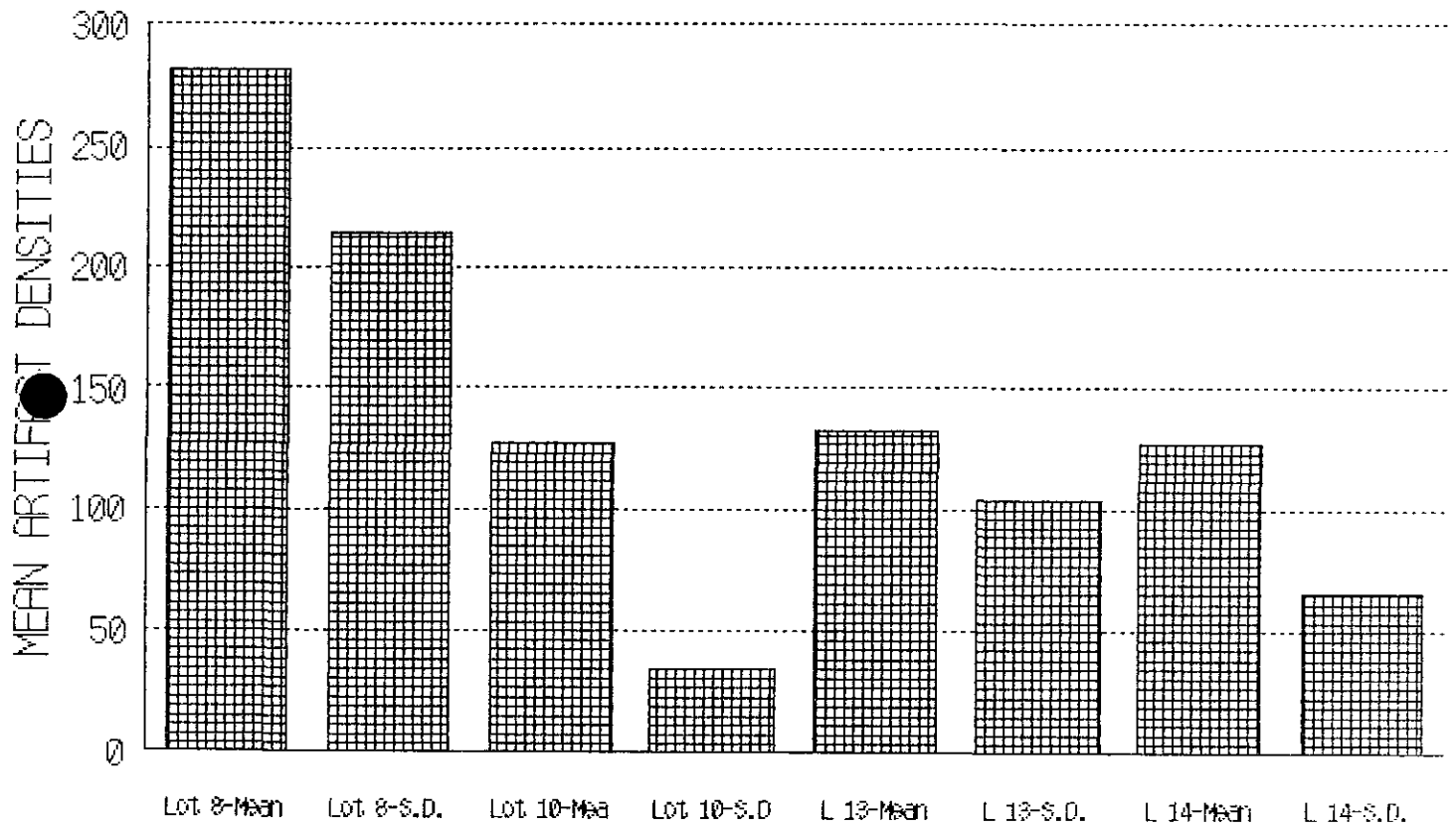
PROJECTED ARTIFACT DENSITIES AND STORAGE REQUIREMENTS
AREA II

The on-site processing, stabilization and tabulation of the excavated materials provided a basis for both characterizing the relative densities of artifacts on a lot by lot basis as well as projecting the volume of potential artifact yields during the mitigation phase for various areas of the site. The recorded densities have been rendered into graphic bar chart formats using Epson QX-10 VALDOX software. Figure 2 contrasts the minimum and maximum yields and Figure 3 contrasts the mean or averages against the standard deviation of totals tabulated for each unit within each lot. If the standard deviation is high relative to the lot mean, this ratio indicates a considerable variable in artifact densities between test areas within each lot. Conversely, if the S.D. is low relative to the computed mean, this ratio suggests a relation uniformity of artifact densities within each lot examined to date.

For Lots 13-14 within Area I, the average artifact yield from the controlled excavated units yielded totals ranging between 62-194 artifacts per 25 square foot or 5x5 unit, with a lot total of 384, minus the contents of the cistern/well. The mean was 128 with a relatively low standard deviation of 66.4.

For Area II, revised and current artifact counts for the three most completely excavated units showed a minimum and maximum range of from 64-395 artifacts with a total yield of 1261 artifacts for test excavations in both lots 8 and 10. This limited sample indicates a mean of 115 artifacts and a relatively high standard deviation of 119 per 5x5 test unit. These numbers indicate a considerable variation in the density of excavated artifacts between different units. However, taking the mean of 115 and assuming a projected excavation area of 36 5x10's, gives an estimate of no less than 11,000 artifacts excluding the possible contents of high yield features such as was encountered in Lot 14. This total represents the probable minimal count. Actual yields are expected to be much higher given the documented variability observed during the testing phase, and the expected recovery of various high yield features.

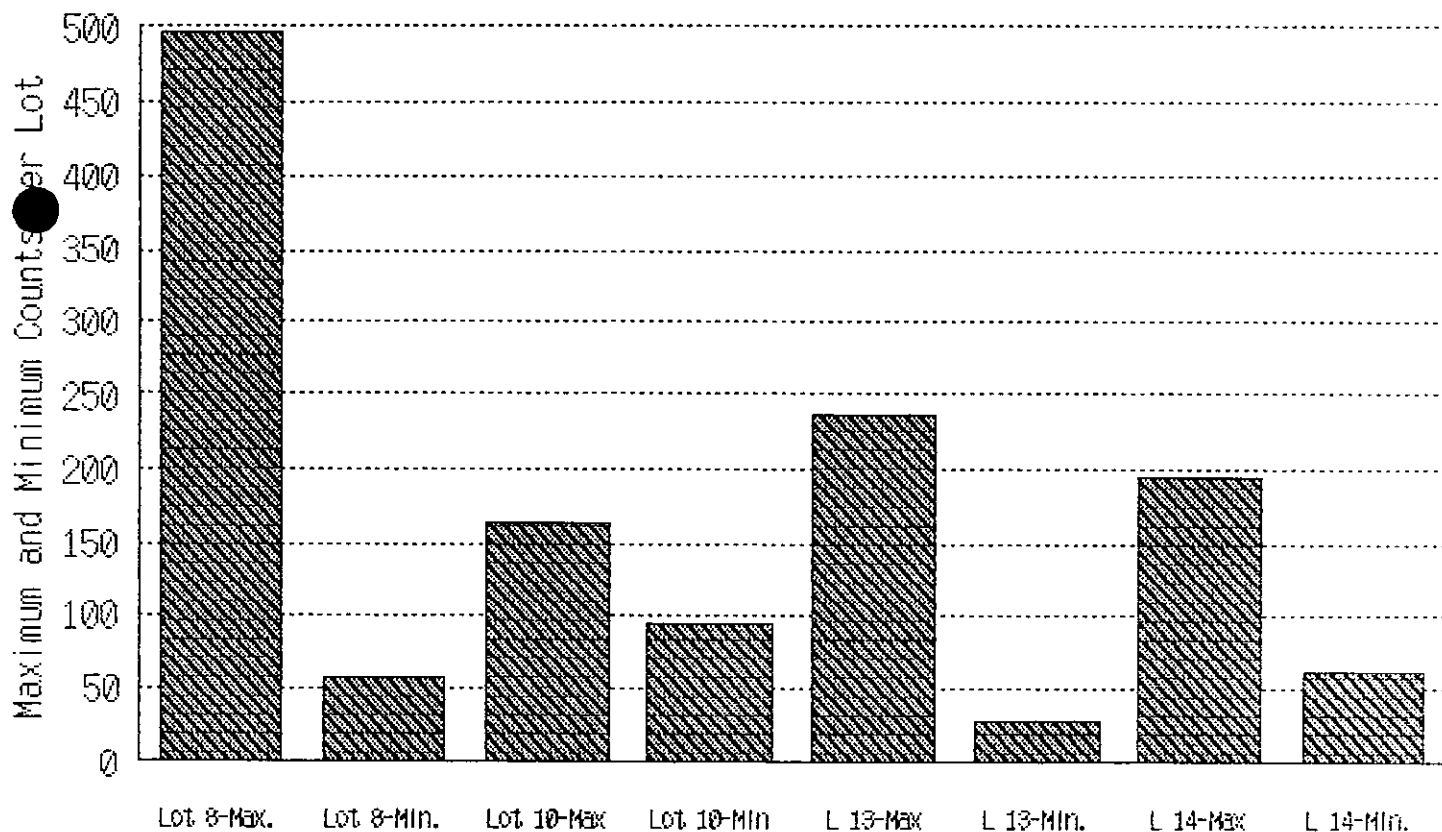
BLOCK 10: ARTIFACT DENSITIES (Per 5X5)



LOT COMPARISONS: Area I vs. Area II

FIGURE 2

BLOCK 10: ARTIFACT DENSITIES (Per 5X5)



LOT COMPARISONS: Area I vs. Area II

FIGURE 3

ARTIFACT PROCESSING

Water table fluctuation throughout the depth levels from which cultural materials were recorded was a major factor in designing the procedures developed for artifact handling. All materials were water degraded to some degree. Metals recovered from Area 1 were covered with heavy encrustations of corrosion products and in some cases were mineralized throughout as a result of exposure to alternating wet/damp conditions. The condition of organic materials was variable and will be discussed in more detail below. The presence of severely water degraded glass necessitated the implementation of specific treatment (consolidation) procedures as part of the routine processing phase. Providing appropriate packaging materials at each stage of the processing was also a major consideration. The handling of artifacts was organized into the following specific tasks: screening; cleaning; drying; cataloging; numbering and entering (into the computer formatted inventory) during excavation and at the field site.

Screening: Dry screening was performed only on those materials recovered from the uppermost levels. Water screening was the primary method of recovering artifact fragments. At the screens, artifacts were separated into 'material' (not taxonomic) categories and placed in polyethylene (open ended poultry bags) to prevent certain chemical reactions that can occur between some materials when in contact in the presence of moisture. Fragile or vulnerable objects encountered by the excavators were brought directly to the Conservator in the site lab trailer; or the Conservator was notified and immediately removed the the object herself using support braces and appropriate chemical pre-treatment prior to removal.

Cleaning: As all artifacts were wet when recovered, water cleaning was considered safe, as long as it was performed before the object was allowed to dry out. ORVUS Liquid (sodium lauryl sulfate, a pure, non-ionic, free-rinsing surface active agent) at very low concentrations was added to the wash water for all inorganic materials, with the exception of those which were held out for possible elemental analysis or other future testing. Mechanical tools such as brushes or probes were used only on the stable, dense materials, such as stoneware and clay pipes. Waterlogged glass and water degraded tin-glazed earthenware both exhibited friable surface layers which could not withstand scrubbing. These and other softer materials, like shell, were cleaned by soaking or removing particles with moving water. Some heavily corroded metal objects exhibited an encrustation layer which can be removed more easily when the object is wet. These were given to the Conservator, who determined the extent of solid metal core (physical examination only) and then removed the outer corrosion layer.

Drying: Three approaches were used for drying: 1) slow air drying on drying screens in an unheated portion of the site lab trailer; 2) slower air drying by placing in an open ended polyethylene bag with a small piece of damp sponge and allowed to remain there for at least one week; and 3) deferring the decision until either freeze drying or water replacement can be performed, and therefore maintaining water saturation, with thymol as a fungicide. The choice of procedure was dependent upon the condition and material class of the object and was determined by the Conservator. Solvent replacement techniques were not

attempted during the test period, but may be considered appropriate during the mitigation.

Cataloging: After one to two days on the drying screens, artifact fragments were classified (as a descriptive procedure) in accordance with the National Park Service Artifact Taxonomy, using only the Group, Class and Material common lists. The fragments were placed in 2 ml polyethylene zip-lock bags. A label printed on TYVIK high density polyethylene coated polyester fibers (a non-paper product) was prepared and placed inside the bag with the artifacts. The label can be read through the bag for future computer entry and, unlike paper, does not give off acids which can attack organic materials and metals. The following information is included on the label: 1) x y z coordinates (entered on only one label for the entire context); 2) context number; 3) number of fragments; 4) find code (from the Taxonomy); and a 'comments' section for an English description of the contents, other measures such as weight, and recording of treatment notes. For immediate use during the test phase the information from these labels was entered on to a computer format inventory page. This step will be eliminated during the mitigation by entering the data directly into the computer.

Numbering: All artifacts, except construction materials and heavily corroded metals were numbered. A thin film of PVA-AYAF (a medium molecular weight polyvinyl acetate thermoplastic resin) was applied with a brush to a small area on the surface of the object. The context number was applied using crow quill pens and India ink, and after drying, the number was covered with an additional film of PVA. The use of solvented PVA protects the number from wear and allows for simple reversibility.

Storage: Processed artifacts were stored in polyethylene bags which were placed, temporarily, in Leahy archive boxes. During the mitigation artifacts will be placed in museum quality storage cabinets which provide security, protection from stacking, and easy accessibility for study.

Treatment: During the processing, certain regular procedures were performed which can be considered stabilization treatment. Whereas organic materials require very slow drying to prevent dimensional change and damage to cellulose fibers, metals need to be relieved of all water as soon as possible in order to stop ongoing corrosion processes. Metal objects which were not in direct association with another material were dewatered by submerging in acetone for at least 30 seconds after cleaning, and then allowed to dry further in the usual way on the screen. Highly devitrified glass was allowed to dry without being touched. When it was completely dry, the friable surface layers were consolidated with from one to five applications of an acrylic thermoplastic resin (Acryloid B-72) in ethanol. It was applied with a brush or flowed on with a pipet and was prepared in very low concentrations (5%) in order to avoid a glossy appearance after treatment. The same consolidation treatment was also used on individual pieces of tin-glazed earthenware which were in danger of losing their glazed layer. The majority of the tin-glazed earthenware recovered from Area 1 was stable and did not require this treatment.

