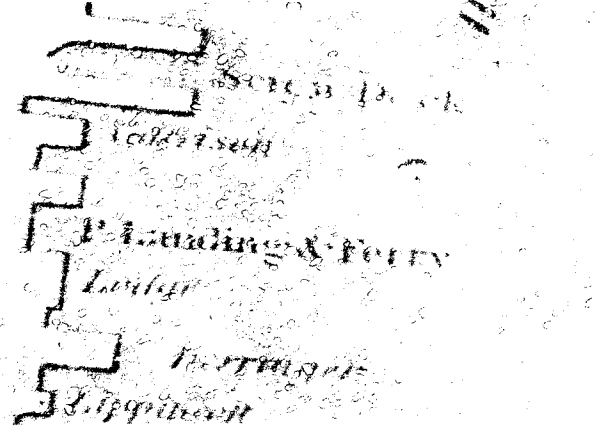
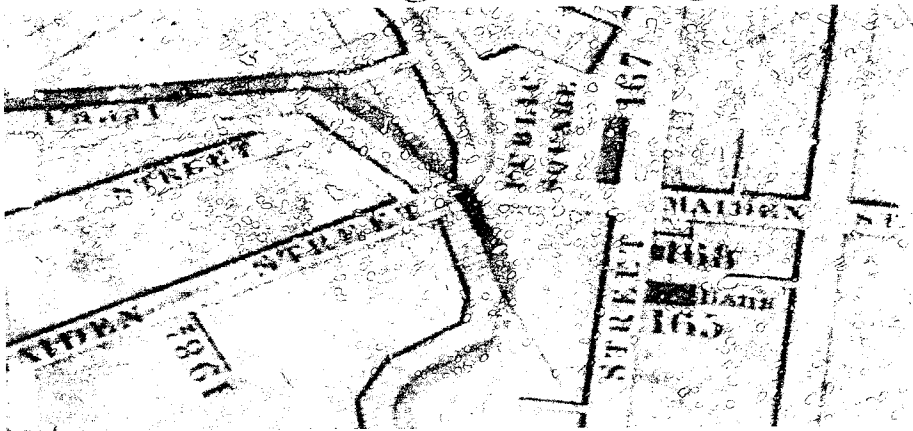


PHASE IB MANAGEMENT SUMMARY REPORT

HSP Gaming, L.P. - SugarHouse Casino



941-1025 North Delaware Avenue, City of Philadelphia,
Philadelphia County, Pennsylvania

ER # 07-0722-101

Prepared for:

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October 2007

DRAFT

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ABSTRACT

This management summary report presents the results of the preliminary Phase IA field investigations undertaken in May 2007 and the October 2007 Phase IB archaeological field identification studies conducted by A.D. Marble & Company within the Area of Potential Effects (APE) associated with the proposed SugarHouse Casino in the City of Philadelphia, Philadelphia County, Pennsylvania. This work was conducted for HSP Gaming, L.P., c/o Keating Consulting, LLC, of Philadelphia, Pennsylvania.

The 22.6-acre development parcel is located along the Delaware River waterfront in the Kensington section of the city. The APE is bounded roughly by Ellen Street to the south, Delaware Avenue to the west, Shackamaxon Street to the north, and the Delaware River to the east. The parcel is currently an open lot and formerly served as an industrial site. No buildings are currently standing on the parcel, though the remains of several concrete pads, roadways, rail lines, and piers/slips are still present.

The preliminary Phase IA field investigations were undertaken to assess the preservation of potential historic archaeological resources across the APE. As recommended in the Phase IA report, the Phase IB testing explored four selected areas that were denoted as H1 through H4 and were considered to have high potential to contain historic archaeological resources. In addition, two other areas, PH1 and PH2, were assessed to have high and moderate precontact archaeological potential, respectively. These two areas, which were embedded within Area H1, were also subjected to Phase IB testing. During the course of the Phase IB testing, a total of 15 10-foot wide trenches were excavated at 100-foot intervals within Areas H1 through H4. In addition, one 3.3-foot square test unit was excavated within Area PH1, and two were excavated within Area PH2. During the course of these studies, archaeologists identified 84 separate historic archaeological features. No intact precontact archaeological resources were identified within the APE.

As a result of the Phase IB testing, A.D. Marble & Company recommends that Phase II evaluation studies be undertaken in five areas within the APE. These studies should include mechanical stripping of the areas to reveal foundation ruins, shaft features, alleyways, and yards and documentation of the finds. In addition, some limited subsurface testing should be undertaken to establish the integrity of shaft features and to determine whether yard areas and alleyways retain intact surficial or near-surficial deposits contemporary with the period of occupation of the buildings represented by the foundations.

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I . 0 I N T R O D U C T I O N

1.0 INTRODUCTION

The following management summary presents the results and recommendations from Phase I identification archaeological testing within the Area of Potential Effects (APE) associated with the proposed SugarHouse Casino project. This project is located in the Fishtown neighborhood of the Kensington section of the City of Philadelphia, Philadelphia County, Pennsylvania (Figure 1). The proposed casino site encompasses 22.6 acres of land bounded roughly by Ellen Street to the south, Delaware Avenue to the west, Shackamaxon Street to the north, and the Delaware River to the east. This management summary report has been prepared for HSP Gaming, L.P., c/o Keating Consulting, LLC of Philadelphia, Pennsylvania, by A.D. Marble & Company of Conshohocken, Pennsylvania.

In February and March 2007, A.D. Marble & Company commenced work on the Phase IA archaeological survey for the SugarHouse Casino site. The Phase IA archaeological survey included conducting background research into the history of the project site; assembling a Geographic Information System (GIS)-based collection of historic maps spanning from the late eighteenth century to the mid-twentieth century; and geomorphological testing of the project area. Four areas, designated H1, H2, H3, and H4 (Figure 2), were determined to have a high probability to contain historic archaeological deposits. Two other areas with precontact archaeological potential, PH1 and PH2, were also identified. Both areas were located within Area H1. The geomorphological test trenches uncovered a number of historic archaeological features, providing a preliminary confirmation of potential archaeological findings. A.D. Marble & Company also conducted some additional limited preliminary testing in May 2007 to assess the preservation potential within the rest of the APE.

On October 3, 2007, representatives of the United States Army Corps of Engineers (USACE), the Pennsylvania Historical and Museum Commission (PHMC), Keating Consulting, LLC (on behalf of HSP Gaming, L.P.), HSP Gaming L.P. counsel, Urban Engineers, and A.D. Marble & Company met to discuss the project and how to proceed with archaeological testing at the site. As a result of the agreements reached at the October 3, 2007 meeting, A.D. Marble & Company

commenced the Phase IB fieldwork on October 8, 2007. The results of those field investigations are documented in this management summary report.

2 . 0 A R C H A E O L O G I C A L
R E S U L T S

2.0 ARCHAEOLOGICAL RESULTS

The fieldwork undertaken in the Phase IB stage of this project followed the recommendations presented in the Phase IA report and the agreements reached at the project meeting on October 3, 2007. The Phase IA report had specified areas of precontact and historic archaeological potential in its Figures 18 and 20, respectively. Prior to the inauguration of fieldwork, additional background research was begun to identify properties of greater historic archaeological potential. The age and integrity of deposits will be used to assess their significance, along with relevant information regarding the people associated with the deposits' formation and the types of activities the deposits represent.

2.1 Preliminary Phase IA Investigations

Preliminary Phase IA field investigations were undertaken to assess the preservation of potential historic archaeological resources across the project's APE. This work was conducted in May 2007. Features identified during these investigations will be discussed briefly below and are summarized in Table 1. Each will be discussed in relation to the historic area in which it was discovered. Locations of geotechnical trenches (GT) and strip blocks (SB) are represented on Figure 3.

2.1.1 Area H1

Area H1 is located between Delaware and Penn Streets, south of Laurel (or Maiden) Street, just west of an active sewer line in the southwest portion of the APE.

Four geotechnical trenches were investigated during preliminary Phase IA testing within this area. Results of this geomorphological study were discussed in detail in the Phase IA archaeological survey report. Architectural features were identified within GTs 3, 5, and 6. A brick privy shaft feature was identified in GT 3, and a brick foundation wall was identified within GT 6. A single non-architectural feature was discovered within GT 5 and consisted of a post mold beneath an intact A-horizon.

Strip blocks excavated during the preliminary Phase IA field investigations resulted in the identification of two architectural features within two separate strip blocks. Feature 21 was identified as an east-west running stone foundation wall within SB 15 and will be further elaborated upon during discussions of Trench 14. Feature 23 (Photograph 1) is also an east-west running stone foundation identified within SB 16 just south of Laurel Avenue.

2.1.2 Area H2

Area H2 is located between Delaware Avenue to the west, Penn Street to the east, Laurel Street to the south, and Shackamaxon Street to the north. Two geotechnical trenches were investigated within the area. The remains of a single brick foundation were identified within GT 1. No features were identified within GT 2.

Nine additional strip blocks were investigated within Area H2 and five architectural features were identified. The identified features included a privy/shaft feature constructed of brick and four foundation features of materials ranging from brick to mortared stone. Feature 10 was identified within SB 7 just north of Laurel Street and consisted of a brick-lined shaft feature (Photograph 2). A single non-architectural feature, identified as a soil anomaly, was also present within SB 7.

Feature 24 (Photograph 3) is a mortared stone foundation discovered in SB 17. The feature appears to be the remains of a building foundation with rubble fill to the south.

Feature 25 (Photograph 4) is a brick foundation or footer for a frame building identified within SB 19. The feature runs east to west. The feature is 4 feet long by 1 foot wide and is comprised of three courses of brick.

Feature 26 (Photograph 5) is a building foundation of mortared stone and consists of two walls and a corner. The southern and eastern walls were exposed directly below a layer of Belgian block and may represent an early residence that predates the sugar refinery that used to stand directly to the south.

2.1.3 Area H3

Area H3 is located just north of Laurel Street and east of Penn Street. This area represents the smallest of the historic areas. No geotechnical trenches were excavated within this area.

Preliminary investigation of two strip blocks produced evidence of two architectural features that will be characterized during discussions of Trench 13 below.

2.1.4 Area H4

Area H4 is located east of Penn Street and south of Laurel Avenue within a fenced area in the southeast portion of the property. No geotechnical trenches were investigated within this portion of the test area.

Five strip blocks were excavated within Area H4, and seven architectural features were identified. Features 14 to 17 (Photograph 6), which involved several brick walls over mortared stone footers and concrete foundation walls, were identified in SB 11.

Feature 18, a brick and stone foundation wall that runs east to west, was identified within SB 12. This feature is shown in Photograph 7.

Feature 19 (Photograph 8) represents a decayed stone foundation running east to west. It lay below surface rail lines, a Belgian block pavement, and over four feet of unconsolidated demolition fill.

Feature 27 (Photograph 9), which was composed of parallel concrete foundations, was discovered in SB 24 just below the present ground surface.

Table 1 lists the features identified during the preliminary Phase IA preliminary investigations. Missing feature numbers represent features that were initially identified in the field but determined subsequently to be non-cultural or composed of fills.

Table 1. Features Identified during the Geomorphological Testing and the Phase IA Preliminary Investigation.

Area	Geo Trench No. or Strip Block No.	Feature No.	Description	Photograph No.
H1	GT 3	2	Brick-filled privy	
	GT 6	4	Brick foundation features	
		5	Brick foundation features	
	SB 15	21	Stone foundation	1
		22	Amorphous stain	1
SB 16	23	Stone wall foundation	1	
H2	GT 1	1	Brick foundation	
	SB 7	10	Privy and soil anomaly	2
		11	Privy and soil anomaly	
	SB 17	24	Stone foundation	3
	SB 19	25	Small brick wall foundation: only three courses	4
SB 20	26	Stone foundation	5	
H3	SB 10	13	Concrete pad	
H4	SB 11	14	Stone and brick foundation remnants	6
		15	Stone and brick foundation remnants	6
		16	Stone and brick foundation remnants	6
		17	Stone and brick foundation remnants	6
	SB 12	18	Brick and stone foundation	7
	SB 13	19	Brick foundation	8
	SB 24	27	Parallel concrete walls	9

2.2 Phase IB Testing

The first stage of activity on-site during the Phase IB testing was the establishment of the areas to be investigated. A Global Positioning System (GPS) was used to identify and mark the boundaries of the locations where the probability for intact cultural resources was highest, as indicated in the Phase IA report. The precontact and historic areas were subjected to different approaches during the archaeological investigations. However, in both cases, the modern overburden was removed mechanically by a backhoe with a straight-edged blade to the depths previously identified during the geomorphological study.

In those areas identified as having high historic archaeological potential (Figure 2), a series of test trenches 10 feet wide was excavated along the shorter axis of the areas, with the exception of Area H3, where the trench was run parallel to the longer axis. This constituted a roughly 10 percent sample of the historic areas. The modern overburden was removed down to the level where remaining foundations and archaeological features were exposed. The exposed foundations and features were then cleared by hand, mapped, and photographed. At the discretion of the principal investigator, additional trenches were excavated in areas determined

by background research to be likely to contain particularly significant archaeological remains, such as areas within which early historic structures were recorded to have been located.

There is a moderate to high potential for intact historical deposits within the backyards and alleyways exposed by the removal of the overburden, and the Phase IB work plan specified shovel testing of these areas at 20-foot intervals. However, no intact historic surfaces or A-horizons were exposed within the trenches during the Phase IB testing. As a consequence, no short interval shovel tests were excavated.

Fifteen 10-foot wide backhoe trenches were excavated during the Phase IB survey. Fifty-two features were identified; 49 were architectural in function, and three consisted of soil anomalies. The results of the Phase IB archaeological fieldwork are presented below.