There was no visible evidence of heavy soluble salt concentrations in the ground water, at least not in the form of spalling surfaces of porous materials. During the mitigation, sample fragments of metals and ceramics will be tested for chloride content, and if high chlorides are present, routine soaking, and/or hot bath rinsing

techniques will be instituted.

A majority of the pipe fragments and many of the ceramic fragments did exhibit surface deposits which are the result of mineral salts in the ground water reacting with carbonates in the water and forming insoluble compounds. They are insoluble in water but can often be removed without damage to the artifact with chelating agents or solvents, both applied with a poultice. During the testing phase, this type of procedure was only used on three objects. It is useful when a mark or some diagnostic decoration has been obscured by the deposit. During the mitigation, this kind of procedure, (there are several variations on the procedure itself) will be performed regularly on fragments that are to be reconstructed, and on any individual fragment where it might reveal information.

Completely mineralized objects that require consolidation will be impregnated with microcrystalline wax. Copper alloy and lead alloy objects which have a solid core and do not require impregnation, will be immersed or vacuum impregnated with benzotriazole (a metal complexing agent which forms a moisture barrier on the surface as the result of a chemical reaction with the Copper ions) after which they may be coated with either wax or Incralac (an acrylic resin with additional benzotriazole included in its formulation), depending on their condition. All of the above metal treatment procedures will be performed after mechanical cleaning of the object under a stereoscopic microscope. Protective corrosion product layers can be retained in this way.

Only one organic object, (a wooden cutlery handle), recovered from Area 1, was considered as a candidate for freeze drying or water replacement with Carbowax. All other organic materials were deemed strong enough to undergo air drying and in no case was there severe checking or splitting during drying. The bone recovered from the well/cistern, (Lot 14, N73, E43), was in excellent condition and did not require special treatment, (other than ensuring that it was washed before it was allowed to dry out). In this particular instance the good bone preservation may be attributed to the oyster and other shell also present in the microenvironment. The shell served to help preserve the bone, but it is these same carbonates (calcium carbonate from shell) that may have created the insoluble salts on the ceramic and pipe fragments.

As of December 7, 1983, 5,408 artifact fragments were recovered, (4,093 from Area 1). All have been washed, stabilized, cataloged, numbered, and the data prepared for computer entry.

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ACKNOWLEDGMENTS

We would like to express our appreciation to Lawrence J. Majewski, Chairman, Conservation Center, New York University, for identifying the material of the double tooth ivory comb recovered from the well in LOT 14.

We would also like to express our thanks to Dr. Alan Stahl, Associate Curator of Medieval Coins and Metal, The American Numismatics Society, N.Y., for his positive identification of the 1590 Dutch coin.

Additional thanks goes to Meta Janowitz for advice and identification of 17th Century ceramics. The preparation of this report also benefitted from the insights and comments of Drs. Nan Rothchild and Diana Rockman.

CREDITS

Glass analysis by Joe Diamond.

Clay Pipe analysis by Diane Dallal.

Conservation and ceramic analysis by Melba J. Myers.

Drafting and cartography by Michael Davenport.

Close-up *photography* by Peter Namuth.

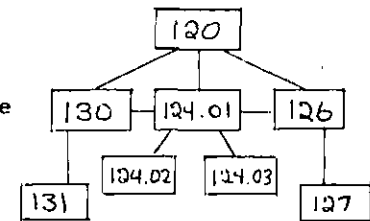
Black-and-White photographic printing by Karen Bluth.

UNIT DATA SUMMARIES

AREA II: LOT 10
UNIT N60/E135

TOTAL Artifact Count	T.P.Q. Comments (Others, Glass, Pipes, Ceramics)	CX	Interpretation	Harris Matrix
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17	Construction materials	120	Destruction rubble from C18 or * C17 buildings, immediately beneath C19 brick floor
64	Yellow slip Earthenware, 1670+	126	Lenses of silt and sand with a little building rubble just above cobbled surface
24	Whiteware, 1830+	130	Lenses of sand & silt with a little building rubble just above cobbled surface
0	No artifacts	124.01	Cover to brick drain
12	2 bottle fragments, mid C18	124.02	Silt within brick drain
0	No artifacts	124.03	Brick side of drain
0	No artifacts	127	Well laid cobbled surface
0	No artifacts	131	Patches of mortared stone slabs possibly remains of a floor



Total Without Feature:

105

Total With Feature:

117

Total CX:

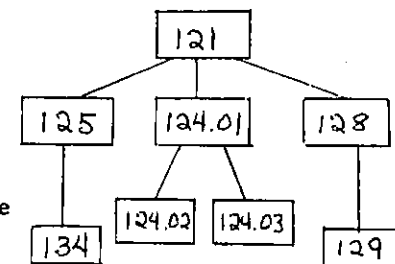
8

* - C, e.g. "C17" is equivalent to 17th Century

AREA II: LOT .10
UNIT N60/E140

TOTAL Artifact Count	T.P.Q. Comments (Others, Glass, Pipes, Ceramics)	CX	Interpretation	Harris Matrix
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18	Construction materials only	121	Destruction rubble from C18 * or C17 buildings, immediately beneath C19 brick floor	
60	Stem, 1710+; Transfer Printed Pearlware, 1795-1840; Banded Creamware, 1780-1810.	125	Lenses of sand and silt with a building rubble just above cobbled surface	
76	Slip decorated Earthenware, 1670+ English brown stoneware, 1671+	128	Lenses of sand & silt with a little building rubble just above cobbled surface	
0	No artifacts	124.01	Cover to brick drain	
12	Bottle fragments, 1620-1710	124.02	Silt in brick drain	
0	No artifacts	124.03	Brick sides to drain	
0	No artifacts	134	cobbled surface	
0	No artifacts	129	Well laid cobbled surface	



Total without feature:
154

Total CX:
8

Total with feature:

166

* - C, e.g. "C17" is equivalent to 17th Century

AREA II: LOT 10
UNIT N65/E115

TOTAL Artifact Count	T.P.Q. Comments (Others, Glass, Pipes, Ceramics)	CX	Interpretation	Harris Matrix
0	No Artifacts	137	Stone & brick rubble from C18 or C17 buildings *	137 ← 138
52	Whiteware, 1820+	138	Possible robber's trench; cuts Cx. 137	
Total without feature:		Total Cx:		
0		2		
Total with feature:				
52				

* - C, e.g. "C17" is equivalent to 17th Century

AREA II: LOT 10
UNIT N65/E120

TOTAL Artifact Count	T.P.Q. Comments (Others, Glass, Pipes, Ceramics)	CX	Interpretation	Harris Matrix
20		139	Stone & brick rubble from C18 or C17 buildings *	<div style="display: flex; align-items: center; gap: 10px;"> <div style="border: 1px solid black; padding: 2px 5px;">139</div> <div style="font-size: 2em;">←</div> <div style="border: 1px solid black; padding: 2px 5px;">138</div> </div>
52	Whiteware, 1820+	138	Possible Robber's trench, cuts cx. 139	
Total Without Feature:		Total CX:		
20		2		
Total With Feature:				
72				

* - C, e.g. "C17" is equivalent to 17th Century

AREA II: LOT 8
UNIT N65/E145

Total Artifact Count	T.P.Q. Comments (Others, Glass, Pipes, Ceramics)	CX	Interpretation	Harris Matrix
4	Bottle Neck	122	Destruction rubble from C18* or C17 Buildings, immediately beneath C19 brick floor	<pre> graph TD 122[122] --- 132[132] 122 --- 133[133] 132 --- 133 133 --- 135[135] 135 --- 136[136] 136 --- 180[180] 180 --- 182[182] 180 --- 181[181] 132 -.- ?[?] -.- 182 </pre>
0	No artifacts	132	Mortared stone slab, either destruction rubble of floor remnants	
67	Copper Coin, 1590. Pipe stem, 1620-1710	133	Thin layer of black oily silt, overlies builder's trench	
68	All construction materials	135	Patch of cobbles, overlies builder's trench	
170	Dutch pipe bowl, 1630+ Transfer Printed White Earthenware 1820+	136	Top part, fill of builder's trench for C19 wall	
86	Raspberry Prunt Goblet, C17 Transfer Printed White Earthenware 1820+	180	Bottom Part, fill of builder's trench for C19 wall	
0	No artifacts	181	Silt below builder's trench	
0		182	Unexcavated	

Total:

395

* = C, e.g. C17 is equivalent to 17th Century

Total Cx:

8

AREA II: LOT 8
UNIT N65/E150

Total Artifact Count	T.P.Q. Comments (Others, Glass, Pipes, Ceramics)	CX	Interpretation	Harris Matrix
-------------------------	---	----	----------------	---------------

87

Creamware, 1762-1820

123

Destruction rubble from
C18 or C17 buildings, *
immediately beneath C19 brick
floor

123

Total:

87

Total CX:

1

* - C, e.g., "C17" is equivalent to 17th Century

AREA II: LOT 8
UNIT N75/E165

TOTAL Artifact Count	T.P.Q. Comments (Others, Glass, Pipes, Ceramics)	CX	Interpretation	Harris Matrix
47	Construction materials only	140	Destruction rubble from C18 or C17 buildings * immediately beneath C19 brick floor	<pre> graph TD 140[140] --- 142[142] 140 --- 141[141] 142 --> 141 </pre>
6	Construction materials only	142	Possible robber's trench (or other feature) cuts surface of Cx. 141	
11	Construction materials only	141	Hard packed silt surface	
Total:		Total CX:		
64		3		

* - C, e.g. "C17" is equivalent to 17th Century.

AREA II: LOT 8
UNIT N80/E165

TOTAL Artifact Count	T.P.Q. Comments (Others, Glass, Pipes, Ceramics)	CX	Interpretation	Harris Matrix
35	Construction materials only	146	Destruction rubble, C 18 or * C17 buildings, immediately beneath C19 brick floor	<pre> graph TD 146[146] --- 147[147] 146 --- 148[148] 147 --- 150_02[150.02] 148 --- 149[149] 149 --- 150_01[150.01] </pre>
40	Construction materials only	147	Layer of sand & silt just above Cistern side	
31	Construction materials, 74% plaster	148	Mottled silt with building rubble	
34	Construction materials, 76% plaster	149	Layer of sand with mortar rubble just above cistern floor	
0	No artifacts	150.01	Mortar floor of cistern	
0	No artifacts	150.02	Brick side of cistern	
Total:		Total CX:		
140		6		

* - C, e.g. "C17" is equivalent to 17th Century

AREA II: LOT 8
UNIT N80/E170

TOTAL Artifact Count	T.P.Q. Comments (Others, Glass, Pipes, Ceramics)	CX	Interpretation	Harris Matrix
58	Construction materials, C19 asphalt	143	Destruction rubble from C18 * or C17 buildings immediately beneath C19 brick floor	143
80	Trade Bead, C17 Pipe stem, 1680+ Pipe stem, 1710+	144	Mottled silt with building rubble	144
72	Construction materials	145	Layer of sand just above cistern floor	145
0	No artifacts	150.01	Mortar floor of cistern	150.01
Total:		Total CX:		
210		4		

* - C, e.g. "C17" is equivalent to 17th Century

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International

Tower 56
126 East 56 Street
New York, New York 10022
212/371 8550

Forcing by



PLATE II

Aerial view, looking west, of the Block 10 site from the Fifth floor of the Bridge Pub Restaurant, showing the three areas of definition of the site.

Area I - Lots 12-14

Area II - Lots 8 and 10

Area III - All other as yet unexposed segments.



AREA I

AREA III

AREA II

AREA III

PLATE III

October 31, 1983 subsurface electromagnetic survey of Lot 10 with the EM-32 Flux Meter , with resolution of circa 30 feet below surface operated by Bruce Bevan of Geosite, Inc.



PLATE IV

View looking south of partially cleared Lot 14 showing 10' x 10' exposure for second test area which contained the 17th/18th century well/cistern. Note the four course basement floor construction and presence of continuous coal bins under the sidewalk of Whitehall Street.



PLATE V

Close-up of view of Test Area II through the basement floor looking East, showing 17th century well/cistern being recorded and depth of basement floors relative to former parking lot surface.



PLATE VI

Formal shot of Southern profile of first test unit in Lot 13, showing 6" thick deposit of historic refuse over sterile sand substrate and groundwater level at bottom of unit.

BROAD STREET

CONTEXT 164

LOOKING SOUTH

E55 N40

DEC. 1 83



ARTIFACTS

PLATE VII

Close-up view of partially excavated well/cistern within the intersection of the second subbasement test area in Lot 14.



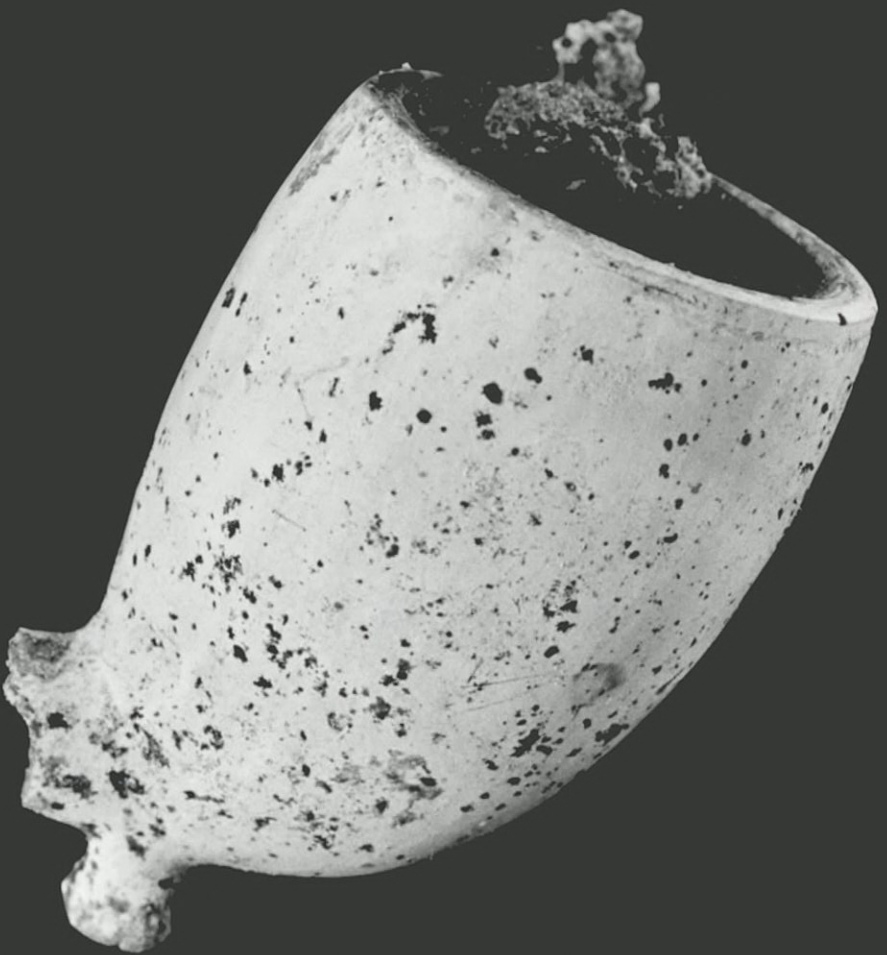
PLATE VIII

CX:102.01 Lot 14

Description: Clay tobacco pipe bowl. 19th century Dutch.
Stroke burnished. Long narrow heel, rouletting
around bowl rim. Tobacco remains in bowl.
Possibly manufactured in Gouda.
· Stem bore 6/64".