2.2.1 Area H1

A total of three trenches were excavated within Area H1. Trench 1 was excavated along the eastern edge of the APE just west of an active sewer line. The northern edge of the trench began 25 feet south of an east-west running fence along the south side of Laurel Avenue. The overlying soil was removed to the tops of remnant building foundations and other features, where present. Fifteen features were identified within Trench 1, including 14 architectural remains and one amorphous, grey soil stain of unknown function. Photograph 10 is an overview of the trench from the north end. Architectural features included the remains of several foundations and two privy/shaft features. Feature 29 (Photograph 11), a brick-lined shaft feature is present within a backyard or side yard of houses represented by the rubble-filled foundations.

Foundations discovered within Trench 1 were constructed of mortared stone and filled with brick and mortar rubble. The presence of a large quantity of brick within the foundations suggests that the upper portions of the buildings were constructed of brick on stone foundations. Six individual foundations that were not industrial in nature were identified within Trench 1, represented here by Feature 33 (Photograph 12). Intact features were identified within several of the foundations, including Feature 34, a brick construction of unknown function (Photograph 13). The integrity of the foundations decreased the further south they were located within the trench.

A second shaft feature (Feature 40), constructed of stone and represented here by Photograph 14, was present within a back/side yard area south of a large mortared stone foundation designated Feature 37.

The southern end of the trench ceased at the edge of a large brick wall that measured more than three feet in width and extended more than four feet below the present ground surface. A corner was identified, as well as the east wall, which extended six feet and stopped. This sizable brick foundation is associated with the Beach Street Power plant that was built in the late nineteenth century. Photograph 15 represents this foundation remnant, designated Feature 42.

Trench 2 (Photograph 16) was excavated parallel to Trench 1 along the eastern edge of a concrete pad associated with the railroad in order to test the center of areas PH1 and PH2. Three 3.3-foot by 3.3-foot test units (TUs) were excavated within the trench and will be discussed in the results section for these precontact areas later in this document. Four historic features were identified within Trench 2 including Feature 45, a row of soil-filled depressions left after the removal of railroad ties (Photograph 17); a wall foundation discovered during the excavation of TU 2 (Feature 61, Photograph 18); an in-filled feature of unknown function (Feature 43); and a concrete pad and fill that appeared to be associated with the power station.

Trench 15 was excavated parallel to Trenches 1 and 2 between two long concrete pads (Photograph 19). Seven architectural features were present within Trench 15. Feature 21 (Photograph 20), a stone foundation located at the northern terminus of the trench, was identified during preliminary testing and discussed previously. Feature 75 was an H-shaped brick feature of unknown function (Photograph 21) present just south of Feature 21 near the center of the trench. Features 76, 77, and 79 were stone foundation features, and Feature 78 was a stone pad feature. Feature 80 was another sizable brick wall similar to Feature 42 in Trench 1 and is also likely to be associated with the power plant.

As determined on the basis of cartographic analysis using historic maps of the area (Figures 4 to 9), many of the foundation features found in these trenches were associated with residences

and likely date from the eighteenth through mid-nineteenth centuries. Late-nineteenth- to early-twentieth-century industrial remains were also identified. The results of this analysis are summarized in the tables below.

Table 2. Features in Area H1, Trench No. 1.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
28	Foundation fronting Maiden/Laurel	mid-19 th c./ residential	1849, 1859, 1860, 1873, 1887, 1909	10	5, 6, 7, 8,
29	Privy and plumbing	mid-19 th c./ residential	1849, 1859, 1860, 1873, 1887, 1909	11	5, 6, 7, 8,
30	Stone foundation	18 th c. to mid-19 th c./ residential	1797, 1849, 1859, 1860, 1873, 1887	10	4, 5, 6, 7
31	Brick pier features in Feature 30	mid-19 th c./ residential	1849, 1859, 1860, 1873, 1887	10	5, 6, 7
32	Stone foundation	mid-19 th c./ residential	1849, 1859, 1860, 1873, 1887	10	5, 6, 7
33	Stone Foundation with brick features	18 th c. to mid-19 th c./ residential	1797, 1849, 1859, 1860, 1873, 1887	12	4, 5, 6, 7
34	Brick feature within Feature 33	mid-19 th c./ residential	1849, 1859, 1860, 1873, 1887	13	5, 6, 7
35	Brick feature within Feature 33	mid-19 th c./ residential	1849, 1859, 1860, 1873, 1887		5, 6, 7
36	Stone foundation, possibly associated with Feature 33	18 th to mid-19 th c./ residential	1797, 1849, 1859, 1860, 1873, 1887, 1909		4, 5, 6, 7, 8
37	Foundation; appears to be truncated by Feature 38; Rubble filling Feature 37 on south side of Feature 38; fill consisted of broken up remains of a non-ferrous smelting furnace	18 th to mid-19 th c./ residential	1797, 1849, 1859, 1860, 1873, 1887		4, 5, 6, 7
38	Brick wall/Courtyard wall	?	?		?
39	A stone foundation wall within Feature 30	Mid-19 th c./ residential	1849, 1859, 1860, 1873, 1887		5, 6, 7
40	Shaft feature constructed of stone	?	?	14	?
41	Soil stain south of Feature 40	?	?		?
42	Large brick foundation associated with the Beach Street Powerhouse	Late-19 th c. into 20 th c./ Industrial	1909, 1920, 1929	15	8, 9

Table 3. Features in Area H1, Trench No. 2.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
43	Deep sand fills	?	?	16	?
44	Concrete remnant	20 th c./ industrial	1909, 1920, 1929	16	8, 9
45	Row of indentations with soil stains from removed railroad crossties	20 th c./ industrial	1929	16, 17	9
61	Stone foundation with corner	18 th c./ ?	1797	16, 18	4

Table 4. Features in Area H1, Trench No. 15.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
21	Stone foundation	18 th c. to mid-19 th c./ residential/ commercial	1797, 1849, 1859, 1873, 1889, 1909, 1920, 1929	19, 20	4, 5, 6, 7, 8, 9
75	H-shaped brick structure with Feature 77	mid-19 th c./ ?	1849, 1859, 1873, 1889, 1909, 1920, 1929	19, 21	4, 5, 6, 7, 8, 9
76	Stone foundations	mid-19 th c./ ?	1849, 1859, 1873, 1889, 1909, 1920, 1929	19	4, 5, 6, 7, 8, 9
77	Brick and stone foundation grouping	mid-19 th c./ bank?	1849, 1859, 1873, 1889	19	5, 6, 7
78	Stone pad	mid-19 th c./ bank?	1849, 1859, 1873, 1889	19	5, 6, 7
79	Stone foundation	mid-19 th c./ bank?	1849, 1859, 1873, 1889	19	5, 6, 7
80	Brick foundation	Late-19 th c. into 20 th c./ industrial	1909, 1920, 1929	19	8, 9

2.2.2 Area H2

A total of eight trenches were excavated within Area H2, and 21 features were identified. Trench 3 was located 50 feet from the edge of, and running parallel to, Laurel Avenue. Photograph 22 is an overview of the trench and shows the presence of Feature 46, a single row of bricks located at the eastern terminus of the trench. Photograph 22 also shows the presence of B-horizon soils directly beneath less than 2 feet of fill within this portion of the APE. Two features of unknown origin are present near the western edge of the trench. Feature 47 (Photograph 23) is rectangular and is constructed of wood and timber and lies within a stone

foundation. This feature was discovered nearly 4 feet below the ground surface. Feature 48 is a row of 1-foot by 1-foot stacked timbers located just east of Feature 47.

Trench 4 was located approximately 100 feet north of Trench 3. Photograph 24 shows the presence of the B-horizon soils directly below the fill horizons and less than 2 feet below present ground surface. This photograph also documents the location of Feature 49. Feature 49 is a foundation constructed of large angular stones. Subsoil appears to be present on the three sides of the foundation that have been exposed, suggesting it may be a footer for some type of framed building. The feature is formed from a single layer of stone.

Trench 5 is located 100 feet north of Trench 4. Photograph 25, an overview shot of the trench, shows the presence of B-horizon soils throughout. There are no features present within this trench.

Trench 6 is located 100 feet north of Trench 5. Feature 50 is the predominant feature within this trench and consists of a deep fill that extends west through more than three-quarters of the excavation and terminates at the slight remains of a stone wall (Photograph 26). Artifacts recovered from the trench, very near its base, have been discarded in the field, and consisted of a plastic hair comb, wire, and a number of other modern artifacts. This feature represents a large building that has been demolished and backfilled. Feature 51 (a brick construction of unknown origin or function), Feature 52 (a stone foundation), and Feature 62 (a modern utilities trench that truncated Feature 52) are all present at the western terminus of the trench and are represented by Photograph 27.

Photograph 28 represents an overview of Trench 7 and documents the deep modern fills associated with an unknown building. Excavations within this trench were halted when a strong odor of fuel oil became apparent. The trench was immediately backfilled when the backhoe operator identified the presence of several asbestos shingles.

Trench 8 is located 100 feet north of aborted Trench 7. Photograph 29 presents an overview of the trench excavation and the presence of a deeply buried foundation ruin (Feature 54) that has

been filled with rubble, cinders, and coal ash. Subsoil is clearly present along the east and south edges of the foundation. Also present within Trench 8 are Feature 58 (a concrete pad located near the center of the trench), Feature 55 (a concrete pillar), and Feature 57 (two vertical standing metal pipes), all attributable to modern construction. Photograph 30 represents Feature 56 (a stone foundation of unknown attribution) and Feature 57.

Trench 9, located 100 feet north of Trench 8, was excavated in two sections as a result of the presence of more than 1 foot of concrete, railway timbers, and rail lines within the area of investigation. Photograph 31, an overview of the trench, shows the presence of Feature 59, which consisted of two stone foundation walls that run north to south and may represent the façade of the sugar house refinery. Feature 60 (a row of rail timbers) and Features 63 and 64 (liner rows of crushed demolition debris) are also present within this trench. Excavations did not extend north past Trench 9 due to the presence of a large truck scale located parallel to Shackamaxon Street.

Trench 14, which was located just outside Area H2, was excavated at the discretion of the Field Director to investigate the area where backyards to houses that had fronted on Delaware Avenue would have been present. Historically, this area was occupied by a large brick warehouse. Trench 14 was placed to determine the degree of disturbance caused by the construction and subsequent demolition of that warehouse. Photograph 32, an overview of Trench 14, shows the presence of Features 81 through 84. Feature 81 is a large concrete pad with a small rectangular brick construction of unknown function (Feature 82) located to its east. A remnant of a late-eighteenth-century foundation (Feature 83) was also identified, along with Feature 84, another late-nineteenth- to twentieth-century industrial feature. The evidence from Trench 14 suggests that the area was heavily impacted by later commercial and industrial construction activities.

Cartographic analysis was undertaken to determine the age and function of the features identified in Area H2. With the exception of the southern end of the area and a small area near its northern end, most of Area H2 appears to have been heavily impacted by historic and modern industrial construction activities. The results are summarized in the tables below.

Table 5. Features in Area H2, Trench No. 3.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
46	Row of bricks, single course	mid-19 th c./ ?	1873	22	6
47	Unknown wood and timber feature	?	?	23	?
48	Row of timbers east end of trench	?	?		?

Table 6. Features in Area H2, Trench No. 4.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
49	Stone foundation	mid-19 th c./ ?	1873	24	6

Table 7. Features in Area H2, Trench No. 5.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
none	Sterile subsoil			25	

Table 8. Features in Area H2, Trench No. 6.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
50	Filled-in hole, possibly a building	mid-19 th c./ ?	1873	26	6
51	Brick feature	mid-19 th c./ ?	1873	26	6
52	Stone foundation truncated by modern utility lines	mid-19 th c./ ?	1873	26, 27	6
62	Modern utility lines	20 th c./ industrial		26, 27	

Table 9. Features in Area H2, Trench No. 7.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
53	Rubble-filled foundations	18 th c./ ?	1797	28	4

Table 10. Features in Area H2, Trench No. 8.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
54	Rubble-filled foundations	mid-19 th c./ ?	1873	29	6
55	Concrete pillar	20 th c./ industrial	?	29	?
56	Stone foundation	?	?	29, 30	?
57	Two modern utility pipes	20 th c./ industrial	?	29, 30	?
58	Concrete pad	20 th c./ industrial	?	29, 30	?

Table 11. Features in Area H2, Trench No. 9.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
59	Row of timbers/railroad crosssties	Late 19 th c. into 20 th c./ industrial		31	
60	Stone and concrete foundation associated with sugar refinery	Late 19 th c. into 20 th c./ industrial	1909, 1920, 1929		8, 9
63	Brick and mortar found	mid-19 th c./ industrial?	1873		6
64	Brick and mortar found	mid-19 th c./ industrial?	1873		6

Table 12. Features in Area H2, Trench No. 14.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
81	Concrete pad running along eastern edge	Late 19 th c. into 20 th c./ industrial	1889, 1909, 1920, 1929	32	7, 8, 9
82	Rectilinear brick feature east of Feature 81	?	?	32	?
83	Stone foundation	18 th c./ ?	1797	32, 33	4
84	Wooden/timber bridge overlaying ceramic utility line	Late 19 th c. into 20 th c./ industrial	?	32, 34	?

2.2.3 Area H3

Area H3 was the smallest of the areas of historic archaeological potential and was tested with a single trench. Photograph 35 represents the overview of Trench 13 in which two architectural features were found. Feature 12 was identified during the preliminary testing in May and was exposed again within the western end of the trench. Feature 65 is a modern concrete foundation complex that includes the remains of a stairwell. Both appear to be industrial in attribution, as determined by cartographic analysis. Table 13 below summarizes the results from Trench 13.

Table 13. Features in Area H3, Trench No. 13.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
12	Brick foundation with stone addition	mid-19 th c. into 20 th c./ industrial	1873, 1889, 1909, 1920, 1929	35	6, 7, 8, 9
65	Concrete wall grouping	20 th c./ industrial	1909, 1920, 1929	35	7, 8, 9

2.2.4 Area H4

Area H4 is located east of Penn Street and south of Laurel Avenue. Three trenches were investigated within this area and nine features of various functions were identified. Trench 10 was located along the eastern terminus of Area H4 and is represented by Photograph 36. It did not contain any features other than deep fills and modern utility lines running through PVC pipes. Fills included coal ash, cinders, demolition debris, and other types of urban debris. A layer of fine white sand was located approximately halfway down the profile of the trench directly above geotechnical matting. This trench was backfilled immediately following its recording.