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N72 E43
Cx 102.01
Secondary fill in top of brick
lined cistern/well.

Condition: Insoluble salts on surface.



cm

MILLIMETERS

1 2 3 4 5 6 7 8 9
1 2 3 4 5 6 7 8 9
1 2 3 4 5 6 7 8 9
1 2 3 4 5 6

PLATE IX

CX: 102.01 Lot 14

Description: Pipe bowl fragment, with goblet mark inside
a cartouche with radiating lines on base.
1667-1693 Gouda.
7/64 stem bore.

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N72 E43
Cx 102.01
Secondary fill in top of brick
lined cistern/well.

Condition: Excellent



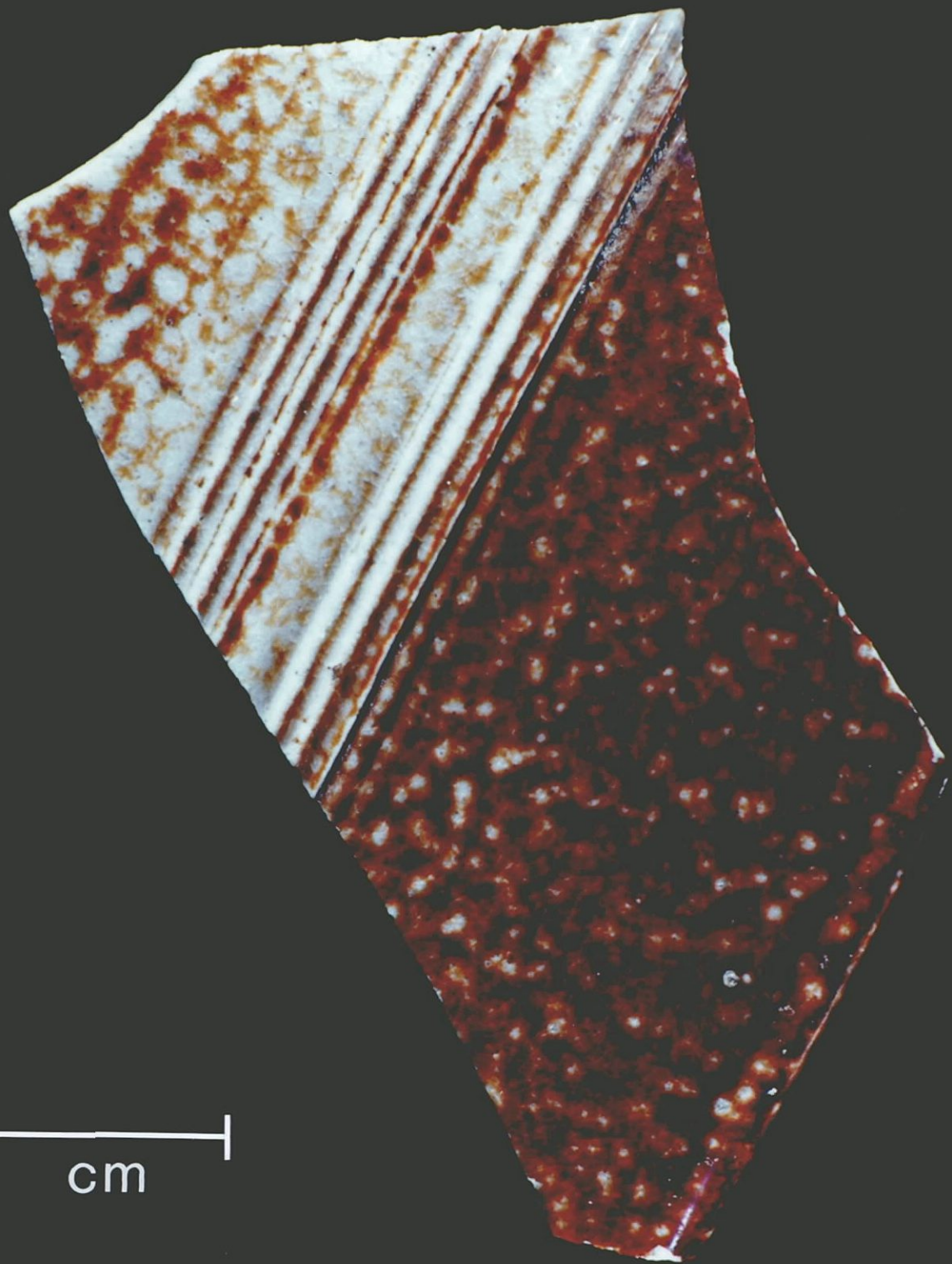
PLATE X

CX: 102.01 Lot 14

Description: English brown salt-glazed stoneware tankard
rim of the "Fulham" type. Post-1690 on
American sites (Noél-Hume 1976: 112-114).

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot: 14
Unit N72 E43
Cx Secondary fill in top of brick
lined cistern/well

Condition: Excellent



cm

MILLINSTEIN

PLATE XI

CX: 102.01 Lot 14

Description: Copper alloy hilt from a "small sword".
Shape parallels early 17th century hilt
recovered from Jamestown (Peterson 1956:
77). Also 18th century parallel shapes
in silver.

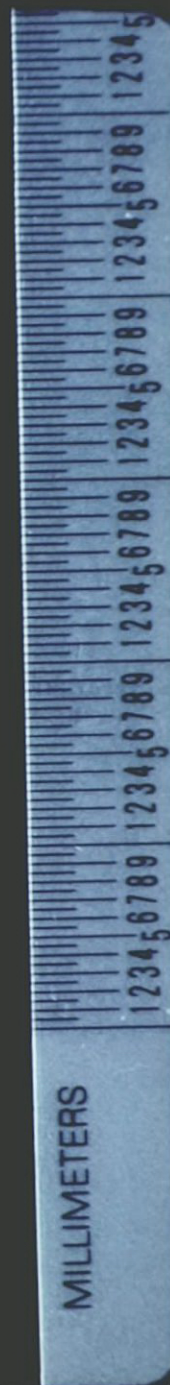
Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N72 E43
Cx 102.01
Secondary fill deposit in top
of brick lined cistern/well

Condition: Encrustation of expanded copper corrosion
products. Solid metal core present. Micro-
scopic examination indicates that mechanical
removal of part of the carbonate encrustation
would reveal a dense cuprite layer at the
surface.

Treatment: Awaiting treatment with Benzotriazole
inhibitor after mechanical cleaning under
stereoscopic zoom microscope.



cm



MILLIMETERS

PLATE XII

CX: 102.01 Lot 14

Description: Octagonal wooden cutlery handle. Probably 18th century. Pointed tang shaft reaches near the butt end but does not break through.

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N72 E43
Cx 102.01
Secondary fill deposit in top of brick lined cistern/well.

Condition: Waterlogged

Treatment: Air drying was not attempted. Object has been kept saturated with water and thymol (fungicide) until water replacement treatment can be performed.

1234 6789 1234 6789 1234 6789 1234 6789 1234 6789 1234 6789 1234 6789 1234 6789 1234 6789

MILLIMETERS



PLATE XV

CX: 102.03 Lot 14

Description: Wine bottle. Dark olive green, sand pontil, squat, probably English. Circa 1685-1715.. (Noel-Hume 1961:103).

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N73 E42
Cx 102.03
 Primary refuse deposit inside
 brick lined cistern/well.

Condition: Waterlogged when recovered. Devitrification layer present and extremely fragile.

Treatment: Removal from its microenvironment with minimum physical handling; cleaned with running water only, no tools; allowed to air dry slowly in an unheated environment; after one week of air drying, four applications of Acryloid B-72 in ethanol to consolidate the devitrification layer.



I
cm

PLATE XVI

CX: 102.03 Lot 14

Description: "Silesian stem" wine glass, molded four
sides, tear, lead glass. Circa 1705-1720,
(Hughes 1956:73) or 1715 (Daris 1964:25).

Provenience: Block 10, 100 Broad Street
NY Site A0 61-01-1282
Lot 14
Unit N73 E42
Cx 102.03
Primary refuse deposit inside
cistern/well.

Condition: Stable. Some very fine pitting on the surface.

MILLIMETERS



cm

PLATE XVII

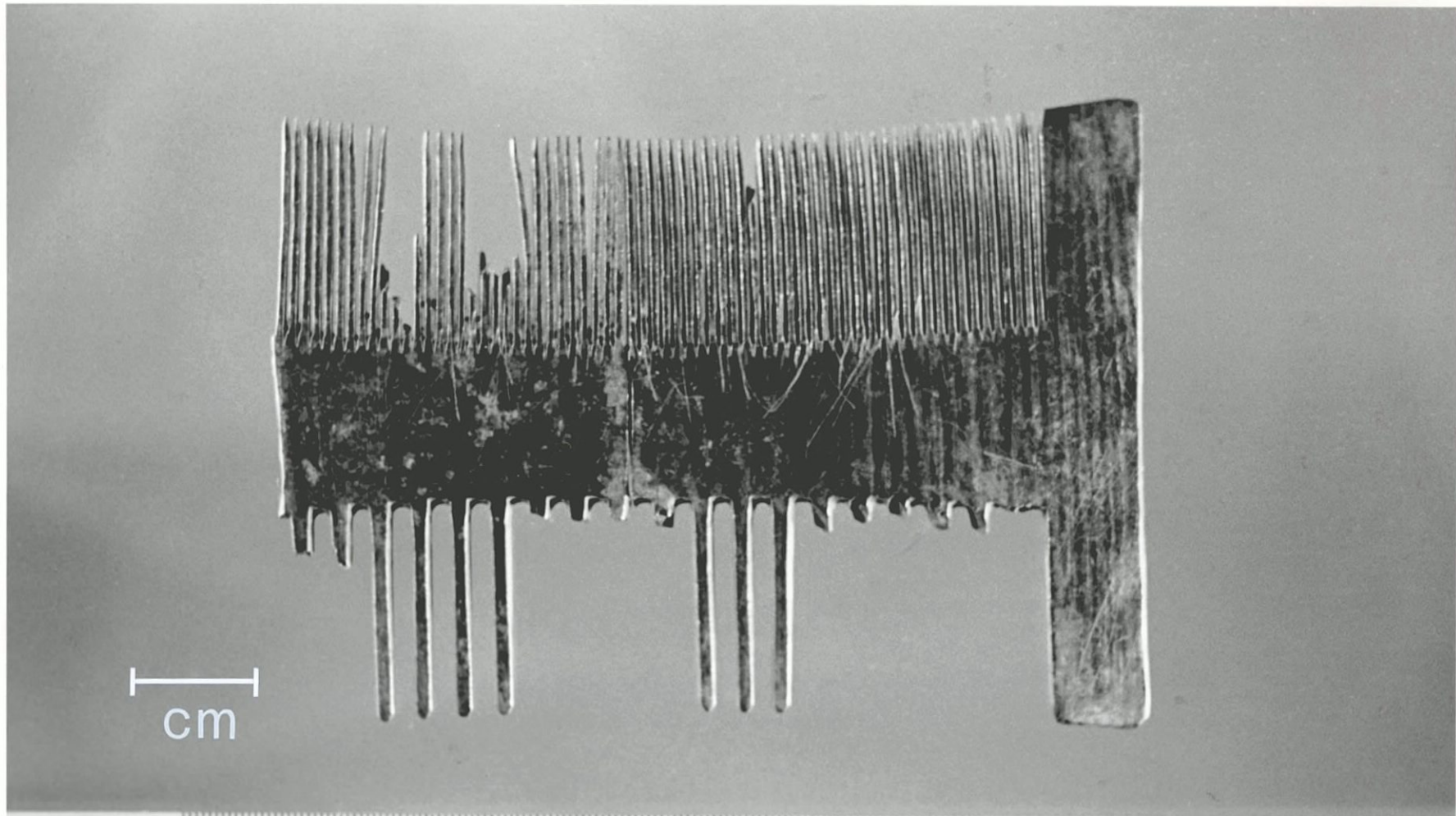
CX: 102.03 Lot 14

Description: Double tooth ivory comb. Common in the 17th and 18th centuries. Vertical pattern clearly visible in the photograph, were used to identify the material as elephant ivory.

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N72 E43
Cx 102.03
Primary refuse deposit inside
brick lined cistern/well.

Condition: Stable. Broken into 2 fragments which mend. Ivory stained dark brown. Waterlogged when recovered.

Treatment: Slow air drying has resulted in no measurable shrinkage and no checking. Deformation of one small tooth existed when the object was wet.



cm

MILLIMETERS
123456789 123456789 123456789 123456789 123456789 123456789 123456789 123456789 123456789 1234567

PLATE XVIII

CX: 102.03 Lot 14

Description: Pipeclay wig curler. Distinctive 18th century artifact type. Used at home as well as in the barber's and wigmaker's shops.

Provenience: Block 10, 100 Broad Street
NY Site AO 61-01-1282
Lot 14
Unit N72 E43
Cx 102.03
Primary refuse deposit inside
brick lined cistern/well.

Condition: Stable. Insoluble salts on surface.



PLATE XIX

CX: 102.04 Lot 14

Description: Inverted baluster stem wine glass, with tear
lead glass, Circa 1690-1710, (Noël-Hume
1976:190-191).

Provenience: Block 10, 100 Broad Street
NY Site A0 61-01-1282
Lot 14
Unit N63 E42
Cx 102.04
Interface between primary refuse
deposit and clay liner inside
brick lined cistern/well.

Condition: Stable. Some surface abrasion. Pitting
at the lower waist of the stem.