Trench 11 was located approximately 100 feet west of Trench 10. Photograph 37 provides an overview of the trench and shows the presence of vertical and horizontal timbers used as cribbing or soil retention within the fill horizons of the trench. The timbers were present at consistent intervals across the trench approximately 6 feet below the present ground surface. Photograph 38 shows several timbers *in situ*.

Trench 12 was located just inside the chain link fence running parallel to Penn Street. It extended from the southern edge of Laurel Avenue to the edge of Area H4. Photograph 39 shows an overview of the trench and the presence of modern concrete features very near the surface. Feature 66, located at the northern terminus of the trench, was composed of a complex of modern concrete pillars and pads, along with a stone pad with a terra cotta pipe sticking up through its base. Feature 67 was another concrete feature near the surface of the trench and appeared to be related to Feature 66 complex. Just south of Feature 67, Feature 68 was a deeply buried brick and stone feature of unknown origin (Photograph 41). Features 68 to 71 were a series of brick features identified at the same depth as Feature 68. Feature 72 was the remains of a concrete utility box with an iron manhole cover (Photograph 42). The southern terminus of the trench was heavily disturbed on the surface and covered with rail lines and concrete. The backhoe could not penetrate this conglomeration of modern construction and therefore the area directly beneath was not investigated. A deep trench was excavated on the northern end of the trench; its profile is represented in Figure 15.

The results of the cartographic analysis of this area are summarized in the tables below.

Table 14. Features in Area H4, Trench No. 10.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
none		?	?	36	?

Table 15. Features in Area H4, Trench No. 11.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
Not assigned	Wood timber cribbing	18 th c. into the 20 th c.	1797, 1849, 1859, 1873, 1889, 1909, 1920, 1929	37, 38	4, 5, 6, 7, 8, 9

Table 16. Features in Area H4, Trench No. 12.

Feature No.	Description	Age/Use	Map Reference	Photograph No.	Figure No.
66	Concrete pillars; concrete wall; stone wall	18 th c. into the 20 th c./ industrial	1797, 1849, 1859, 1873, 1889, 1909, 1920, 1929	39, 40	4, 5, 6, 7, 8, 9
67	90° concrete foundation	20 th c./ industrial	1909, 1920, 1929	39	7, 8, 9
68	Brick/stone wall and brick floor	18 th c. into the 19 th c./ industrial	1797, 1849, 1859, 1873, 1889	29, 41	4, 5, 6, 7
69	Brick wall with rubble fill	18 th c. into the 19 th c./ industrial	1797, 1849, 1859, 1873, 1889	39	4, 5, 6, 7
70	Brick wall remnant	?	?	39	?
71	Brick wall	?	?	39	?
72	Concrete conduit box with manhole	20 th c./ industrial	?	39, 42	?
73	Concrete pier and foundation	20 th c./ industrial	1909, 1920, 1929		8, 9
74	Brick pillar	?	?		?

2.2.5 Areas PH1 and PH2

In the two areas with precontact archaeological potential, PH1 and PH2 (Figure 2), a single test trench approximately 150 feet long and 10 feet wide was excavated along the longer axis of the combined areas. This constituted a roughly 20 percent sample of the precontact area. The modern overburden was removed mechanically to within a few inches of the surface of the intact buried A-horizon identified in the high probability area (PH1) or the B-horizon identified in the moderate probability area (PH2). The remainder of the modern overburden was removed by hand. Three 3.3-foot by 3.3-foot test units (one in PH1 and two in PH2) were placed at roughly 50-foot intervals within the trench and excavated into archaeologically sterile subsoil to determine the presence or absence of intact precontact deposits. Excavations followed natural

stratigraphy. Soils were dry screened through 0.25-inch hardware cloth, and any artifacts were collected.

TU 1 was placed at the northern terminus of Trench 2 in Area PH2. Overlying fill horizons were removed by backhoe and then by hand to intact soil. The soil profile consisted of fill horizons overlying subsoil. Two 4-inch levels of sterile subsoil were removed, and no precontact artifacts were recovered.

TU 2 was located approximately 50 feet south of TU 1 within Trench 2 in Area PH2. Overlying fill horizons were removed by backhoe and then by hand. Directly below the first fill horizon a wall foundation (Feature 61) was discovered, and the excavation of the test unit was terminated.

TU 3 was located approximately 50 feet south of TU 2 within Trench 2 in Area PH1. Overlying fills were removed by backhoe. The soil profile consisted of fills overlying sterile subsoil (Photograph 43, Figure 16). Stratum I consisted of 7.5YR 5/8 strong brown sandy loam with slag, coal, cinders, concrete, and brick fragments. No artifacts were recovered from Stratum I. Stratum II consisted of 10YR 4/3 dark grayish brown mottled with 7.5YR 5/8 strong brown sandy loam with gravel and brick fragments. Artifacts recovered from Stratum II include redware, stoneware, bottle glass, window glass, and a number of other historic artifacts. A single precontact artifact, a secondary quartzite flake, was recovered from Stratum II. Stratum III consisted of 10YR 4/6 dark yellowish brown sandy loam and was present in the southeast portion of the test unit. Artifacts recovered from Stratum III included redware, stoneware, porcelain, tin glazed ceramic, and yellowware.

The single precontact artifact, a quartzite secondary flake, was retrieved from a disturbed context. Neither of the other two units yielded precontact material. On the basis of these results, it appears that the precontact potential within the APE has been significantly diminished by historic and modern ground disturbances.

3 . 0 S U M M A R Y A N D
R E C O M M E N D A T I O N S

3.0 SUMMARY AND RECOMMENDATIONS

3.1 Summary

The results of the preliminary Phase IA investigations and Phase IB field testing indicate that the bulk of the areas identified as having historic archaeological potential have experienced substantial historic and modern ground disturbance, largely associated with the construction of industrial facilities and utility trenching.

In Area H1, the construction of the Beach Street Powerhouse effectively eliminated the area within the powerhouse's footprint from any further consideration. However, as evidenced by the number of historic archaeological finds made to date, the area to the north of the powerhouse's former location was not impacted by similarly disruptive activities.

In Area H2, construction of warehousing, the sugar processing plant, and rail facilities compromised the majority of the area. Only a limited area at the southern end of H2 and a tiny foundation remnant along its northeastern edge appear to retain deposits of archaeological interest. Features within these two areas have been identified that will require further study.

Area H3 retains a foundation ruin in its northwestern end that appears to warrant further consideration.

In Area H4, several interesting features were encountered, although they are located within an area that has experienced very significant modern ground disturbances as well. Despite the degree of modern ground disturbance, these features retain integrity and should be evaluated for their potential to yield significant information.

3.2 Recommendations

Based on the results of the testing undertaken to date, five areas within the SugarHouse APE are recommended for Phase II evaluation studies. These areas are identified in Table 17 below and are shown in Figure 17. Criteria of age, integrity, function, and research potential have been taken into consideration in making these recommendations. No areas of precontact archaeological interest were identified during the Phase IB survey.

Table 17. Summary of Testing to Date within the SugarHouse APE.

Area	Trench No.	Feature No.	Results	Recommendations
H1	1	28	Exposed foundation fronting Maiden/Laurel	Further Investigation
		29	Exposed privy and plumbing	Further Investigation
		30	Exposed foundation	Further Investigation
		31	Exposed brick pier features in Feature 30	Further Investigation
		32	Exposed foundation	Further Investigation
		33	Exposed stone foundation with brick features	Further Investigation
		34	Exposed brick feature within Feature 33	Further Investigation
		35	Exposed brick feature within Feature 33	Further Investigation
		36	Exposed foundation	Further Investigation
		37	Exposed foundation; appears to be truncated by Feature 38	Further Investigation
		38	Exposed brick wall/courtyard wall	Further Investigation
		39	Exposed a stone foundation wall within Feature 30	Further investigation
		40	Exposed a shaft feature constructed of stone	Further investigation
		41	Exposed a soil stain south of Feature 40	Further investigation
	42	Exposed a large brick foundation associated with the Beach Street Powerhouse	No Further Investigation	
	2	43	Exposed deep sand fills	No Further Investigation
		44	Exposed concrete foundation	No Further Investigation
		45	Exposed row of indentations with soil stains from removed railroad cross-ties	No Further Investigation
	15	61	Exposed stone foundation with corner	Further Investigation
		21	Exposed stone foundation	Further Investigation
		75	Exposed H-shaped brick structure with Feature 77	Further Investigation
76		Exposed stone foundations	Further Investigation	
77		Exposed brick and stone foundation grouping	Further Investigation	
78		Exposed stone pad	No Further Investigation	
79		Exposed stone foundation	Further Investigation	
H2	3	46	Exposed row of bricks, single course	Further Investigation
		47	Exposed unknown wood and timber feature	Further Investigation
		48	Exposed row of timbers east end of trench	Further Investigation
	4	49	Exposed stone foundation	Further Investigation
	5	none		No Further Investigation
	6	50	Exposed filled-in hole, possibly a building	No Further Investigation
		51	Exposed brick feature	No Further Investigation
		52	Exposed stone foundation truncated by modern utility lines	No Further Investigation
		62	Exposed modern utility lines	No Further Investigation

Area	Trench No.	Feature No.	Results	Recommendations
H2	7	53	Exposed rubble-filled foundations	Haz-Mat condition
		54	Exposed rubble-filled foundations	No Further Investigation
	8	55	Exposed concrete pillar	No Further Investigation
		56	Exposed stone foundation	No Further Investigation
		57	Exposed two modern utility pipes	No Further Investigation
		58	Exposed concrete pads	No Further Investigation
		59	Exposed row of timbers/railroad crossties	No Further Investigation
	9	60	Exposed stone and concrete foundation associated with sugar refinery	No Further Investigation
		63	Exposed brick and mortar	Further Investigation
		64	Exposed brick and mortar	Further Investigation
	14	81	Exposed concrete pad running along eastern edge	No Further Investigation
		82	Exposed rectilinear brick feature east of Feature 81	No Further Investigation
		83	Exposed stone foundation	No Further Investigation
		84	Exposed wooden/timber bridge overlaying ceramic utility line	No Further Investigation
H3	13	12a	Exposed brick foundation with stone addition	Further Investigation
		65	Exposed concrete wall grouping	No Further Investigation
H4	10	None		No Further Investigation
	11	None	Exposed wood timber cribbing	No Further Investigation
	12	66	Exposed concrete pillars; concrete wall; stone wall	No Further Investigation
		67	Exposed 90° concrete foundation	No Further Investigation
		68	Exposed brick/stone wall and brick floor	Further Investigation
		69	Exposed brick wall with rubble fill	Further Investigation
		70	Exposed brick wall remnant	Further Investigation
		71	Exposed brick wall	Further Investigation
		72	Exposed concrete conduit box with manhole	No Further Investigation
		73	Exposed concrete pier and foundation	No Further Investigation
74	Exposed brick pillar	Further Investigation		

The most prominent of these five areas is the part of Area H1 that contains residential foundations datable to the late eighteenth and early nineteenth centuries, along with shaft features. This is also the largest of the areas recommended for further study. Within Area H2, two areas are recommended for Phase II testing: the southernmost area proximate to Area H1 (which also contains shaft features) and the small foundation remnant along its northeastern edge. In Area H3, the foundation ruins identified in Trench 3 are recommended for evaluation studies. Finally, in Area H4, the area within which the deep brick features and timber cribbing were identified is also recommended for Phase II testing.

A.D. Marble & Company is recommending that the following methodology be followed during the course of the Phase II testing. First, the areas of interest should be stripped mechanically of their modern overburden. Foundation ruins, shaft features, alleyways, and yards exposed by this procedure should be cleared by hand, then mapped, drawn, and photographed. Some limited subsurface testing should be undertaken at this stage to establish the integrity of shaft features and to get a preliminary understanding of their contents. Yard areas and alleyways should also be tested, as they may retain intact surficial or near-surficial deposits contemporary with the period of occupation of the buildings represented by the foundations. All soils recovered from these tests should be screened through 0.25-inch hardware cloth, and all artifacts recovered from these tests and from other secure contexts should be retained for processing and analysis.

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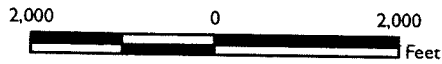
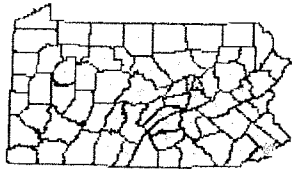
ATTACHMENTS

Figures

Figure 1
Project Location Map
 Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
 Philadelphia, Philadelphia County, Pennsylvania

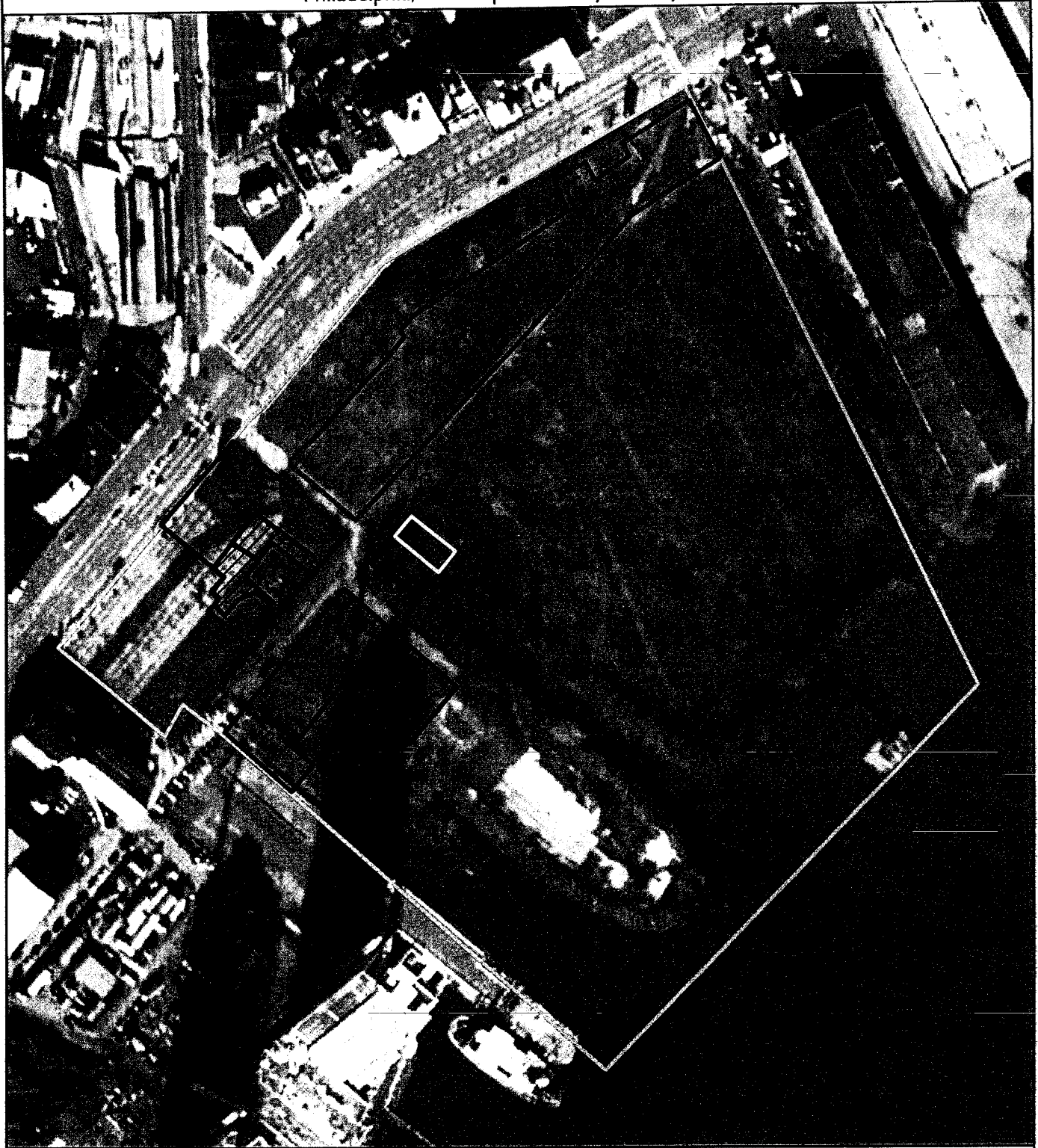


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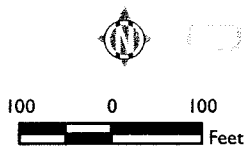
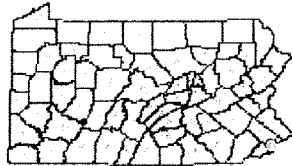


 Project Location

Figure 2
Areas of Archaeological Potential
 Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
 Philadelphia, Philadelphia County, Pennsylvania






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Area of Potential Effect (APE)

Test Areas

-  PH1
-  PH2
-  Historic- High - Area H1




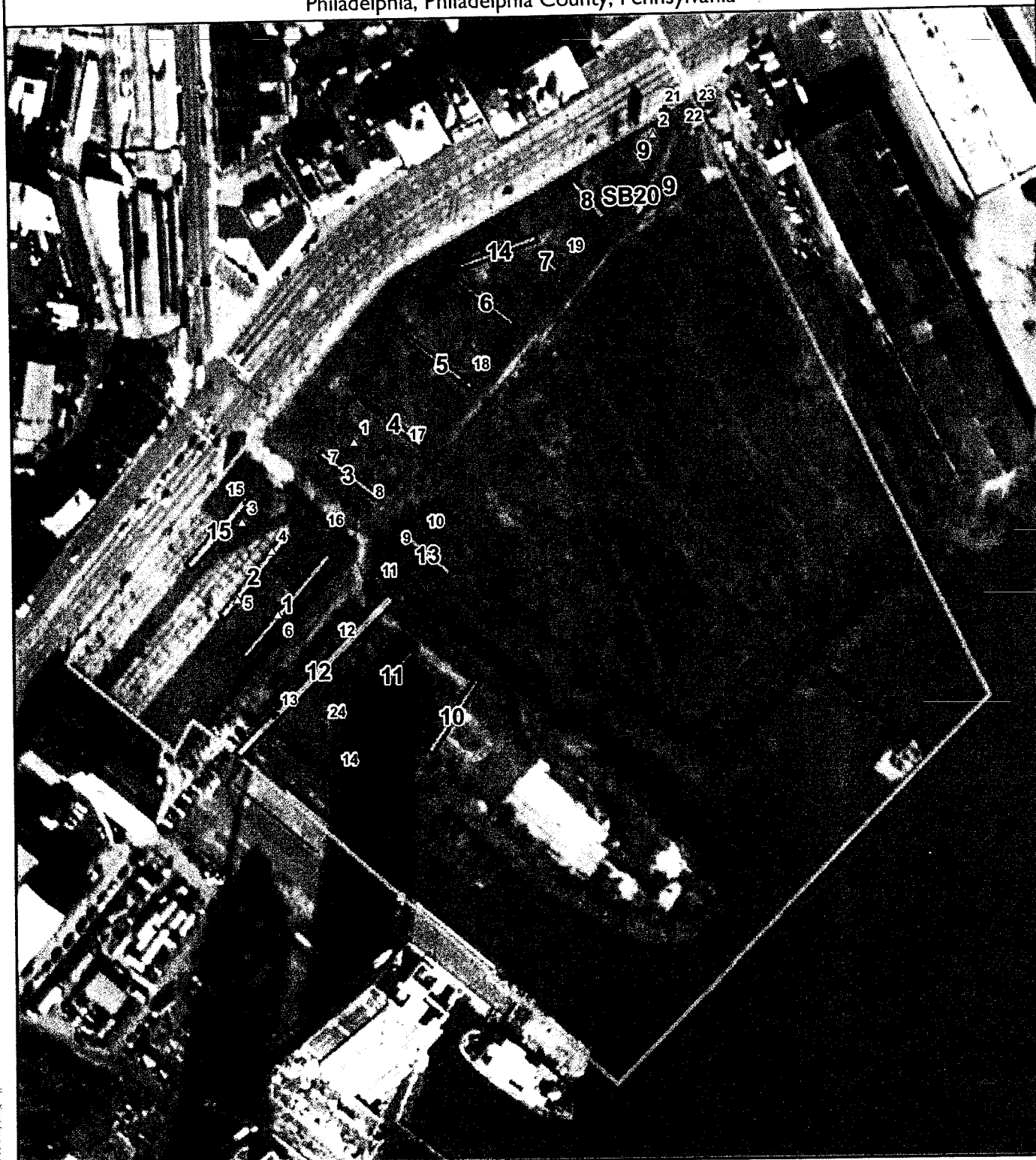
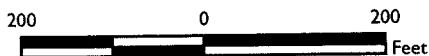
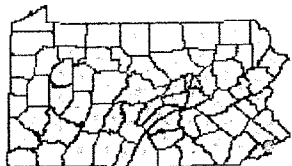
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-  Historic- High - Area H3
-  Historic- High - Area H4

Figure 3 Test Locations

Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
Philadelphia, Philadelphia County, Pennsylvania



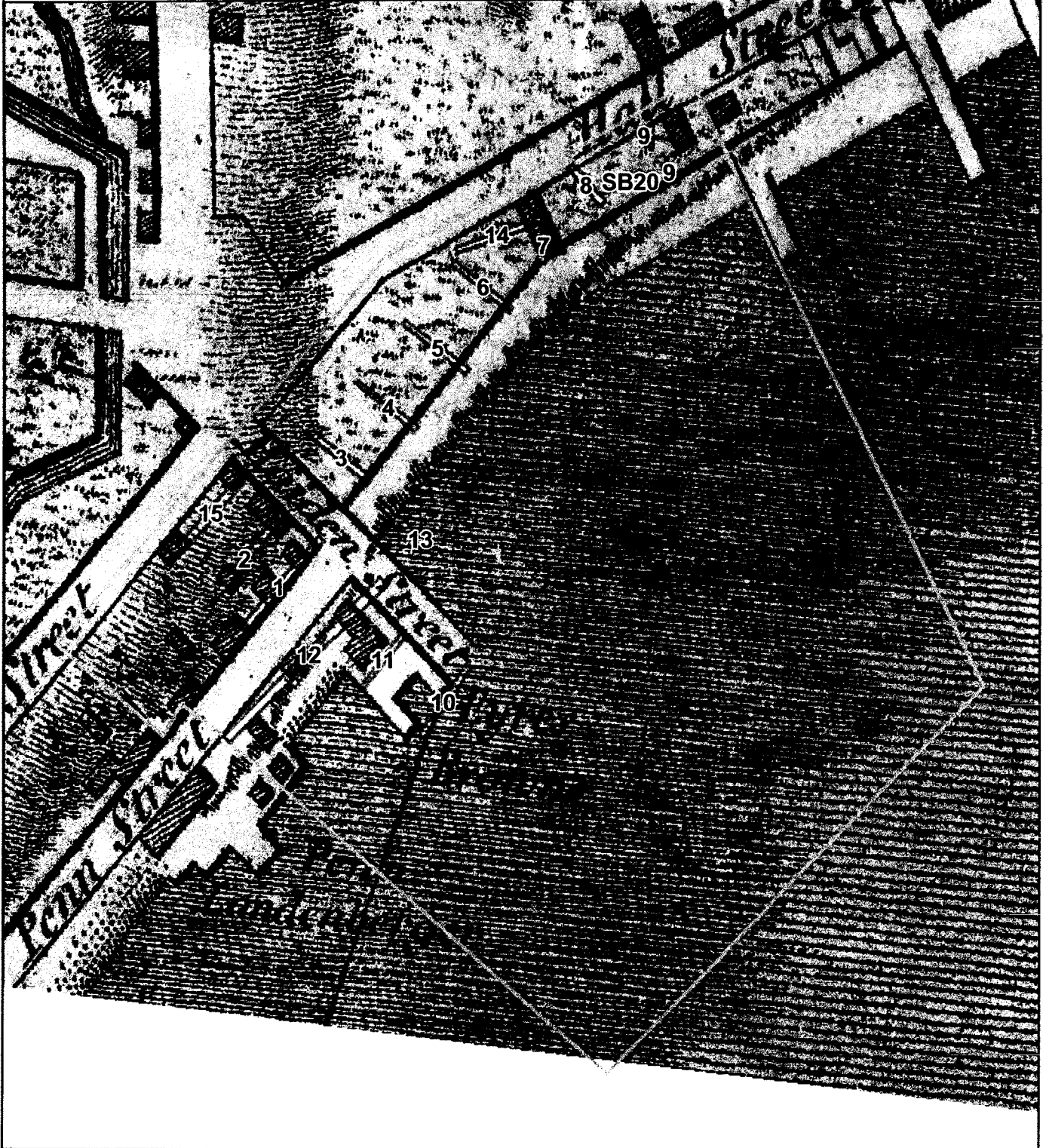
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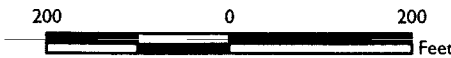
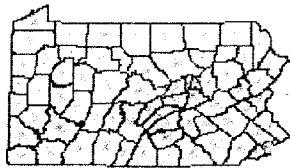
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Figure 4 1797 Hills Map

Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
Philadelphia, Philadelphia County, Pennsylvania



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
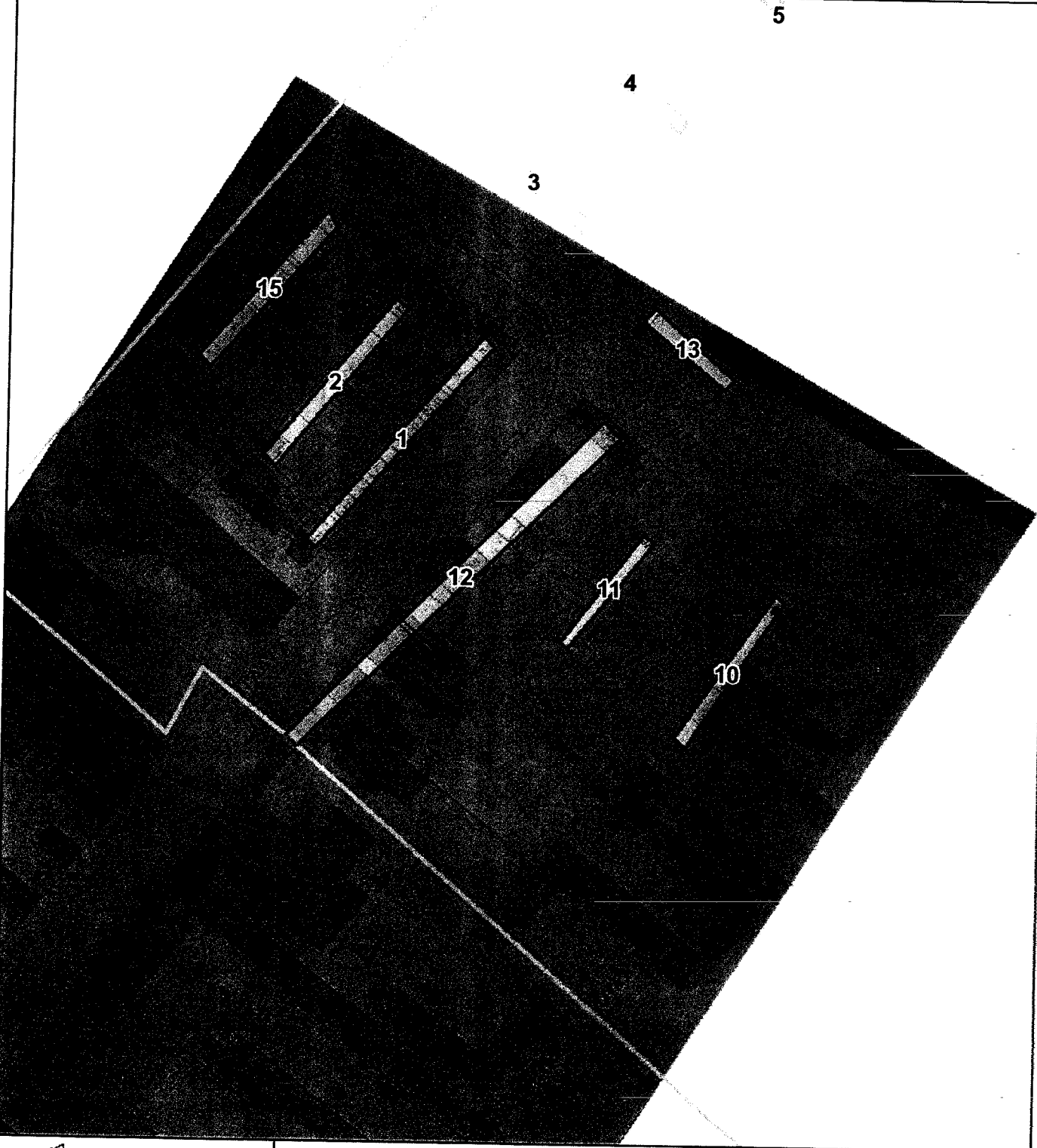
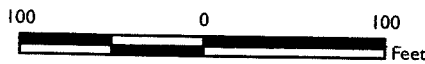
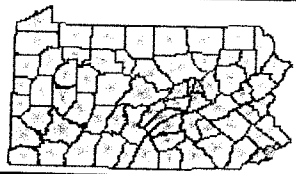
 Area of Potential Effect (APE)