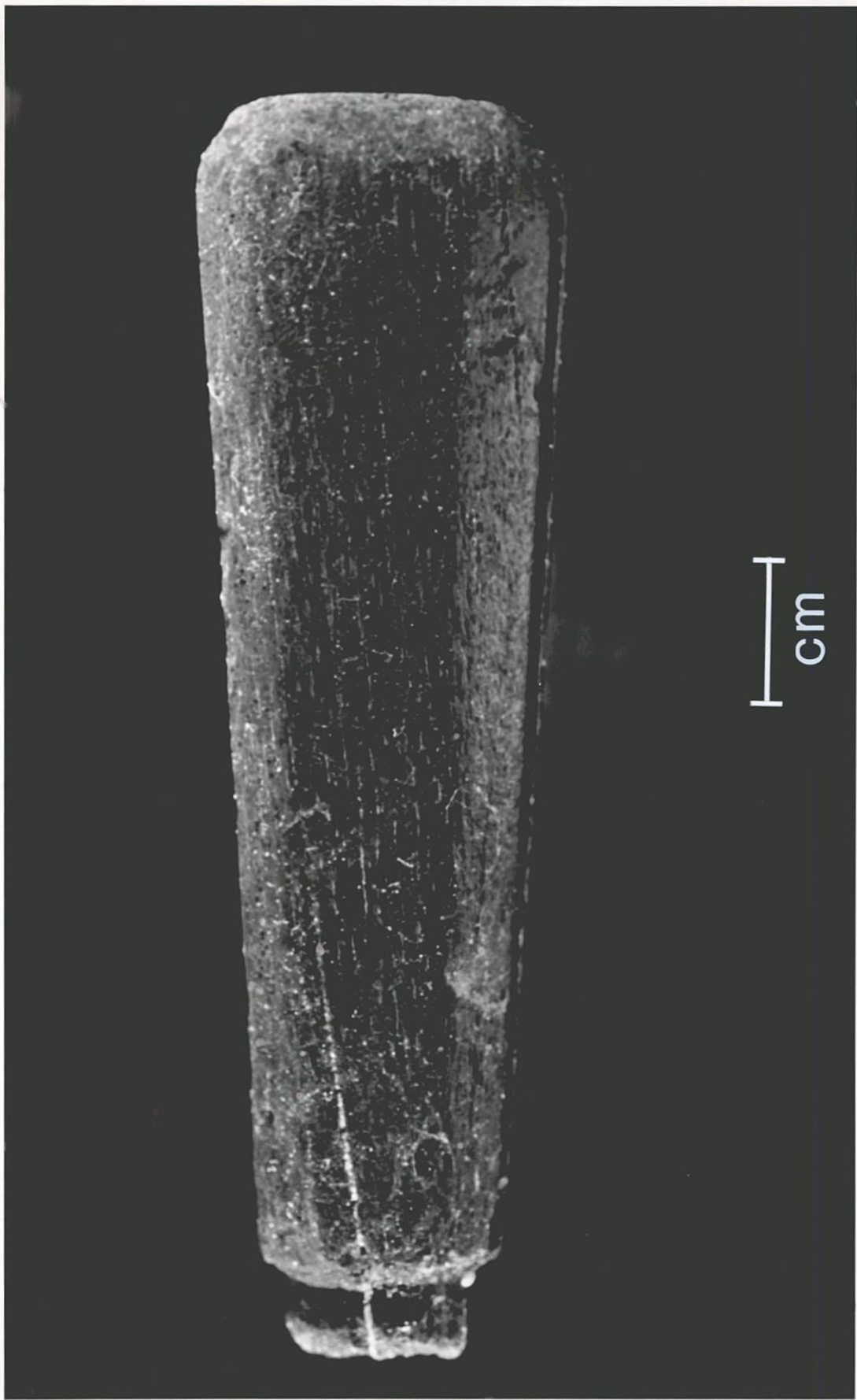


PLATE XIII

CX: 102.03 Lot 14

Description: Belly bowl with heel and partially rouletted rim, 5/64" bore diameter. Cartouche in raised circle on right side of bowl reads:
"I^IENK". James Jenkins. Bristol. 1707-1739
ND

Provenience:

Block	10, 100 Broad Street
NY Site	AO 61-01-1282
Lot	14
Unit	N72 E43
Cx	102.03

Condition: Insoluble salts on surface

** See detail: close-up of Mark on next page.





PLATE XIV

CX: 102.03 Lot 14

Description: Buff bodied tin-glazed earthenware plate rim. Blue on light blue. Panelling on chinoiserie decoration suggests late 17th or early 18th century date. 4.7 cm x 4.6

Provenience:

Block	10, 100 Broad Street
NY Site	AO 61-01-1282
Lot	14
Unit	N72 E43
Cx	102.03

Primary residue deposit inside brick lined cistern.

Condition: Tin glaze chipped on rear of rim. Insoluble salts deposit on surface.



1
cm

PLATE XX

CX: 102.04 Lot 14

Description: Tin-glazed fireplace/wall skirting tile with central figure in manganese decoration. Probably Dutch. Size of figure and proportion of undecorated area suggests late 17th century date.

Provenience: Block 10, 100 Broad Street
NY Site A0 61-01-1282
Lot 14
Unit N72 E43
Cx 102.04
Interface between primary and refuse deposit and clay liner at bottom of brick lined cistern/well.

Condition: Excellent. Mortar present on top edge. Cleaned with ORVUS in tap water plus final water baths to remove detergent residues.

MILLIMETERS

102.04

cm



PLATE XXI

CX: 102.04 Lot 14

Description: Pewter tankard with banded repousse designs. 17th Century. Ceramic drinking vessels were often patterned after existing metal vessel types. This is a rare example of the metal prototype.

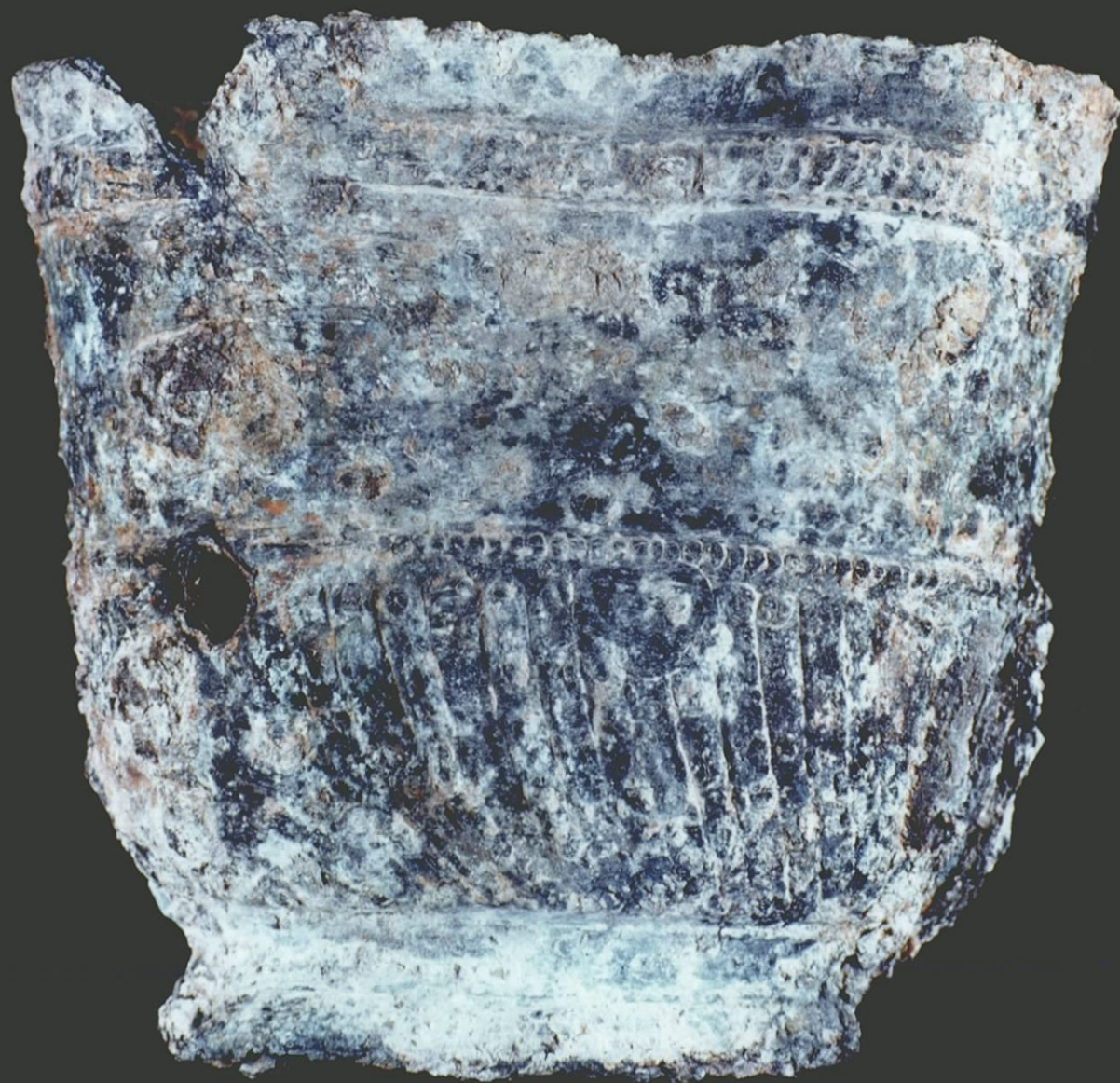
Provenience:

Block	10, 100 Broad Street
NY Site	AO 61-01-1282
Lot	14
Unit	N72 E43
Cx	102.04

Interface with primary refuse deposit and clay liner inside brick lined cistern/well.

Condition: Fragile. Completely mineralized.

Treatment: Expanded lead carbonates were removed while the object was wet. Some encrustation remains, and will have to be removed mechanically before stabilization by wax impregnation.



1
cm

100 Broad St.

PLATES

AREA II

LOT 10

PLATE I

Close-up of polyvinyl chloride deep winter protective shelter without its plastic skin and before the addition of vertical leg supports. The use of modular protective units, heated with thermostatically controlled space heaters, will provide both site protection and a reasonable working environment for excavation teams during the below freezing weather projected for January and February of 1984.

A minimum of two structures, totalling 800 square feet of coverage will provide both aerial exposure and continuous vertical stratigraphic control for 20 and 40 foot section profiles. Overhead carrier mounts within each structure will accomodate photomosaic and stereoscopic documentation of the excavation surfaces without the need to continually move and dismantle the structures during the data recovery process. Each structure will be covered with two layers of 6 ml polyethylene, with forced air insulation, to reduce wind drag, and for temperature control.

Total materials, plus labor, for up to an 800 sq. ft. unit pro rates out to an approximate cost of \$1.30 per square foot of plastic enclosure. The projected use of two large plastic structures and four quanset hut metal frame structures will provide 1760 sq. ft. of excavation area at any one time throughout the project.

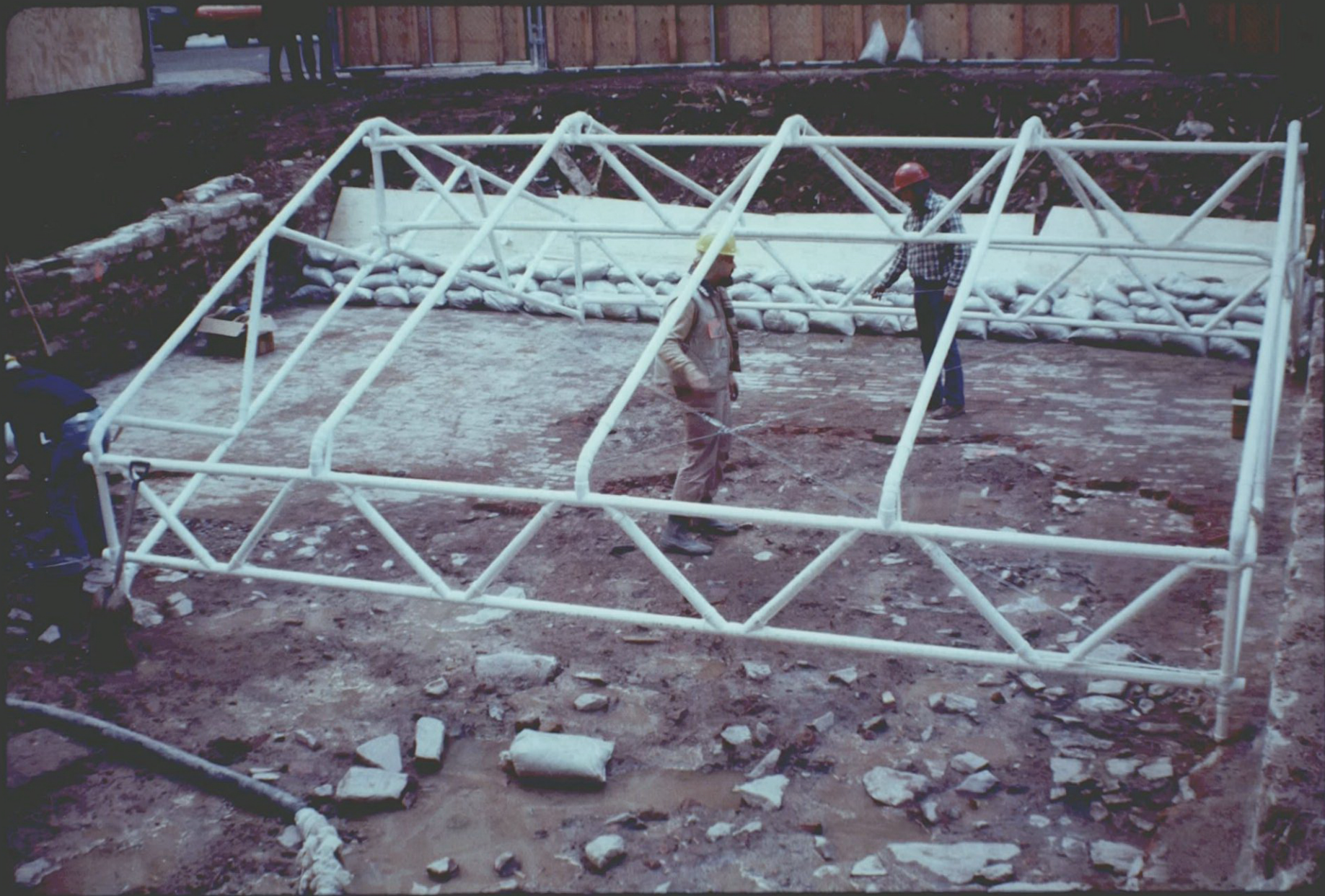


PLATE II

General view of Lots 8 and 10, (Area II) looking east toward the rear of the New York Clearinghouse. This general perspective shows the exposed sub-basement (17th and 18th century,) 8 feet below modern surfaces; protective sandbag embankment; a section of the protective structure frame; and in the center, the overhead bi-pod system used to provide the time efficient photomosaic and stereoscopic coverage of exposed excavation surfaces. The use of this overhead system reduces the labor and time requirements for recording patterning of architectural and cultural features from a manual rate of approximately one man day per 5'x5' unit to approximately one person hour.