Figure 5 1859 H&L Map

Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
Philadelphia, Philadelphia County, Pennsylvania



Map Document: (X:\Projects\1993\Mapping\Phase I\Map\XX-Hills 1997.mxd)
10/22/2007 -- 6:17:17 PM





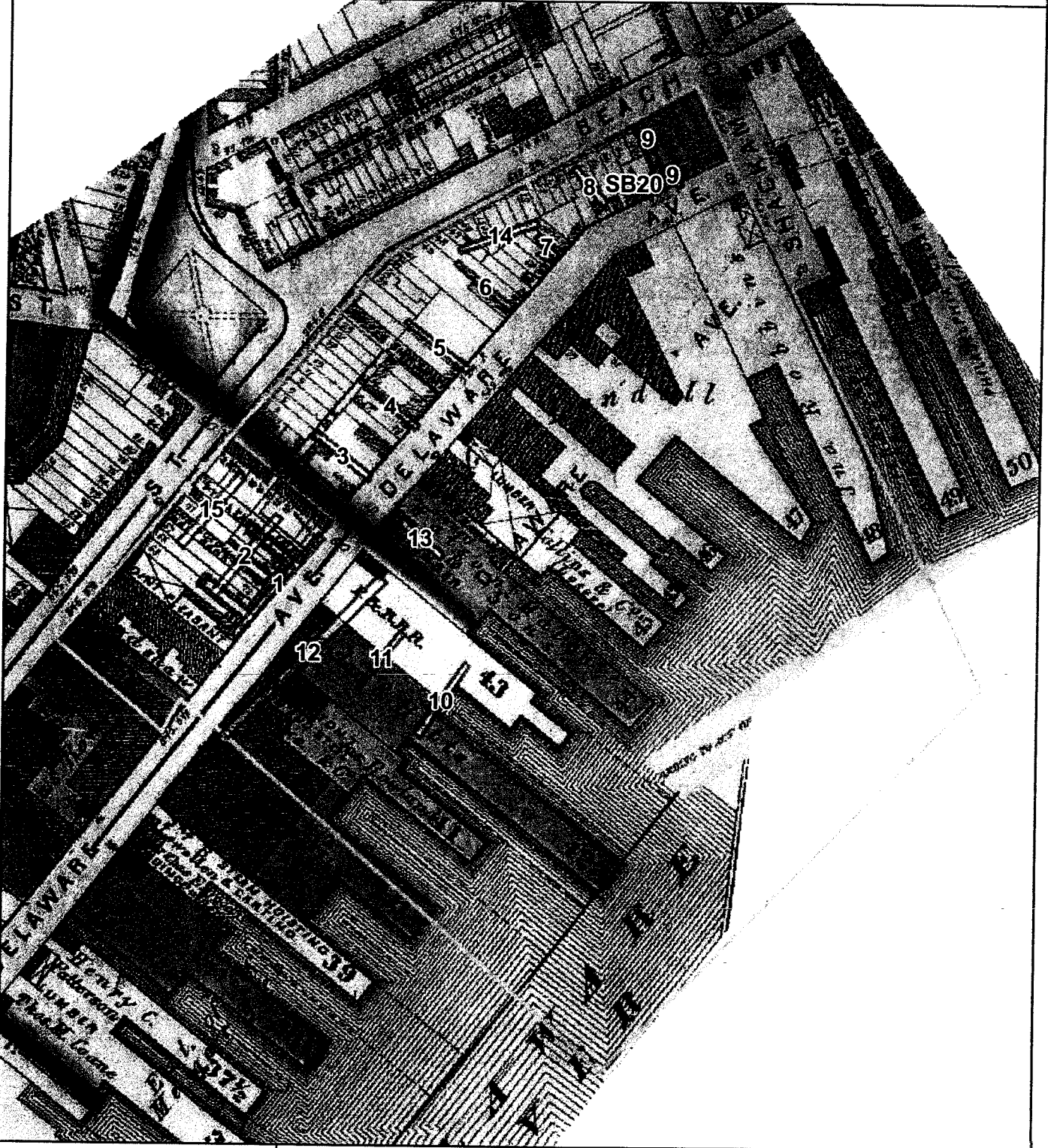
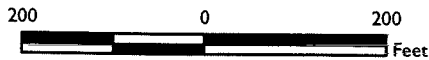
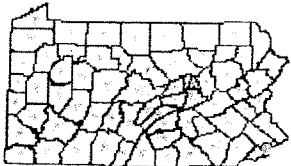
-  Trench
-  Area of Potential Effect (APE)

Figure 6 1873 Hopkins Map

Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
Philadelphia, Philadelphia County, Pennsylvania

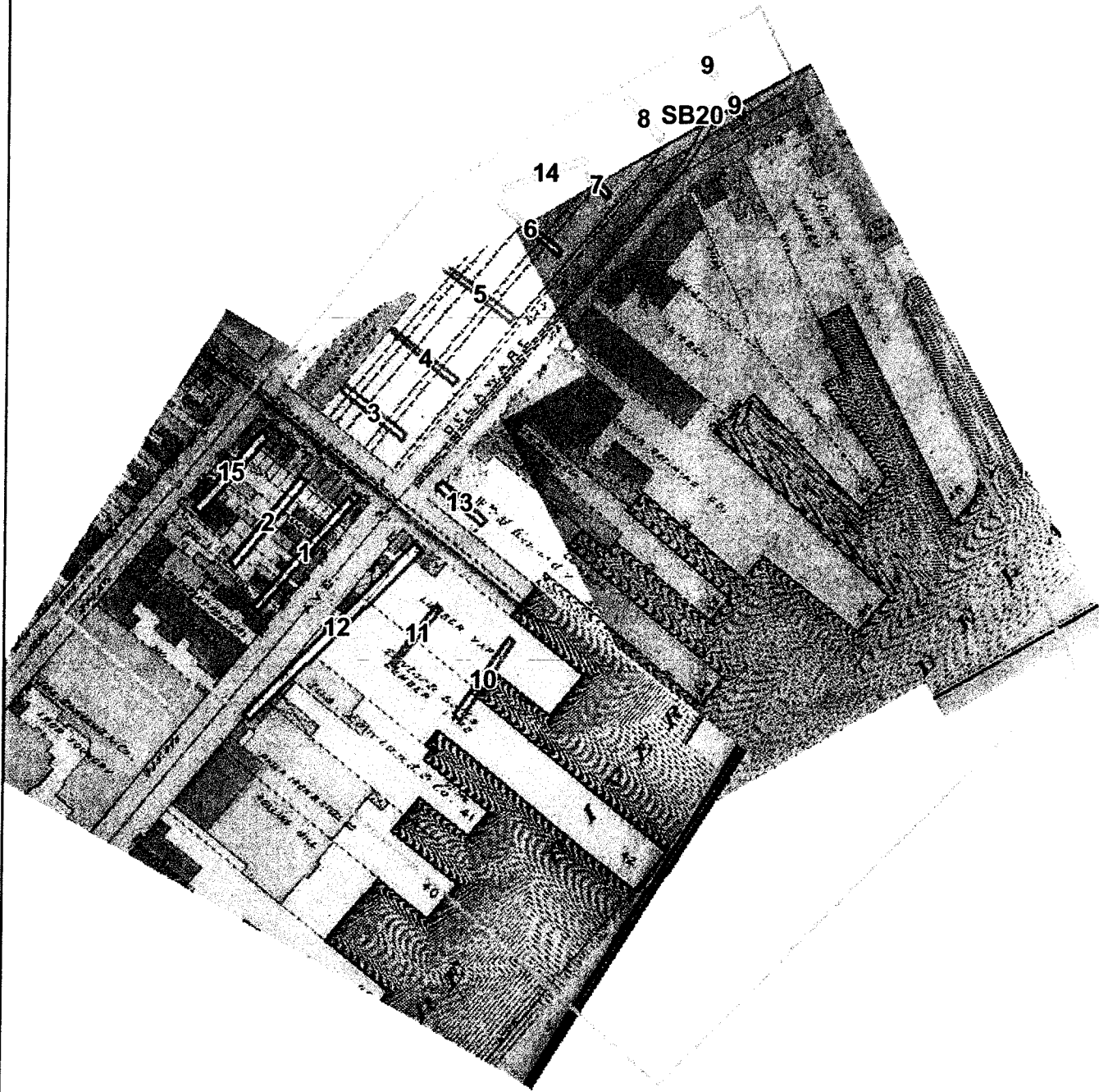


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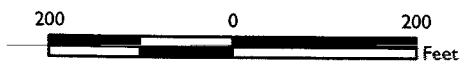
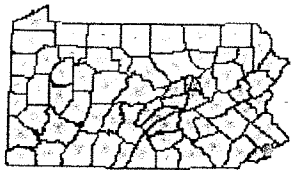


- Trench
- Area of Potential Effect (APE)

Figure 7
1886-1889 Bromley Map
 Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
 Philadelphia, Philadelphia County, Pennsylvania



Map Document: (X:\Projects\1993\Mapping\Phase IB\Fig7\Bromley\1886.mxd)
 10/22/2007 -- 6:32:52 PM





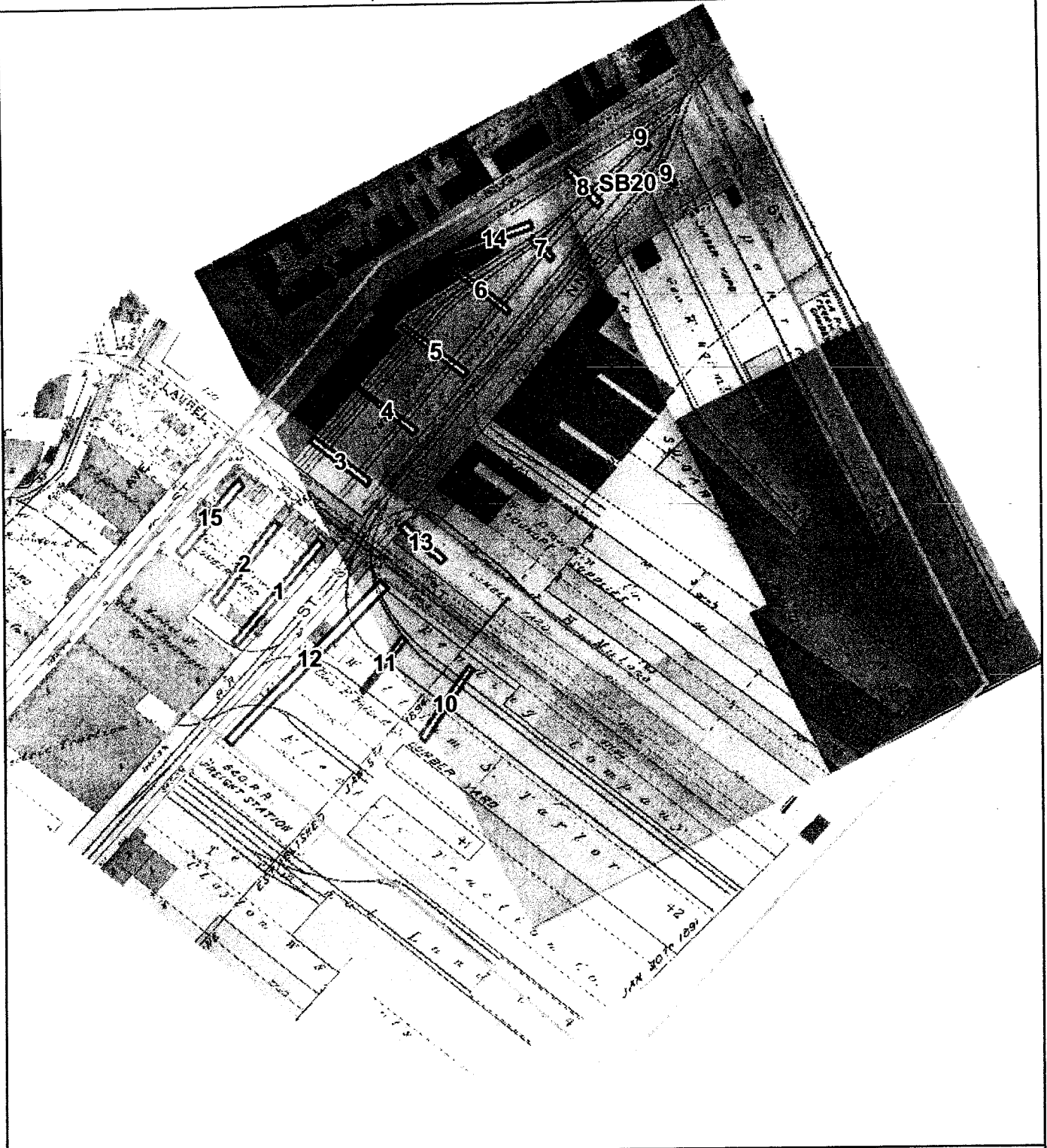
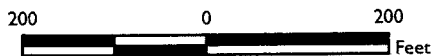
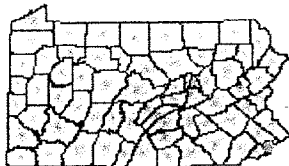
-  Trench
-  Area of Potential Effect (APE)

Figure 8
1904-1909 Smith Map
 Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
 Philadelphia, Philadelphia County, Pennsylvania



Map Document: X:\Projects\1983\Maping\Phase I\Fig8Smith\1904.mxd
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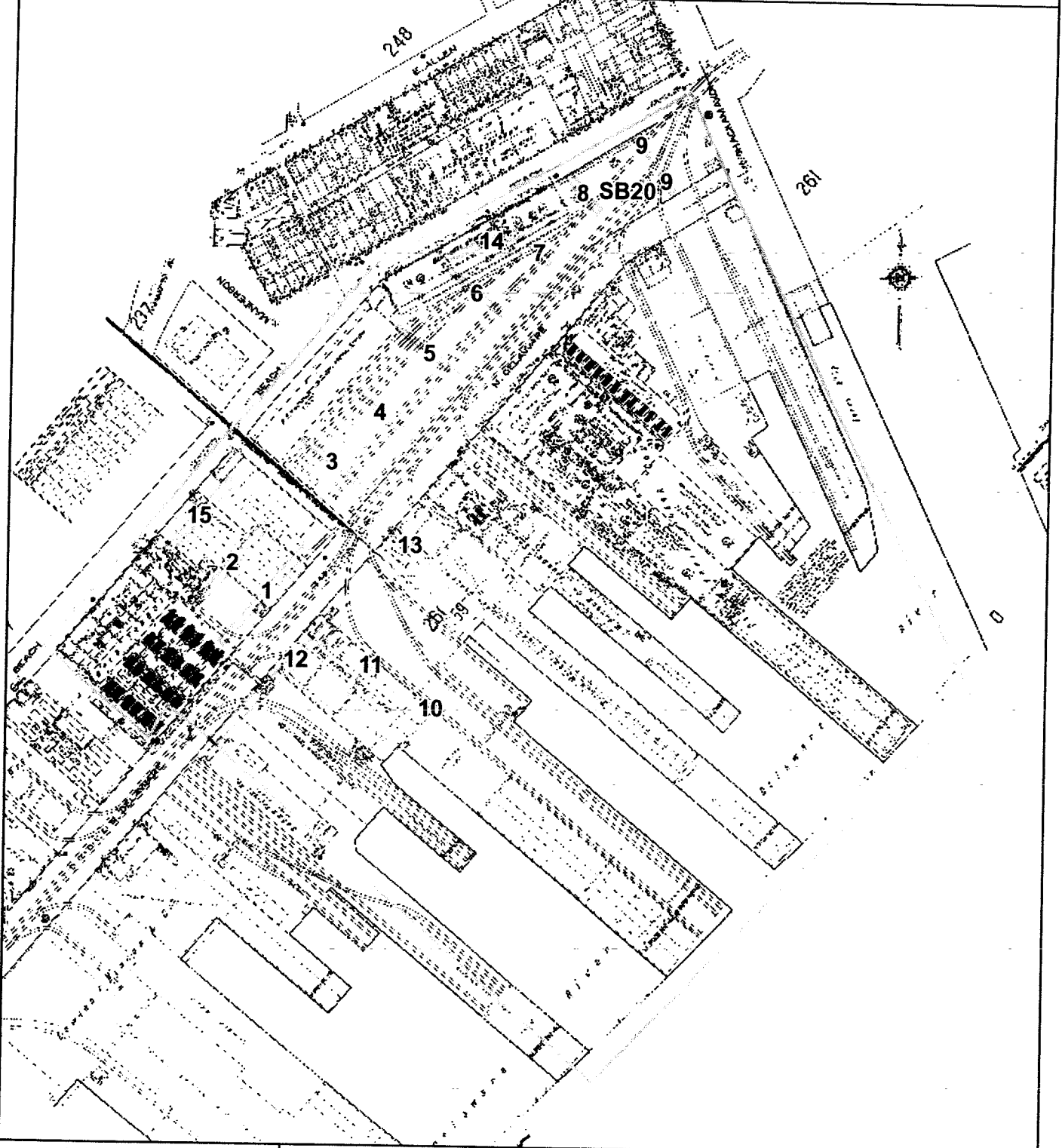
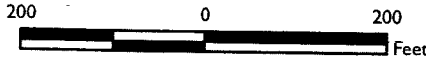
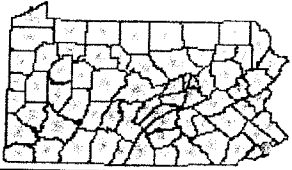
-  Trench
-  Area of Potential Effect (APE)

Figure 9
1916-1929 Sanborn Fire Insurance Map
 Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
 Philadelphia, Philadelphia County, Pennsylvania

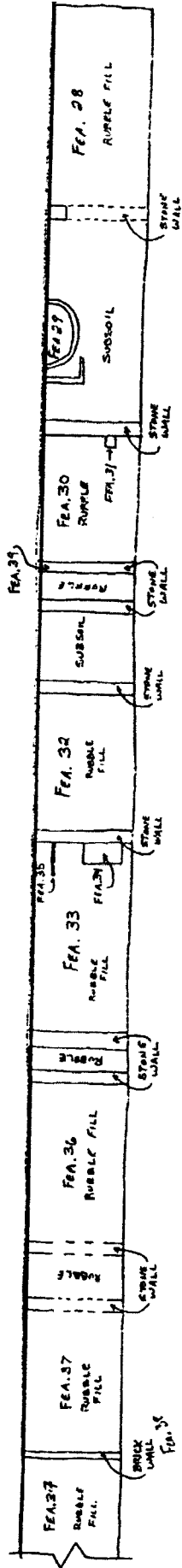


File Document: X:\Projects\PP831\Mapping\Phase IB\Fig_15Sanborn 1929.mxd
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- Trench
- Area of Potential Effect (APE)

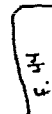
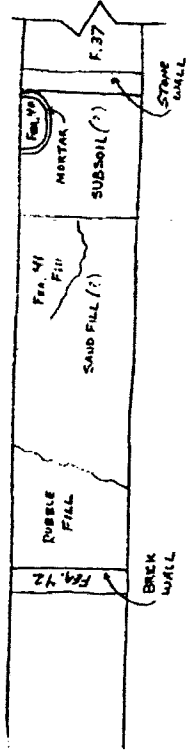
TRENCH 1



P983C
SUGAR HOUSE
BLOCK H-1
TRENCH 1, 2, & 15
PLAN VIEW
10/15/07
JJP, RLW, CG, JB



TRENCH 2



T.M.3

F.43

F.45
R. SAND
BED

T.M.2

F.61

TRENCH 15

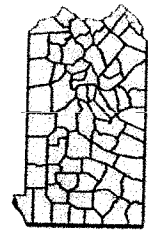
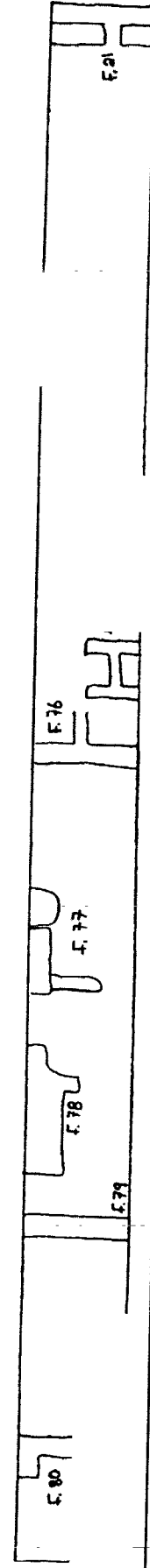


Figure 10
Area H1, Trenches 1, 2, and 15

Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
Philadelphia, Philadelphia County, Pennsylvania

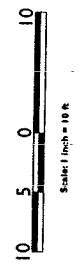
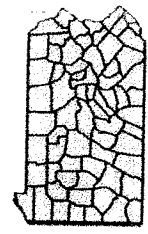
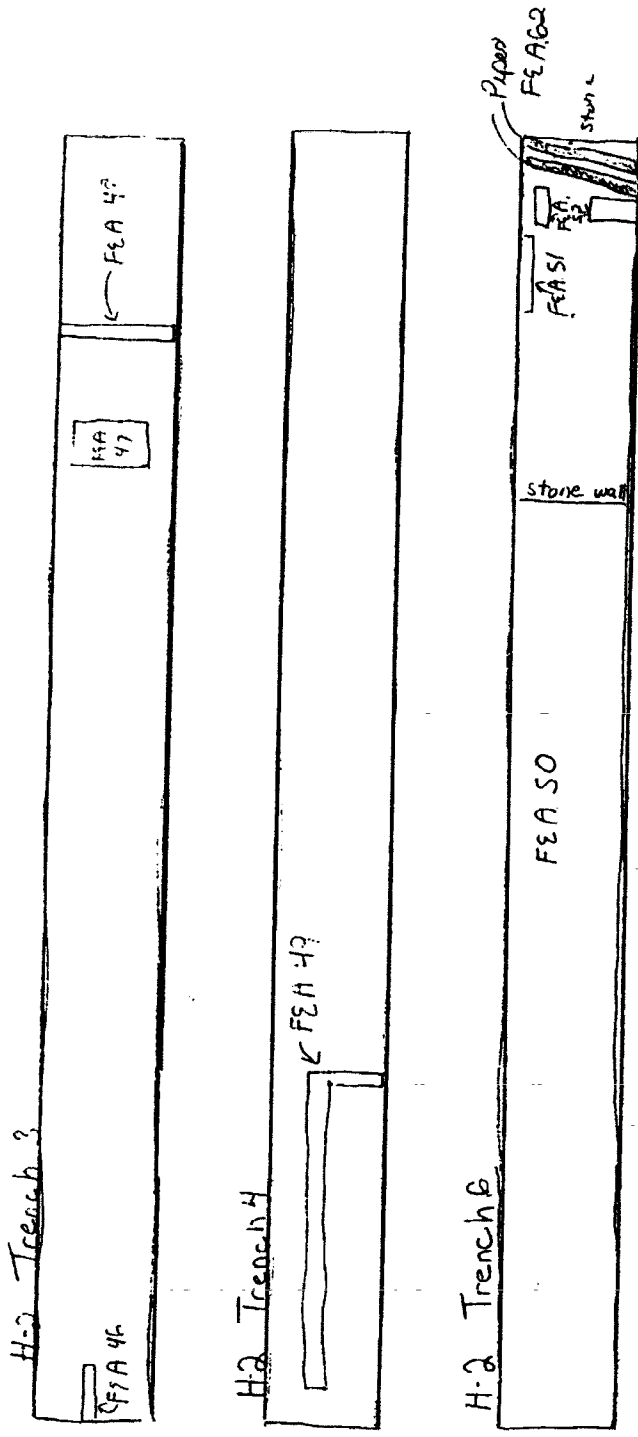


Figure 11

Area H2, Trenches 3, 4, and 6

Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
Philadelphia, Philadelphia County, Pennsylvania

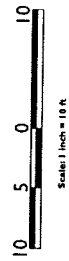
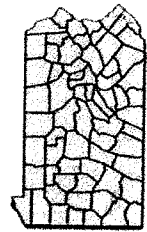
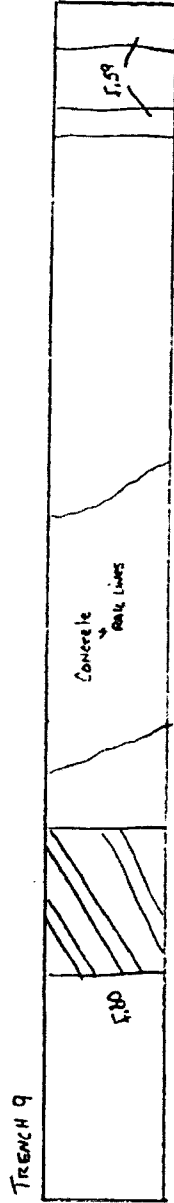
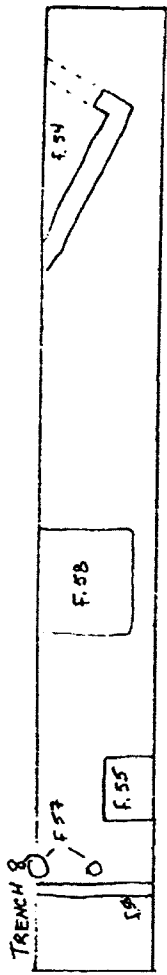


Figure 12
Area H2, Trenches 8, 9, and 14
 Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
 Philadelphia, Philadelphia County, Pennsylvania