PLATE III

Overhead bi-pod view of 5x10 test unit (N60, E135-140) oriented East-West on the long axis and abutting the 19th century wall, separating Lots 8 and 10 at the eastern end of Block 10, closest to the New York Clearinghouse.

This overhead view shows on the right the brick "basement" floor of the 19th century building. Artifacts associated with the underlying destruction debris suggest that the brick floor itself postdates the first quarter of the 19th century. Below this brick floor, is a 4-6" thick strata of 18th century destruction debris. Finally, below that, is the late 17th to early 18th century cobblestone surface. This cobble floor is set into a matrix of soil without evidence of plaster mortar. Running the length of this 5x10 foot unit, is what appears to be a late 18th century brick lined drain covered by stone slabs and brick. This drain which appears to run through both Lots 8 and 10 postdates the construction of the deeper cobbled floor, and intruded from above through an approximately one inch thick deposit of sediment of silt, which covered the cobble floor. Diagnostic artifacts found within this sediment (Contexts 125 and 128) postdate the last decade of the 18th century. These diagnostics included Banded Creamware produced between 1780 and 1815, and a sherd of Transfer Printed Pearlware which postdates 1795. These associations together with the stratigraphic relationships suggest that the drain itself was built sometime in the transition from the 18th to the 19th century and that the cobble floor predates the drain by an as yet undetermined time span.



BROAD STREET
CONTEXTS 124-127,
129-131-134
MAG E205 & 110
DEC. 2 63

PLATE IV

Oblique view taken from within Lot 10, looking east, of the 5x5 foot unit (N60, E140) showing the vertical stratigraphy (brick floor 19th century, underlain by 18th century destruction debris which in turn is followed by a one inch thick deposit of sediment which overlay the as yet unexposed 17th and 18th century cobbled floor).

This perspective also shows the 19th century brick drain cutting through the earlier sediment and underlying the cobble floor together with the construction details of the brick sided and brick and stone drain covering. (See Plate III for the overhead view of the same feature).

BROAD STREET
CONTEXT 124
LOOKING EAST
E 140 N 60
NOV. 23. 83

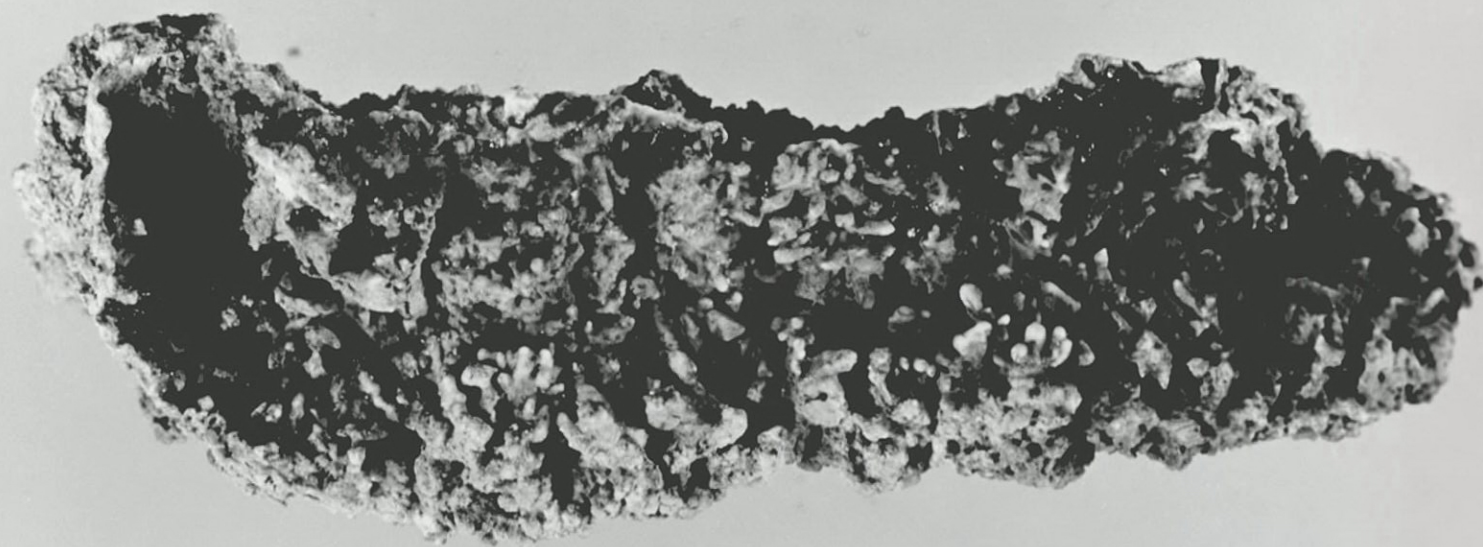


PLATE V

Description: Fragment of coral. Coral was frequently used as ballast in the hold of ships during the 17th & 18th centuries.

Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 10
Unit N60 E140
Cx No. 124.02

Condition: Stable.



cm

PLATE VI

Description: Wall plaster/mortar fragment including three grades of material:

- 1) mortar: bottom layer 15ml thick.
Inclusions medium sand 1/4ml diameter. avg. 5.5 p/sq ml.
- 2) plaster: layer above mortar; 4ml thick
Inclusions medium sand 1/4ml diameter. avg. 1.7 p/sq ml.
- 3) fine top layer 1/4ml thick
plaster: No inclusions.

Provenience: Block 10, 100 Broad Street
NY Site AO-01-1282
Lot 10
Unit N60 E140
Cx No. 125; Thin layer of silt and sand immediately above the cobbled surface.

Condition: Stable.

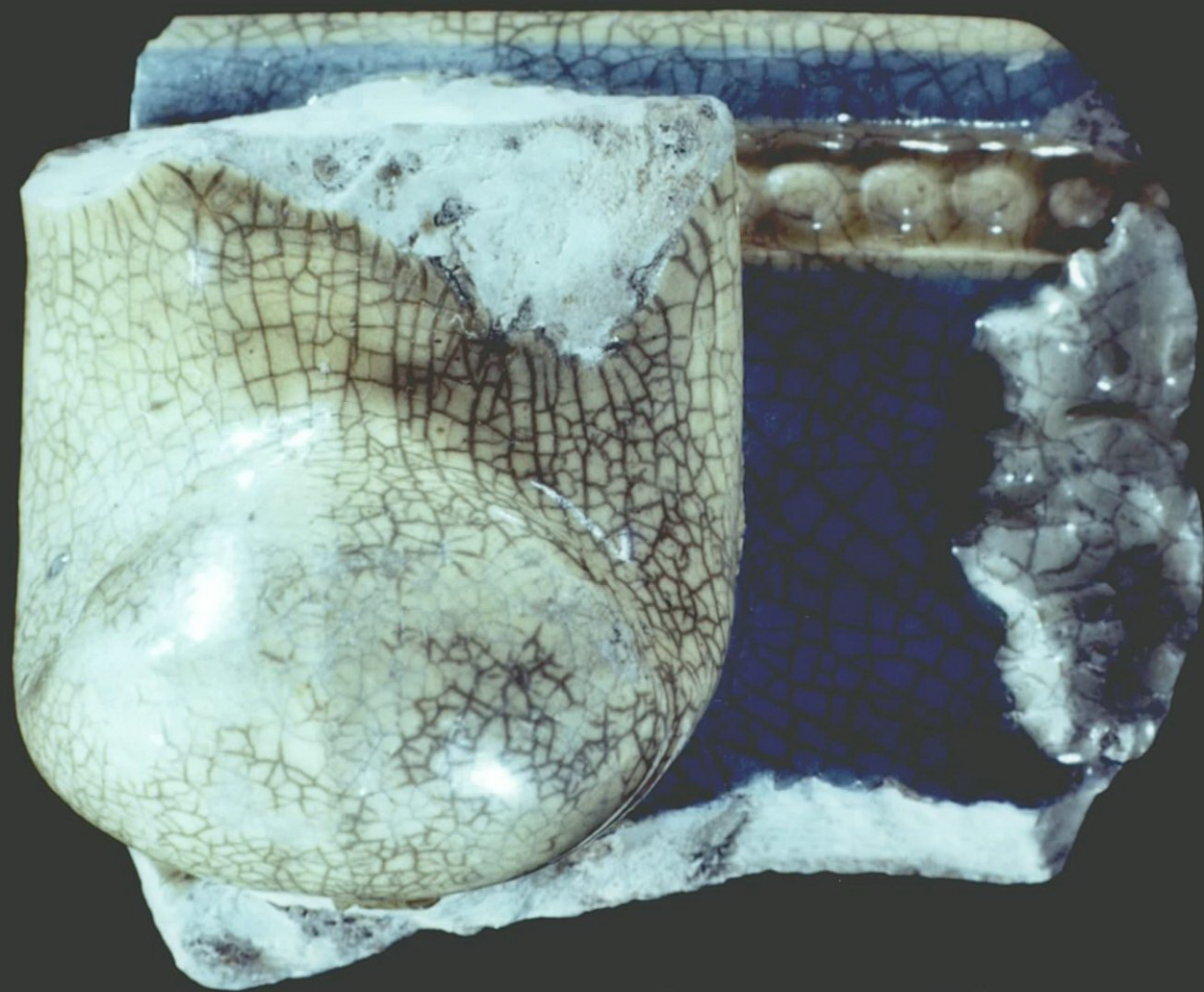
TERS



cm

PLATE VII

- Description: Banded Creamware pitcher or large mug rim. Fragment with rouletting and sprigged decoration. Probably English. 1780-1815. (Van Rensselaer 1966:240-244). H. 3.4 cm; W. 3.9 cm.
- Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 10
Unit N65 E145
Cx No. 125; Thin layer of silt and sand immediately above the cobbled surface.
- Condition: Covered with black petrochemical from surrounding microenvironment.
- Treatment: Removed oily deposit with acetone/swab.



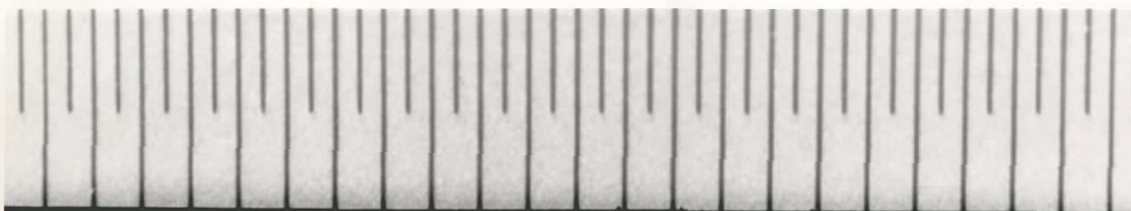
cm

PLATE VIII

Description: Pipe stem stamped with two raised, individual fleur-de-lis; each within a diamond-shaped cartouche. Bore diameter 8/64". Dutch or English. 1630-1700.

Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 10
Unit N60 E135
Cx No. 126; Rubble above cobble surface south of brick drain.

Condition: Stable.



1 cm

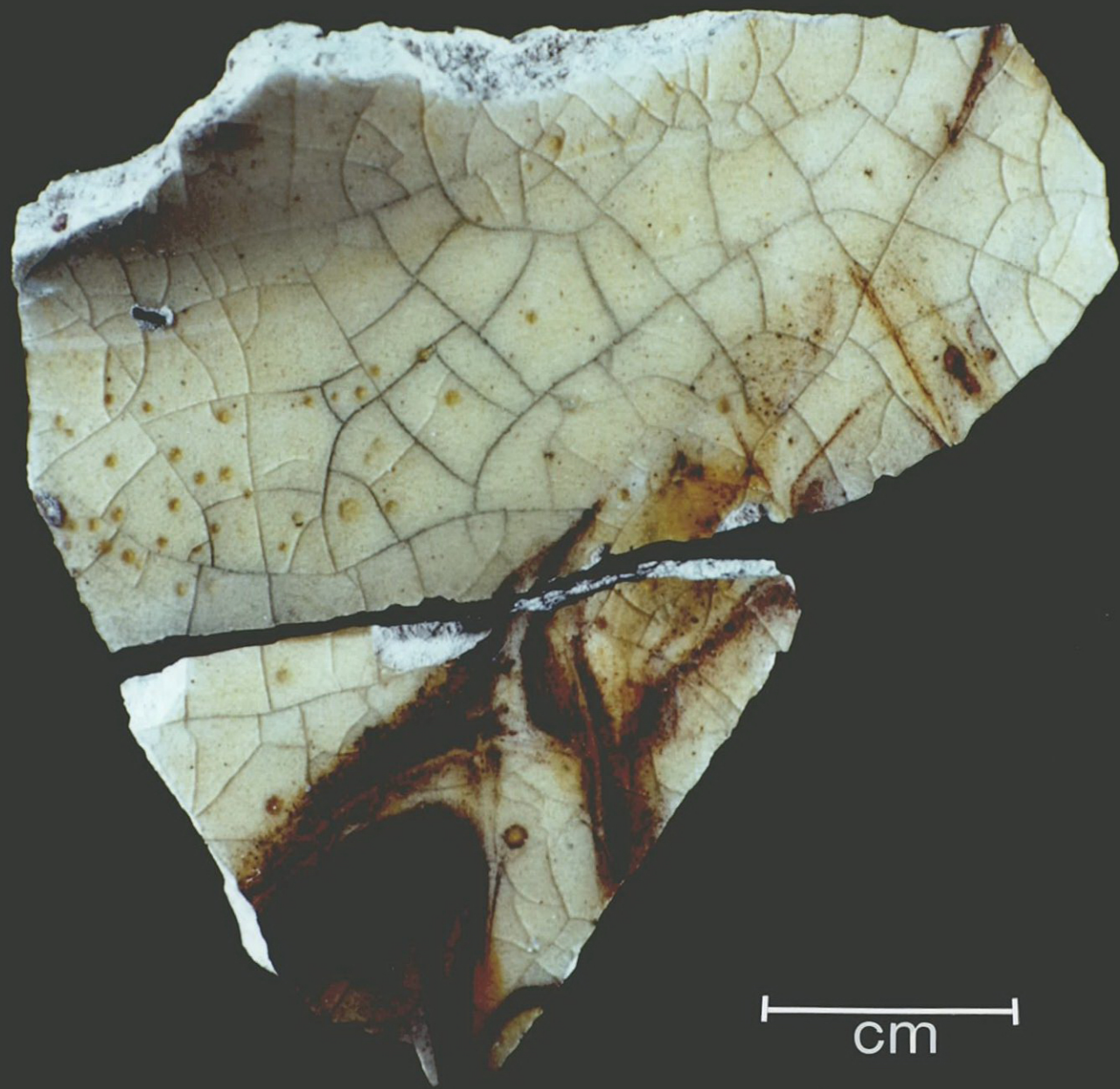


PLATE IX

Description: Combed Yellow Slipware.
Fragments from an everted rim, bulbous
bodied, cup or posset pot. 1670-1795
(Pearson 1979:83-210). H. 4.3 cm.;
W. 4.7 cm.

Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 10
Unit N60 E135
Cx No. 126; Rubble above cobble surface
south of brick drain.

Condition: Stable.



LOT 8

PLATE X

Overhead view of partially exposed 5x10 test unit in Lot 8, showing similar sequence of vertically stratified in situ historic sub-basement strata as documented in Lot 10. The dark soil in the left or western edge turned out to represent the oil impregnated fill of a 19th century builder's trench associated with the 19th century foundation walls separating Lots 8 and 10. The discontinuous and incomplete cobble spread appears to have been disturbed and partially replaced during this building process. The white arrow points to the location from which the 1590 Dutch token (Plate XVII), was recovered. In addition to the early materials mixed in from the sub-cobblestone strata during the construction of this foundation, the fill of this builder's trench contained two sherds of Transfer Printed White Earthenware (possibly from the same vessel) both postdating 1820.

1. 135-136

BROAD STREET
CONTEXTS 135-136-
NO 6 CHS & NO
DEC-2 83



PLATE XI

Perspective view looking southwest, of the builder's trench associated with the stone wall (sandstone and Manhattan schist) separating Lots 8 and 10.

As discussed in the previous plate, the post-1820 Transfer Printed White Earthenware dates the building of this wall to sometime after the first quarter of the 19th century. However, the contents of the trench contained twelve diagnostic late 16th century and early 17th century artifacts which document the time frame of the earliest occupations in Lots 8 and 10, associated with underlying cobble surface. These early dateable artifacts included: a 1590 copper token (Plate XVII); a post 1630 Dutch pipe bowl from Amsterdam (Plate XIV); 9 dateable pipe stem fragments spanning the time period from 1620-1710 ; and finally a glass "raspberry" prunt, diagnostic of 17th century glass making techniques (Plate XXII). Together, these artifacts clearly indicate the presence of 17th century materials associated with the cobble surface through which the builder's trench is cut.

Finally, it is important to note that the builder's trench and its soil matrix were permeated and coated with petroleum. In contrast to the heavily eroded brick foundation walls in the western end of the site between Lots 14 and 13, the oil sealed foundation stones between Lots 8 and 10 were in much better condition and were apparently unaffected by the fluctuating water table immediately under the cobble floor.



PLATE XII

Overhead view of the western-most test unit, located parallel to the rear of the New York Clearinghouse, (N75-85, E165-170). The long axis of the photograph is oriented North and South in line with the long rectangular 19th century lot alignments. This overhead view shows the 18th century destruction debris immediately under the 19th century brick surfaces. As clearly evidenced by the photograph, but less well defined on the ground, there are three east-west stone alignments which, when contrasted to the 17th century map reconstructions, correlate with the location of two buildings indicated on the 1655 Innes Plan of Lot 8, Block 10.

BROAD STREET
CONTEXT 140
E 165-170 N75-85
NOV.22. 83

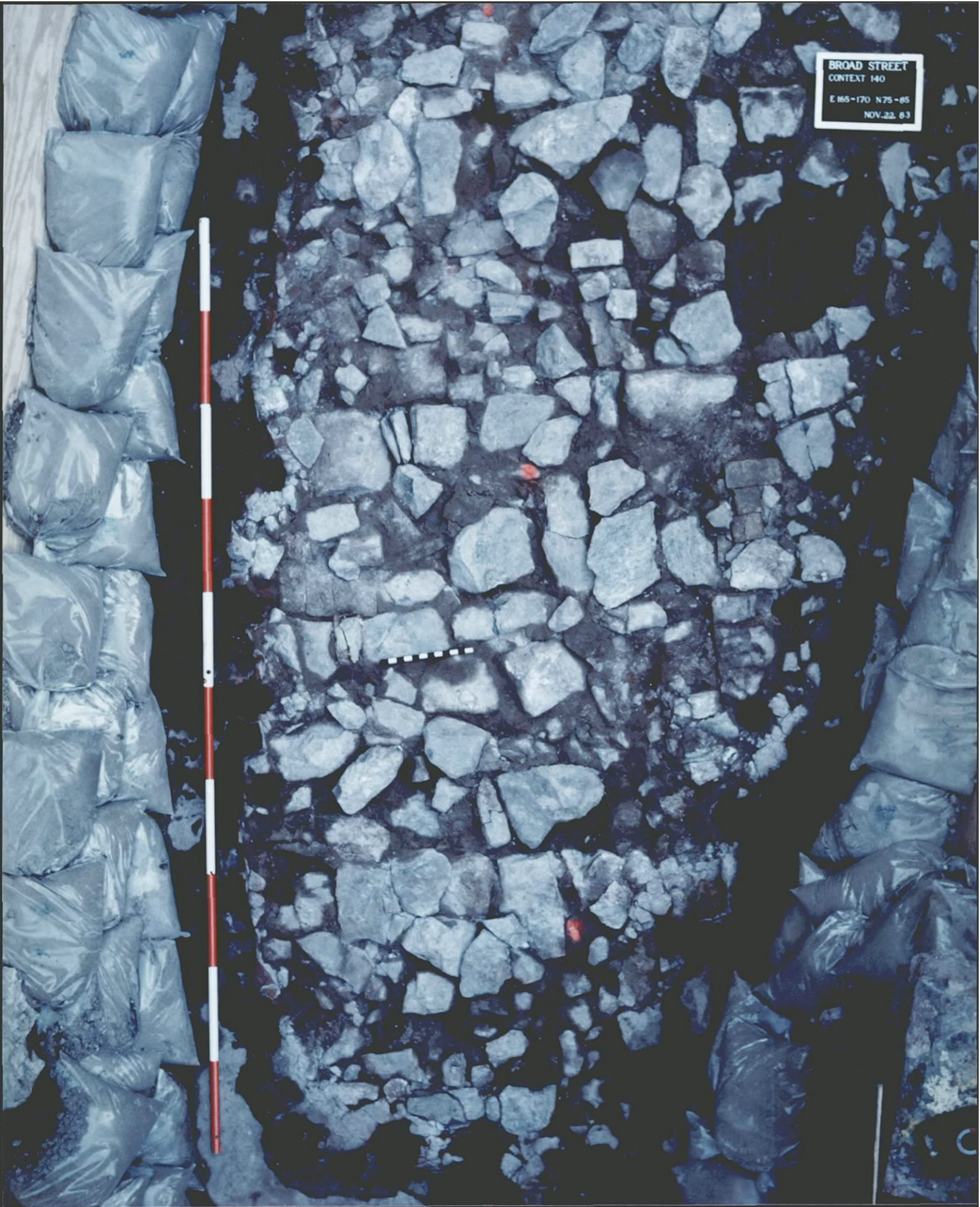


PLATE XIII

Perspective view of previous overhead area after test excavation, looking west and parallel to Bridge Street. Beneath the thin layer of blacktop on the 19th century brick floor (at top), and through the 18th century destruction debris documented in the previous overhead plate, was a ca. four inch thick layer of historic refuse, (under breadboard) which in turn overlayed a 17th century plaster-floored and brick lined cistern. The contents of the refuse fill covering the cistern floor contained: a Venetian glass trade bead, (Plate XX); and two diagnostic pipe stems which postdate 1680 and 1710, respectively. These late 17th century and early 18th century artifacts indicate that the cistern itself predates 1710 and that it was abandoned sometime after the first decade of the 18th century.



BROAD STREET
CONTEXT 148 & 149
LOOKING WEST
E175 N80

DEC.2 83

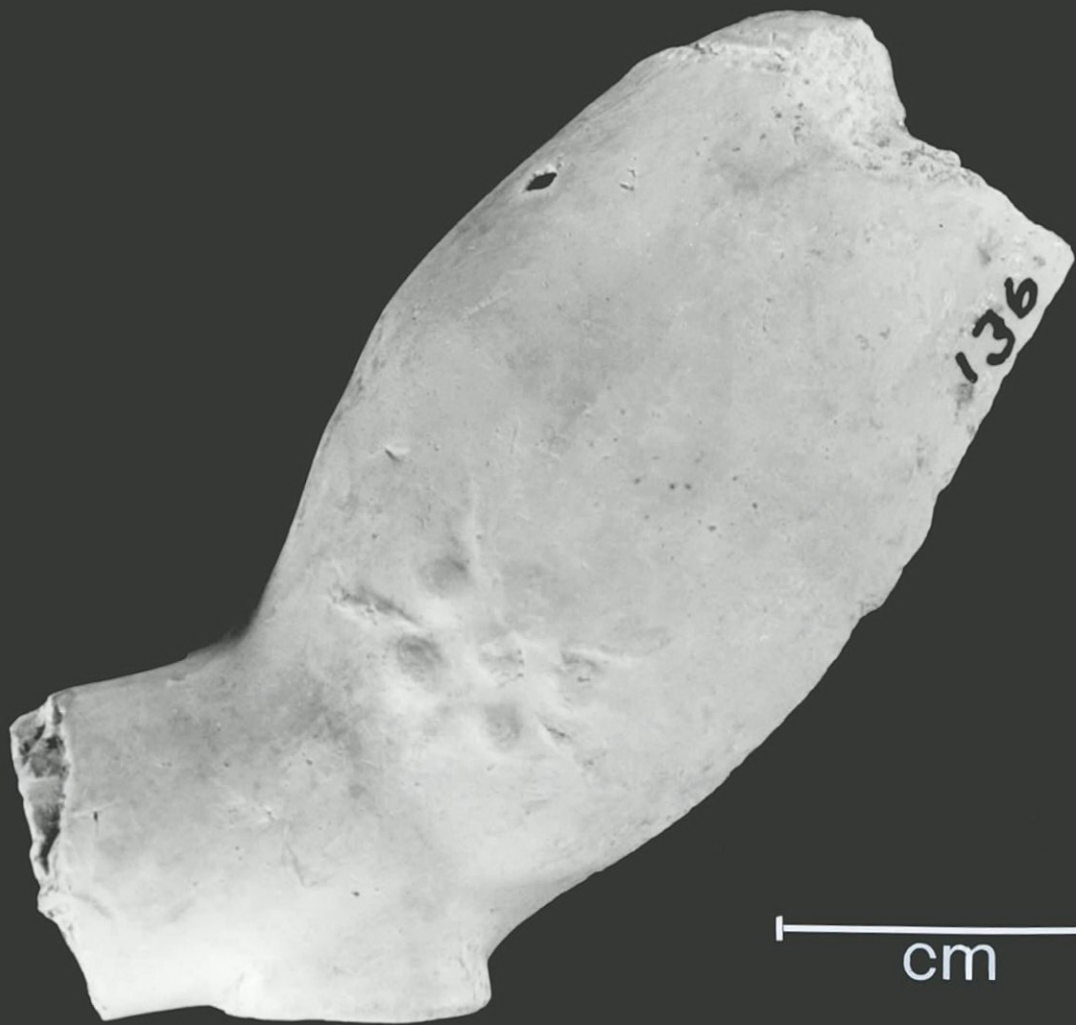
PLATE XIV

Description: Small clay tobacco pipe (belly bowl) with rouletted rim, square heel 2mm long and 6x7mm in diameter. Molded Tudor Rose on either side of bowl near base. Amsterdam, ca. 1633.

Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 10
Unit N65 E145
Cx No. 136; Top part, fill of builders' trench for 19th century wall.

Condition: Completely covered with black oil and insoluble salts deposits.

Treatment: Initial cleaning by soaking for 10 min., in acetone. Further cleaning with alcohol/water/ammonia poultice applied twice. Additional mechanical removal of salt deposits under a binocular stereo microscope.



136

cm

89 123456789 123456789 123456789

PLATE XV

Description: Tin-glazed earthenware fireplace/wall skirting tile. Size and figure decoration suggest Dutch manufacture of the last quarter of the 17th century, (Noel-Hume 1976:292). H 4.5 cm; W. 5.8 cm.

Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 8
Unit N65 E150
Cx. No. 123
Destruction rubble from 17th or 18th century buildings immediately beneath 19th century brick floor.

Condition: Stable. Three fragments which mend. Upper side is original edge.

Treatment: Cemented with PVA-AYAF in acetone.

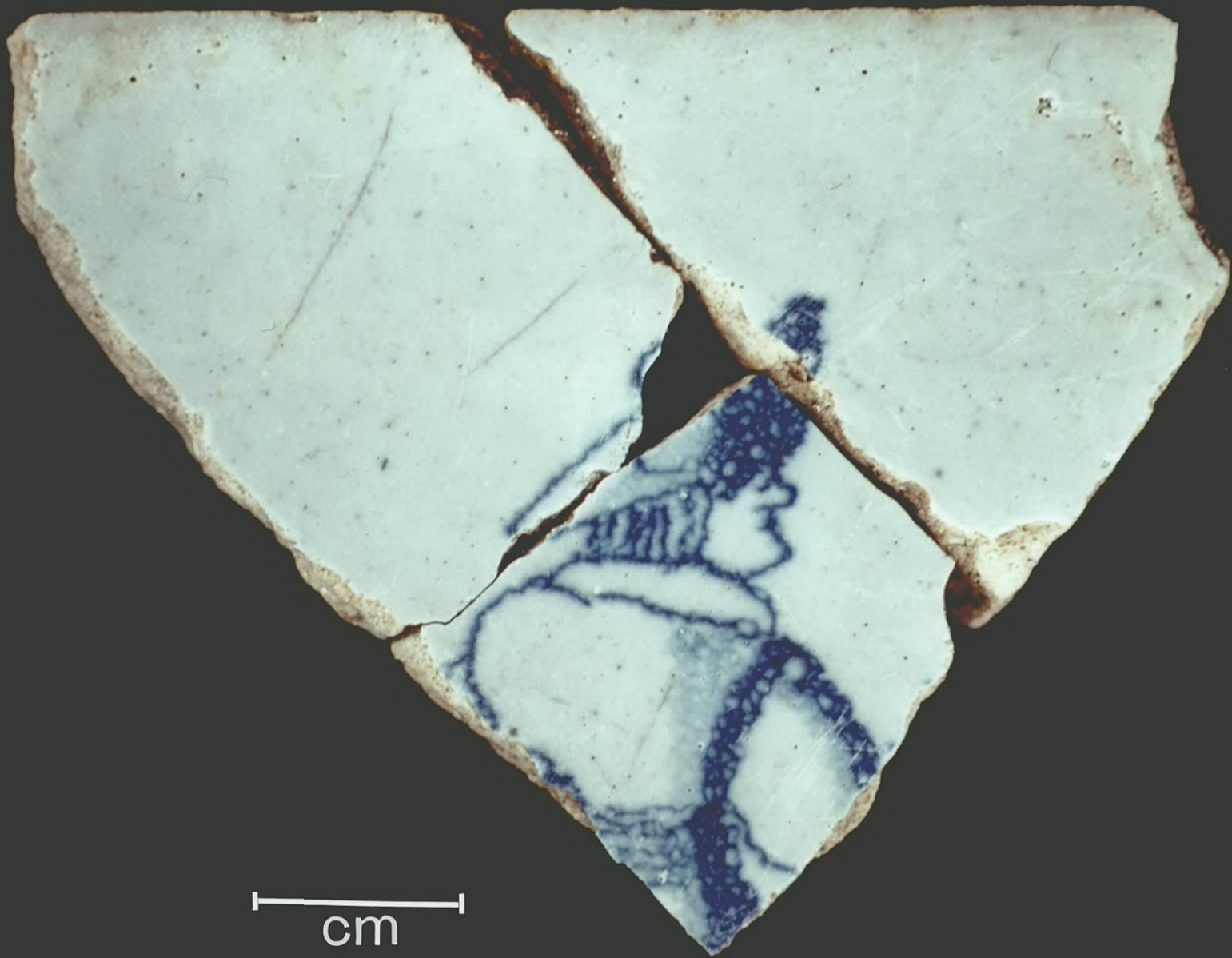


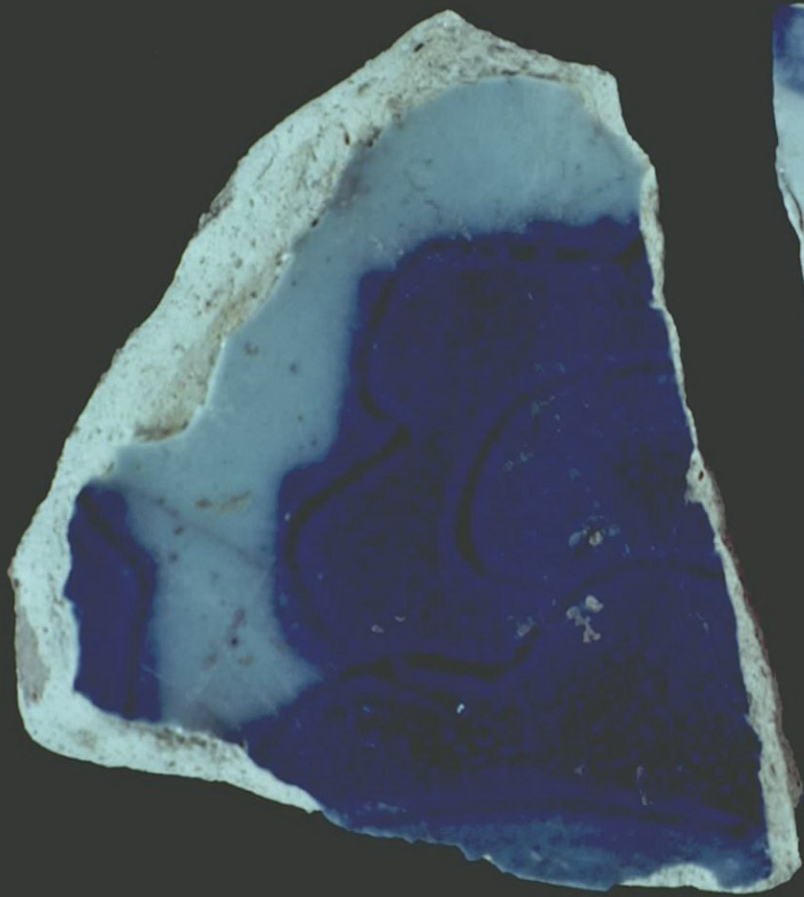
PLATE XVI

Description: a) Buff-bodied tin-glazed earthenware.
blue on light blue chinoiserie
decoration. W. 2.5 cm.

b) Light blue Transfer, Printed White
Earthenware. 1830+ (Price 1979:10-15).
W. 2.2 cm.

Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 8
Unit N65 E145
Cx No. 133
Thin sand and silt layer
overlying the builder's trench
for the 19th century wall.

Condition: Stable. Soluble salts on surface of the tin-glazed
earthenware.



cm

PLATE XVII

- Description: 1590 Dutch token. Copper coin.
Diameter 3.0 cm. Obverse: 6 arms
(representing the 6 provinces of the
Netherlands), hold up a column which
rests on the bible, and is surmounted
by the hat of Liberty. Below the hat
and just above the bible is the legend
LIBERT, and just above the bible is the
legend RELIG. The inscription around the
perimeter reads: HANC TVEMIR
NIMITVR HAC.
- Comments: This is a token, (a privately minted coin),
issued in 1590 by Prince Maurice of Nassau,
(Born 1567, died 1625) to commemorate his
election as Stadtholder of Utrecht. The
engraving was done by Van Loon.
- References: Dr. J.-F. Dugniolle, Le Jeton Historique des
Dix-Sept Provinces des Pays-Bas, Tome III,
Bruxelles 1877, Page 102, Catalog #3256.
"Maurice of Nassau" Encyclopedia Britannica,
Vol. 15, Chicago 1955, page 106.
- Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 10
Unit N65 E145
Cx No. 133 Thin layer overlying the
builders' trench for the 19th
century wall.
- Condition: Covered with a black petrochemical material,
(not yet analyzed). Bare copper metal exposed
in some areas, slightly pitted but exhibiting
no copper corrosion products.
- Treatment: Oil removed from surface with acetone/swab.
Degreased with acetone. Allowed to soak in 3%
benzotriazole in ethanol. After drying,
coated with microcrystalline wax. Stored
with six grams of indicating silica gel for
humidity control.



cm



PLATE XVIII

- Description: Reverse of 1590 Dutch token, (Plate XVII).
6 arrows, (representing the 6 provinces) with
their points up are held together by 2 clasped
hands. Above the arrows is the legend: DEO,
and below: IVVANTE. The inscription around
the perimeter reads: 1590. CALC SENAT
PROVINC VNIT BELGII. This translates as:
Struck in 1590 by the senate of the united
provinces of Gaul.
- Comments: See Plate XVII .
- References: Dr. J.-F. Dugniolle, Le Jeton Historique des
Dix-Sept Provinces des Pays-Bas, Tome III,
Bruxelles 1877, Page 102, Catalog #3256.
"Maurice of Nassau" Encyclopedia Britannica,
Vol. 15, Chicago 1955, page 106.
- Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 10
Unit N65 E145
Cx No. 133. Thin layer overlying the
builders trench for the 19th
century wall.
- Condition: See Plate XVII.
- Treatment: See Plate XVII.



cm



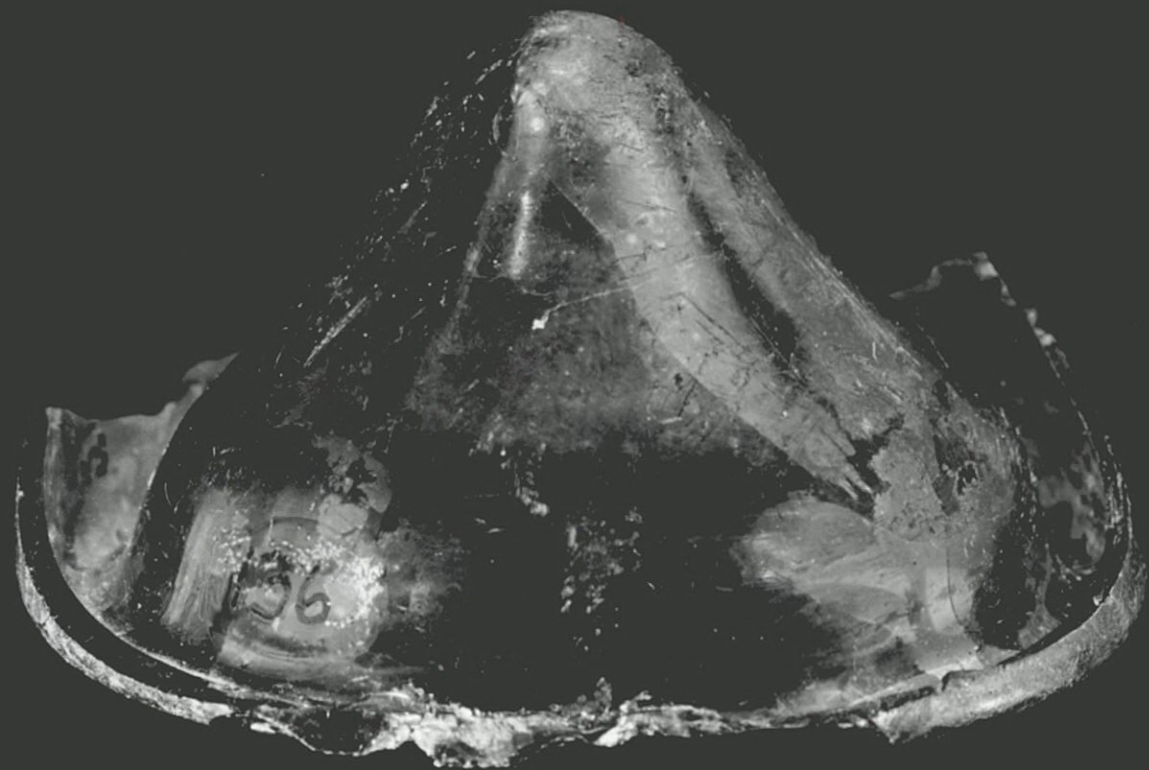
PLATE XIX

Description: Pharmaceutical bottle base with conical basal kick-up. Clear lead glass. Late 17th or early 18th century. Diameter: 5 cm.

Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 8
Unit N80 E170
Cx No. 136

Condition: Slight devitrification layer on surface. Originally clear, the glass now appears amber colored.

Treatment: Surface consolidation with Acryloid B-72 in ethanol.



6789 1234 56789 1234 56789 1234 56789 1234 56789 1234 56789 1234 56789 1234 5678

1
cm

PLATE XX

Dscription: Glass trade bead. Black and white vertical bands, plus red and blue vertical stripes. 17th century. Probably Venetian. Diameter 14mm.

Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 8
Unit N80 E170
Cx No. 144; Silt and sand above the mortar floor of a cistern.

Condition: Stable. Slight pitting on surface.



cm

11 MILLIMETERS

PLATE XXI

Description: Shell with mortar visible around the edges. Shell mortar was a common building material in the 17th century

Provenience: Block 10, 100 Broad Street
NY Site A061-01-1282
Lot 8
Unit N80 E170
Cx No. 144; silt and sand above the mortar floor of a cistern.

Condition: Stable.