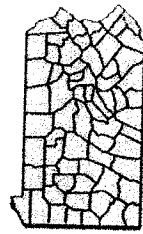
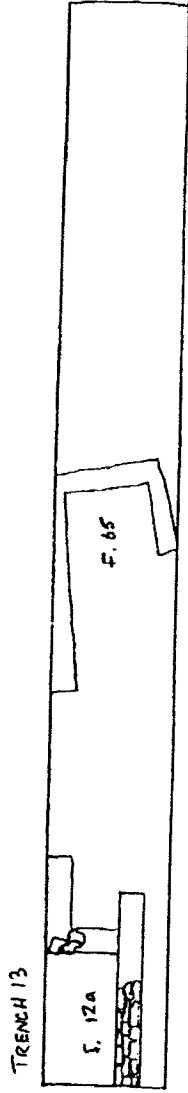


Figure 13
Area H3, Trench 13
 Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
 Philadelphia, Philadelphia County, Pennsylvania

TRENCH 12

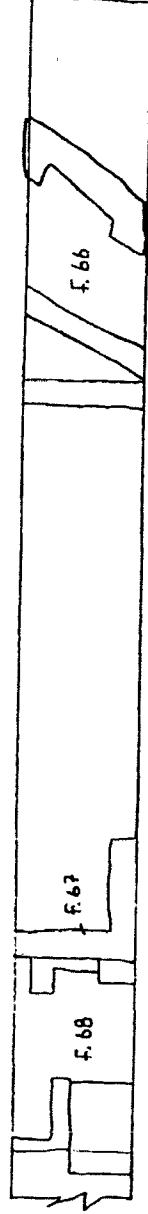
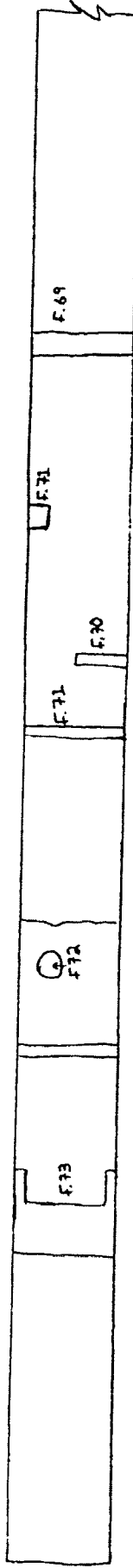
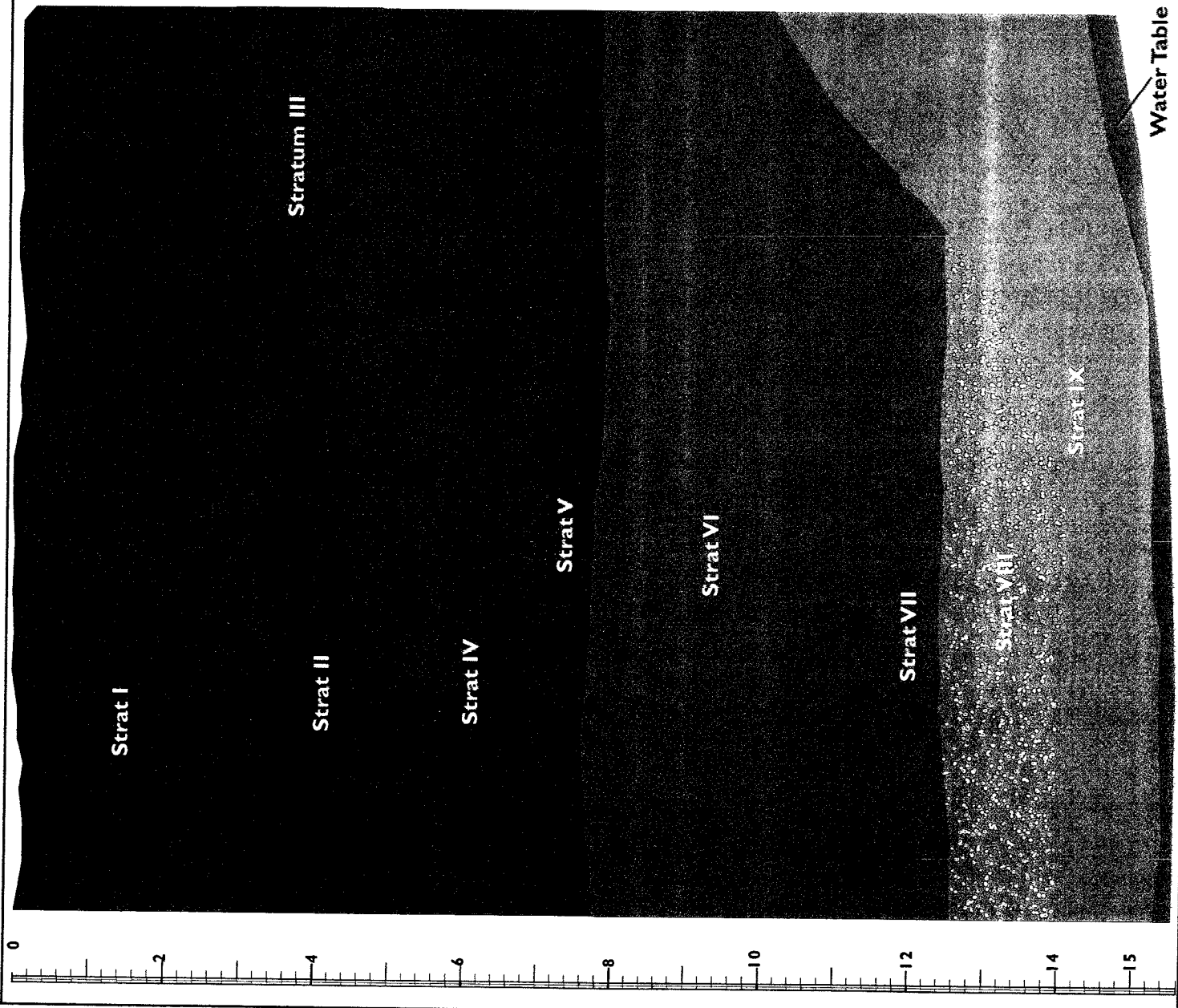


Figure 14 Area H4, Trench 12

Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
Philadelphia, Philadelphia County, Pennsylvania



Trench Stratigraphy:

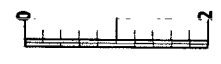
- Strat I: Modern Soil with gravels
- Strat II: 10YR 3/2 Very dark grayish brown with coal, ash, and cinders
- Strat III: Coal Ash Layer
- Strat IV: 10YR 3/4 Dark yellowish brown soil
- Strat V: Brick Demo Layer with mortar and coal ash
- Strat VI: 10YR 4/3 Brown soil fill
- Strat VII: 10YR 5/4 Yellowish brown coarse sand with 90% cobbles
- Strat VIII: 10YR 5/6 Yellowish brown mottled with 10YR 7/2 Light gray sand
- Strat IX: 10YR 5/6 Yellowish brown sand with cobbles

Water Table

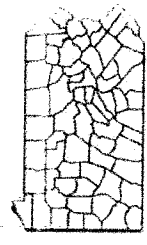
Figure 15

Area H4, Trench 12, North Wall Profile

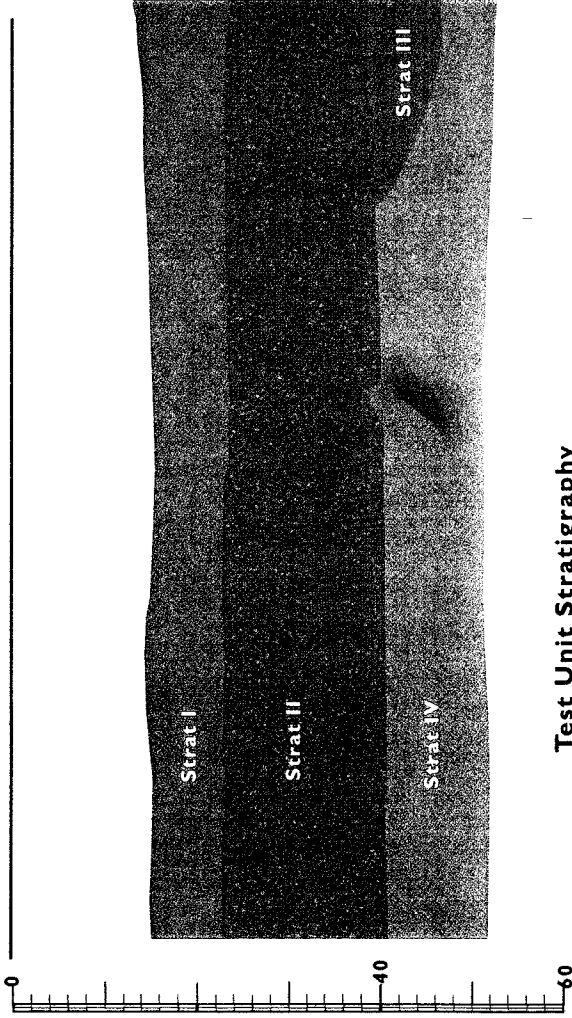
Phase IB Management Summary, HSP Gaming L.P. -
 SugarHouse Casino
 Philadelphia, Philadelphia County, Pennsylvania



1 inch = 2 feet



Line Level



Test Unit Stratigraphy

- Strat I:** 7.5YR 5/8 Strong brown sandy loam with slag, coal, cinders, concrete, and brick fragments
- Strat II:** 10YR 4/3 Dark grayish brown mottled with 7.5YR 5/8 Strong brown sandy loam with gravel and brick fragments
- Strat III:** 10YR 4/6 Dark yellowish brown Sandy loam
- Strat IV:** 10YR 5/8 Yellowish brown Sandy loam

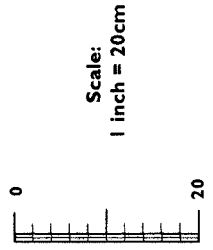
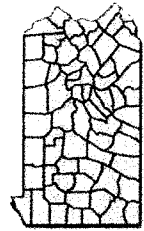
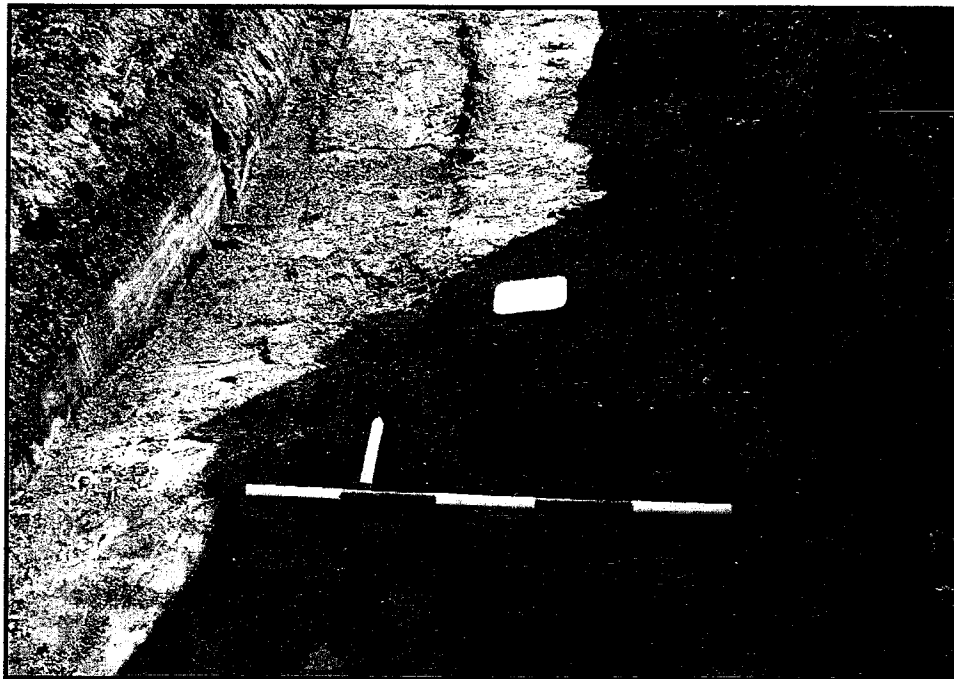


Figure 16
Area HI, Trench 2, TU 3 East Wall Profile
Phase IB Management Summary, HSP Gaming L.P. - SugarHouse Casino
Philadelphia, Philadelphia County, Pennsylvania