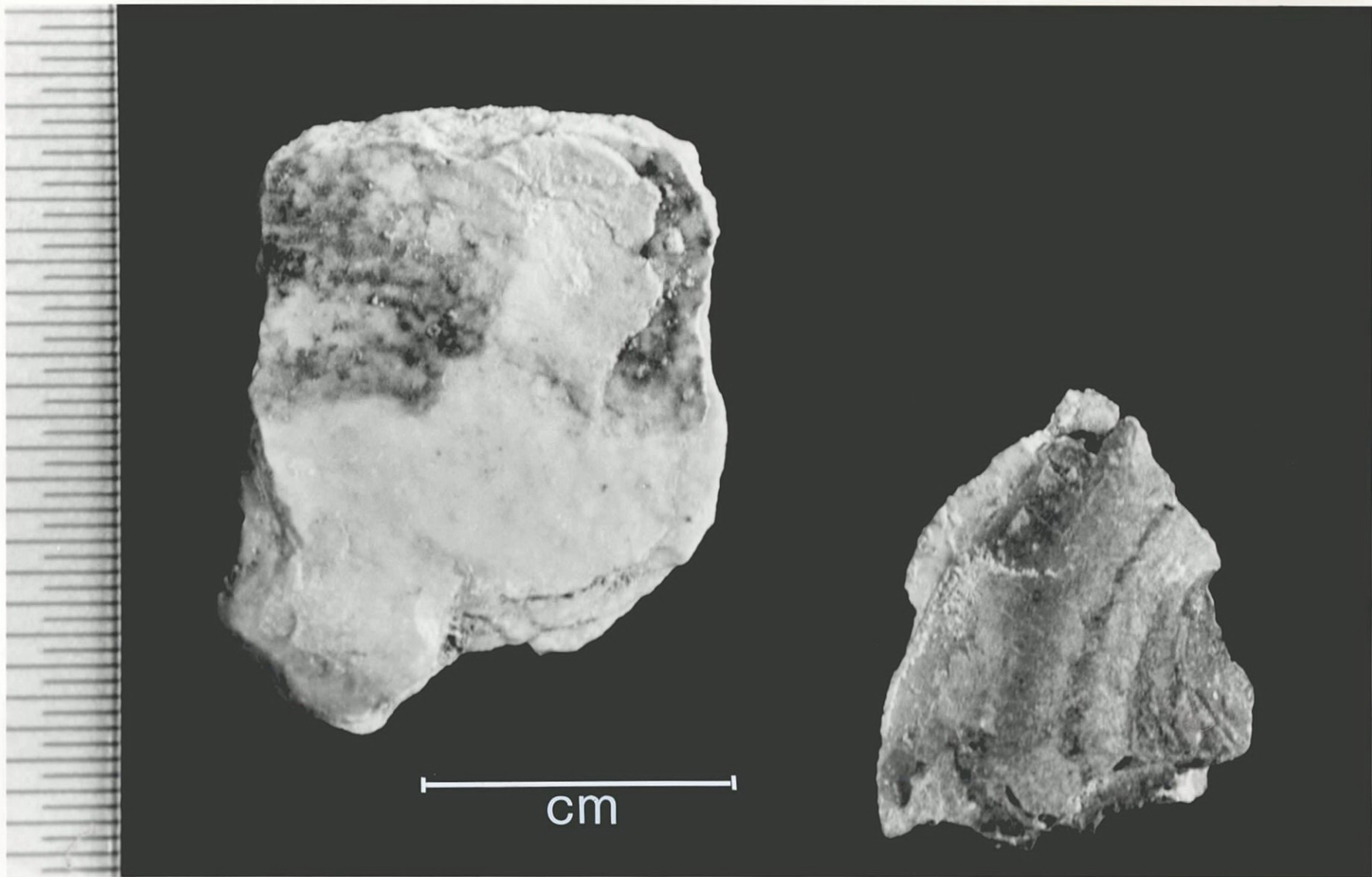
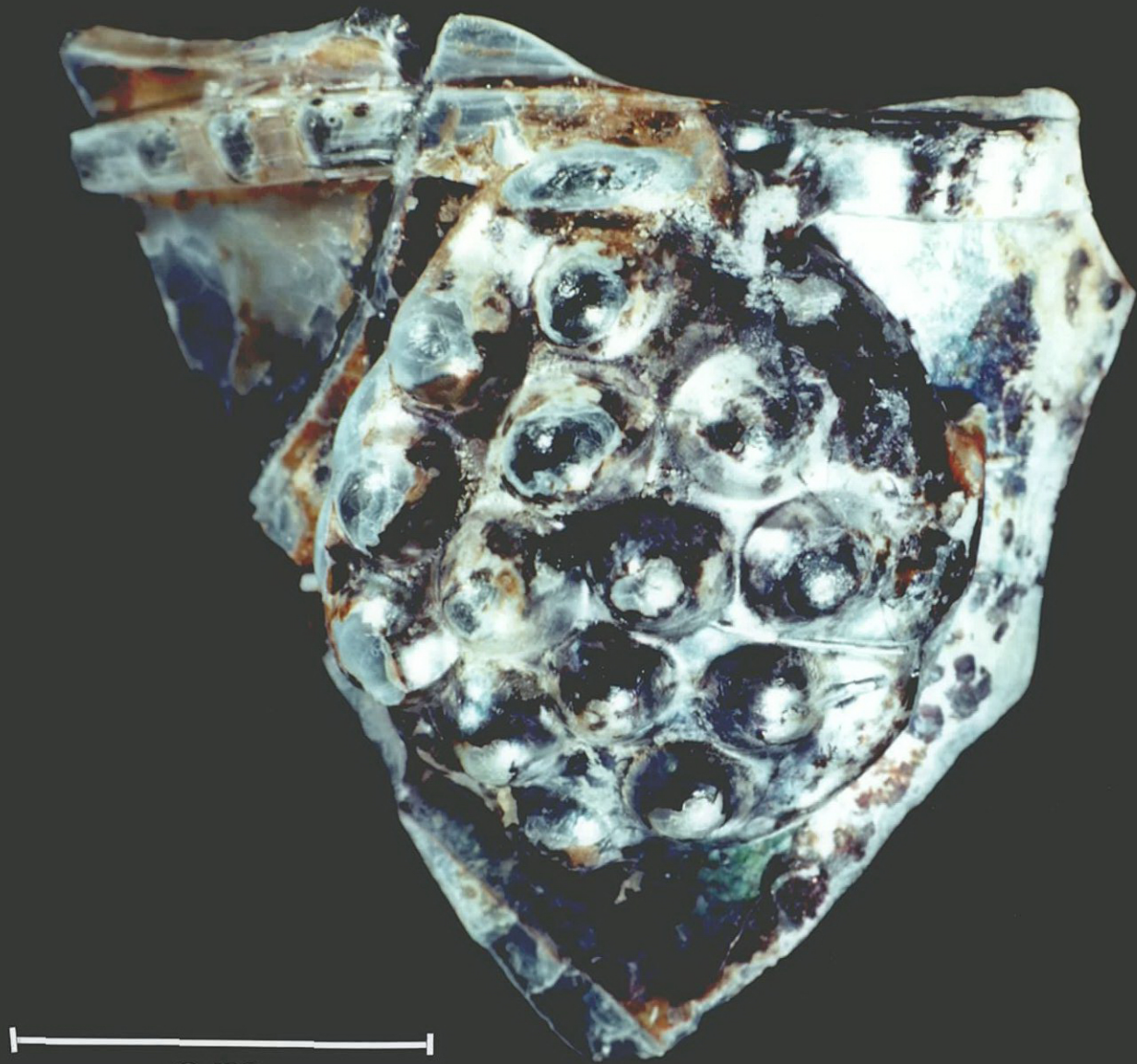
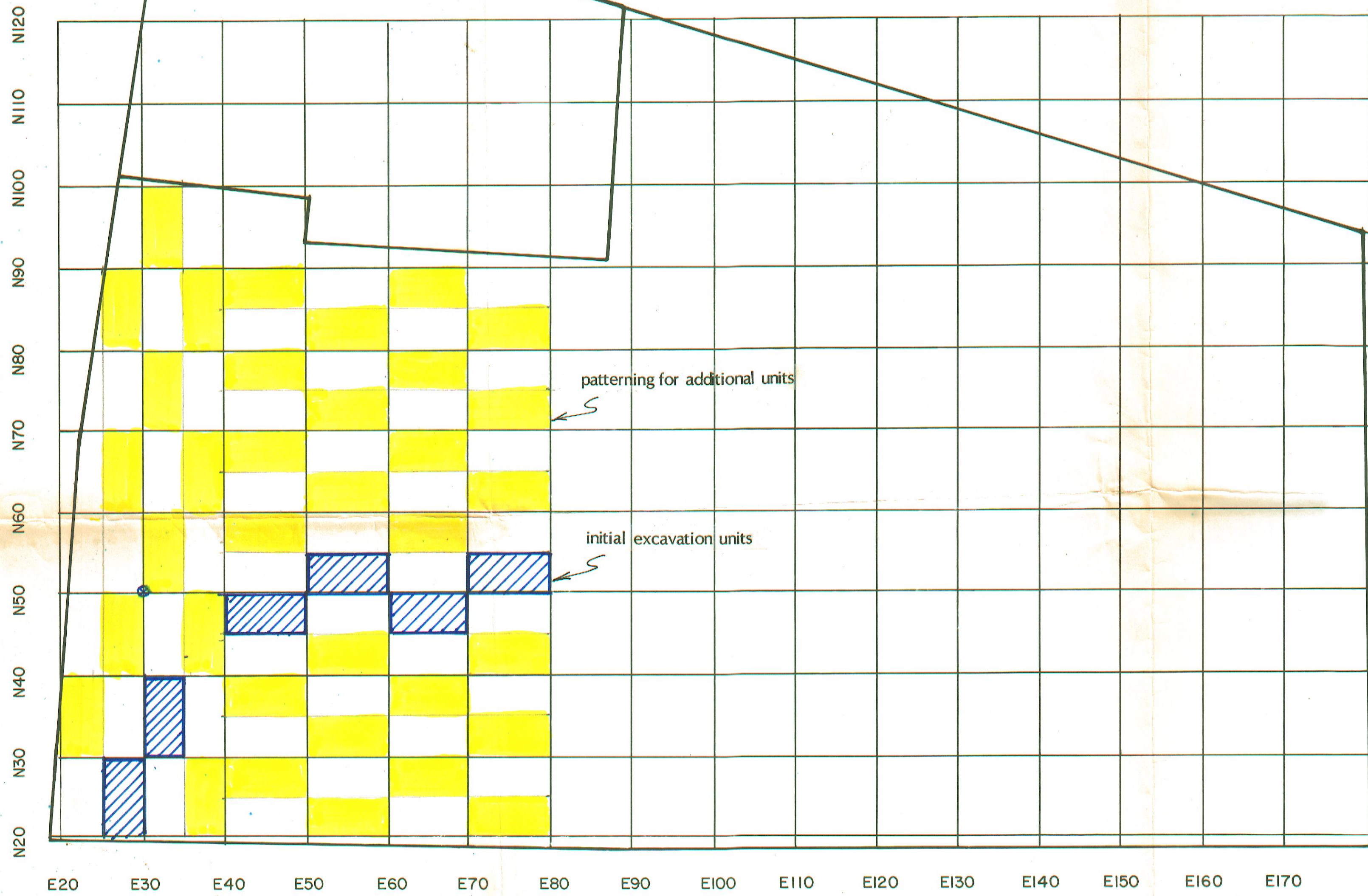


PLATE XXII

- Description: "Raspberry prunt" an ornament from a
Rhenish cylindrical-stemmed goblet.
17th century. (Noel-Hume 1972:185).
H. 2.5 cm., W. 2.8 cm.
- Provenience: Block 10, 100 Broad Street
NY Site AO-01-1282
Lot 8
Unit N65 E 145
Cx No. 180; Bottom of 19th century
builders' trench.
- Condition: In two fragments. Fragile devitrification
layer on all surfaces.
- Treatment: Cleaned in moving water. After complete
drying, consolidated surface layer with
3 coats of Acryloid B-72 in ethanol.
Cemented fragments with PVA-AYAF in acetone.

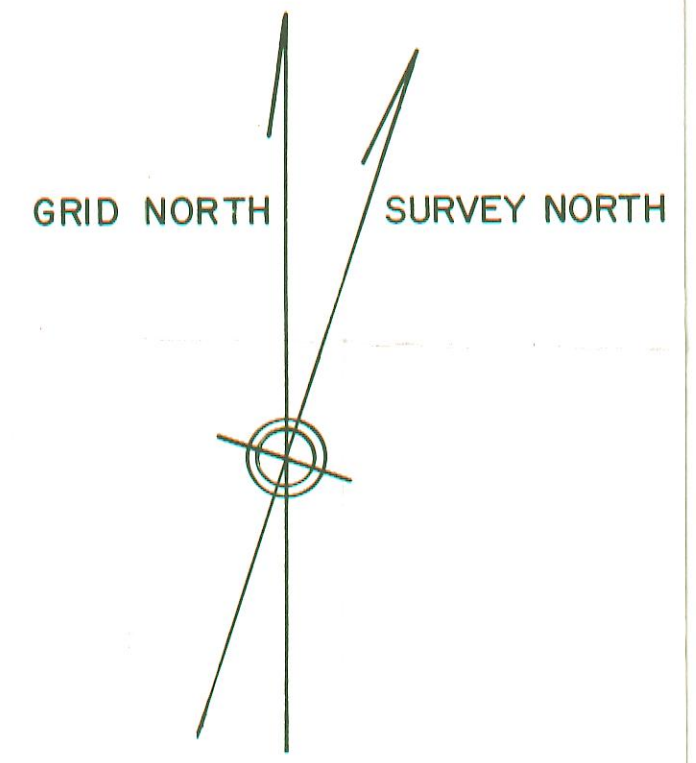


cm

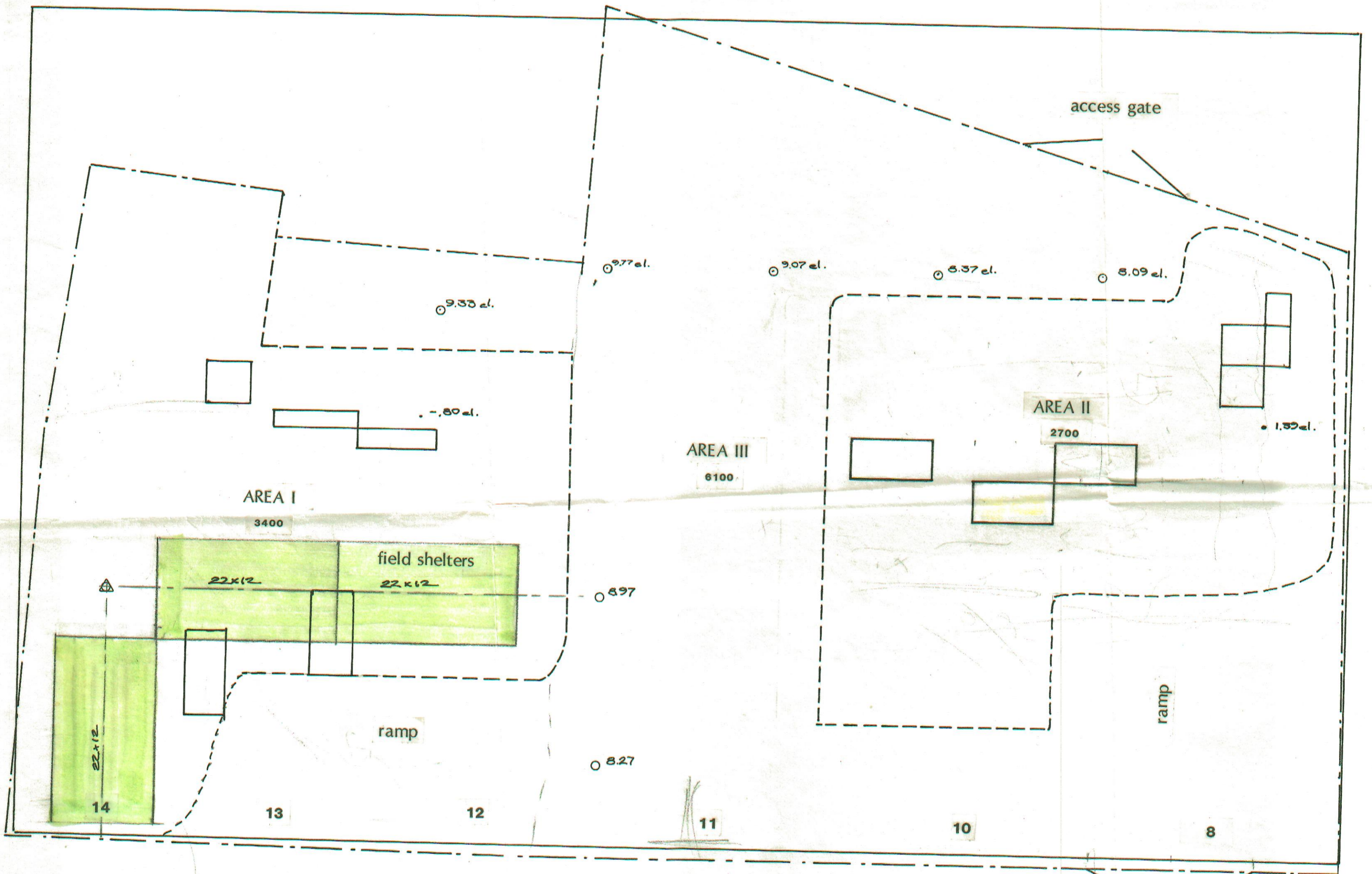


patterning for additional units

initial excavation units



SCALE: 1:120



TOTAL AREA 12,200 sq. ft.

access gate