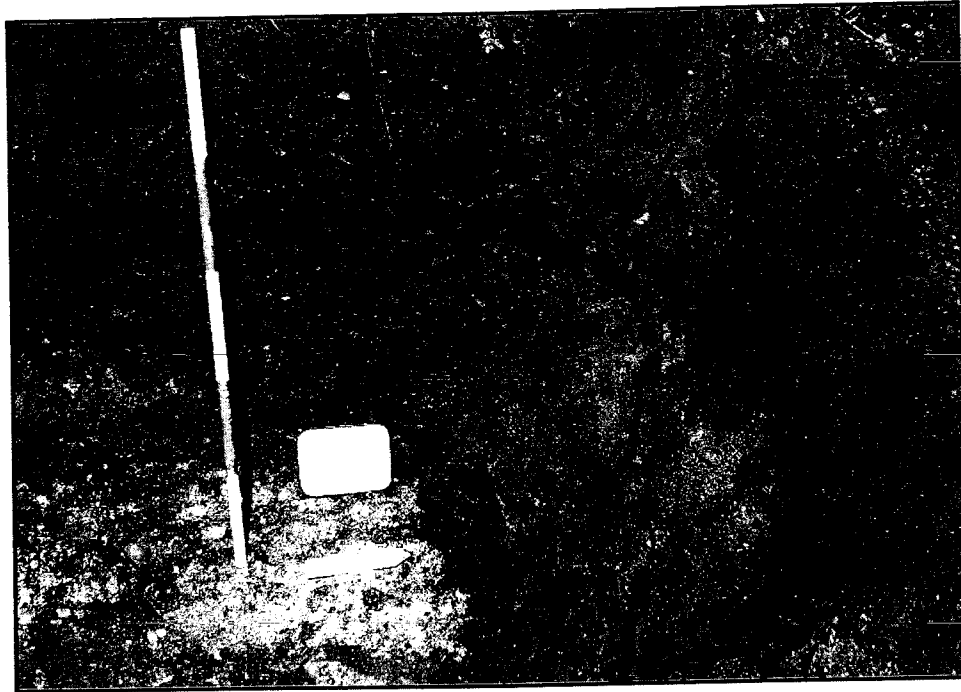
Photopages



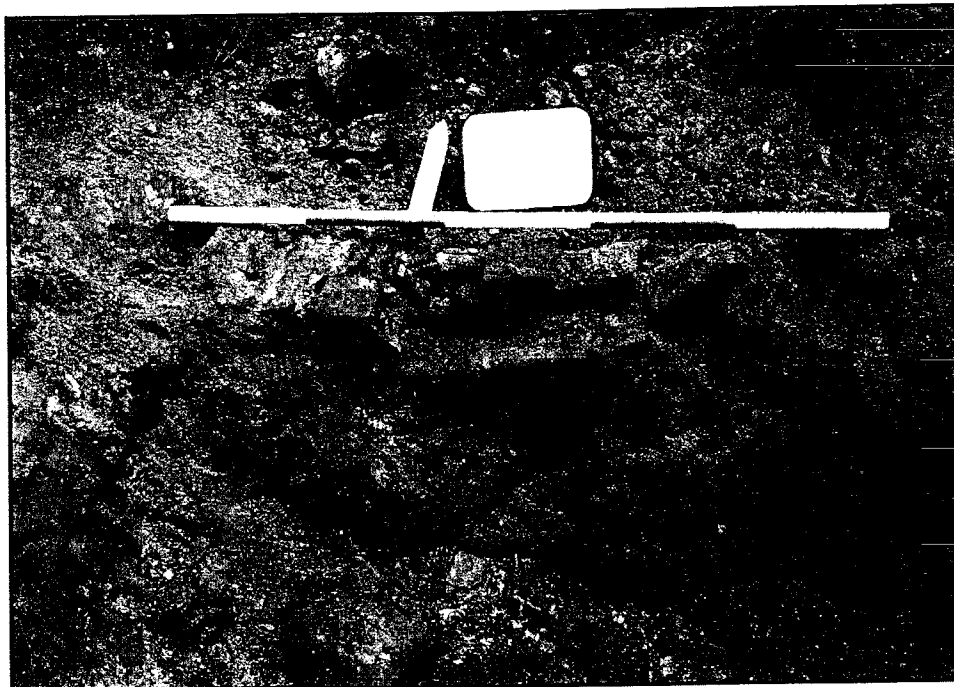
Photograph 1: Feature #23, stone foundation in area H1. View facing north (May 2007).



Photograph 2: Feature #10, privy/shaft feature in area H2. View facing north (May 2007).



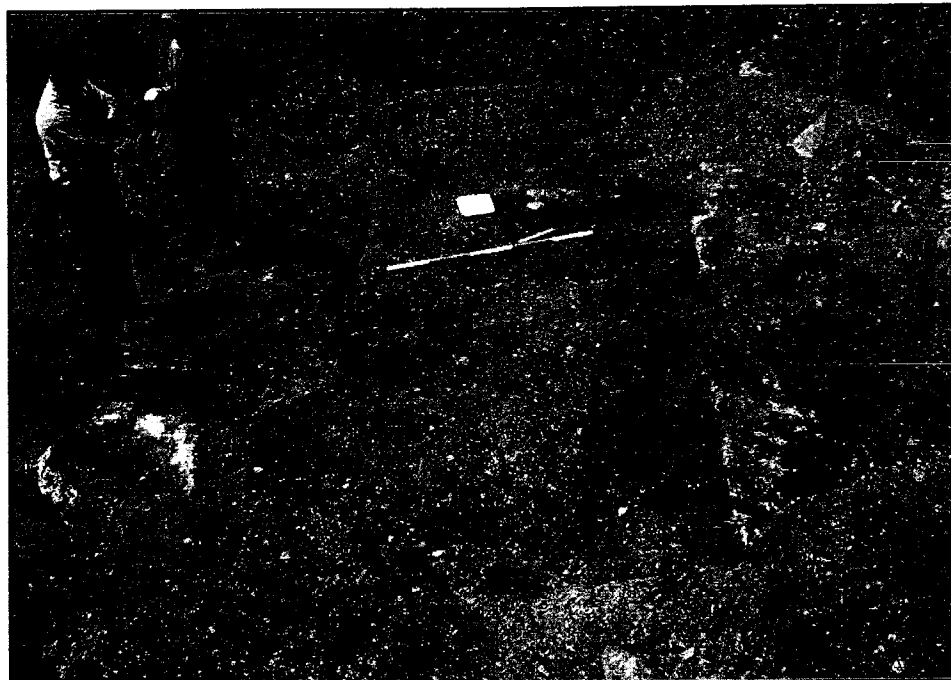
Photograph 3: Feature #24, stone foundation in area H2. View facing west (May 2007).



Photograph 4: Feature #25, brick foundation/footer in area H2. View facing north (May 2007).



Photograph 5: Feature #26, stone foundation in area H2. View facing northeast (May 2007).



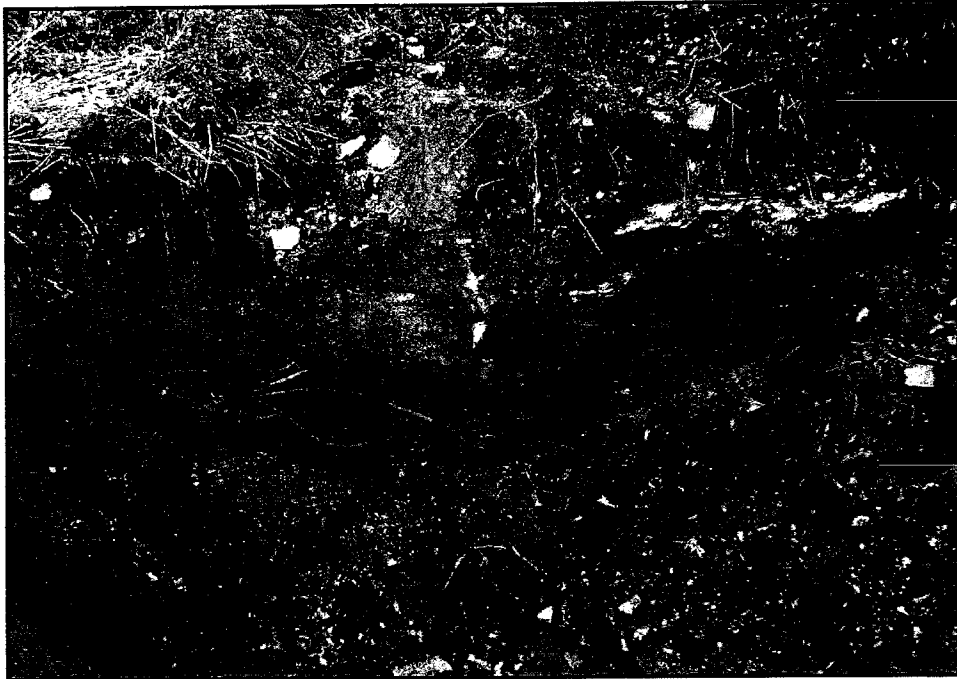
Photograph 6: Feature #14-17, brick and stone foundations in area H4. View facing east (May 2007).



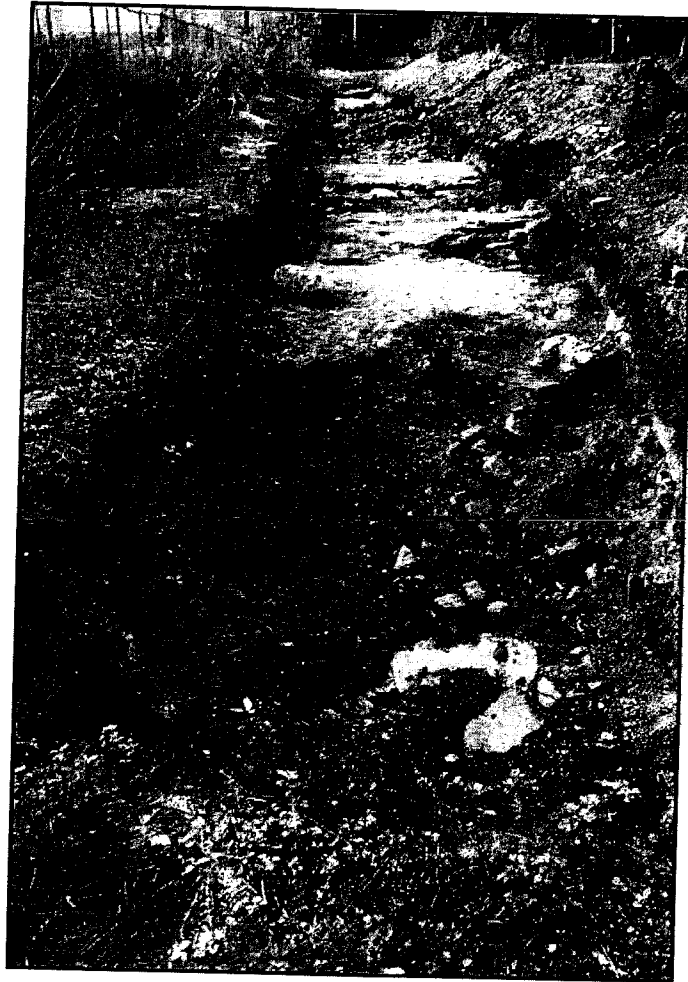
Photograph 7: Feature #18, brick and stone foundations in area H4. View facing north (May 2007).



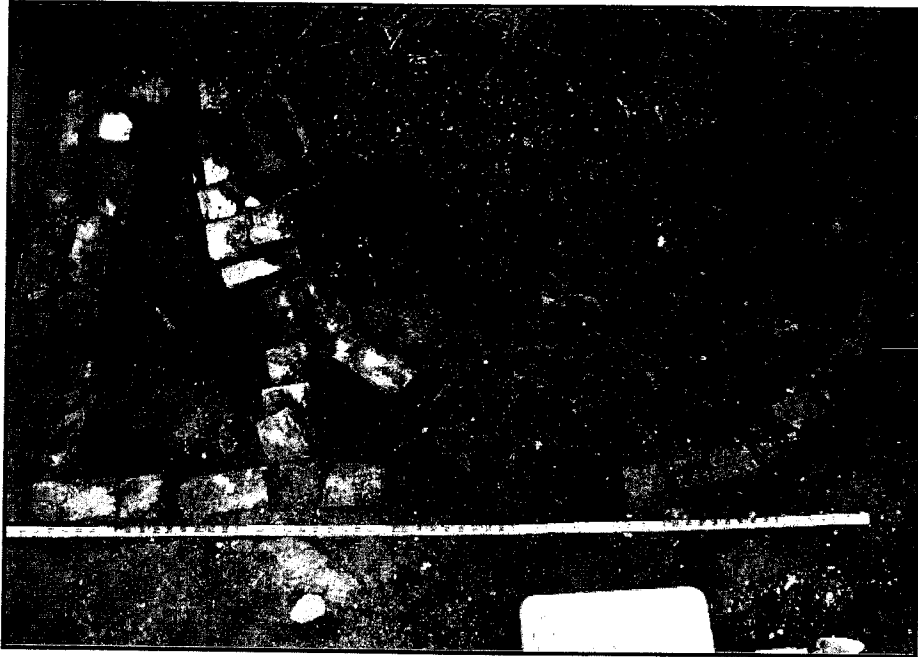
Photograph 8: Feature #19, stone foundation in area H4. View facing north (May 2007).



Photograph 9: Feature #27, parallel concrete walls in area H4. View facing north (May 2007).



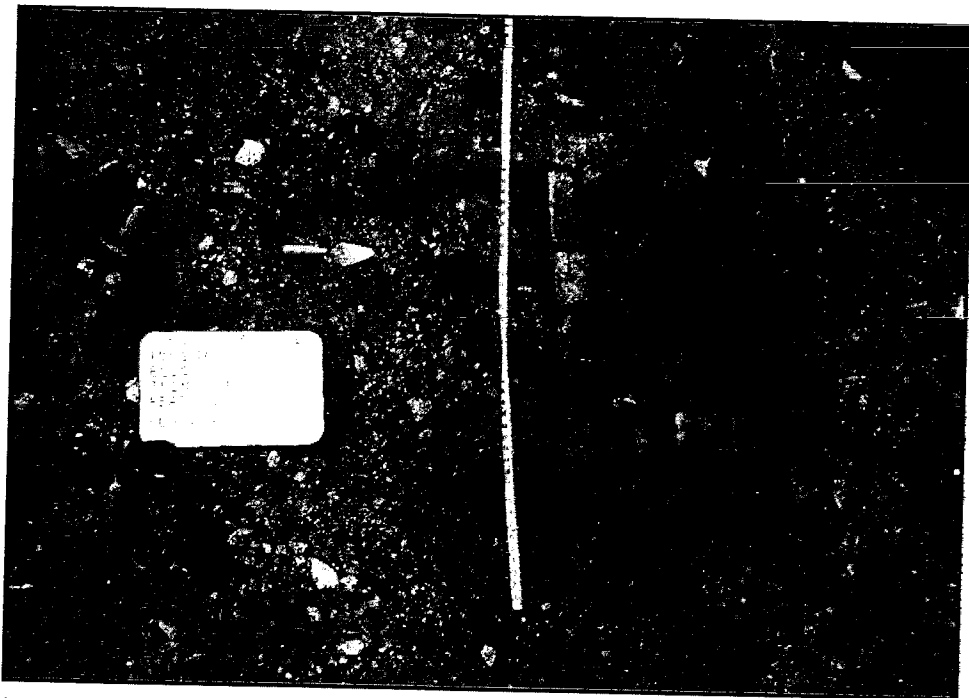
Photograph 10: Trench #1, overview showing Features #28-42. This photograph shows building foundations including architectural and non-architectural features in area H1. View facing south (October 2007).



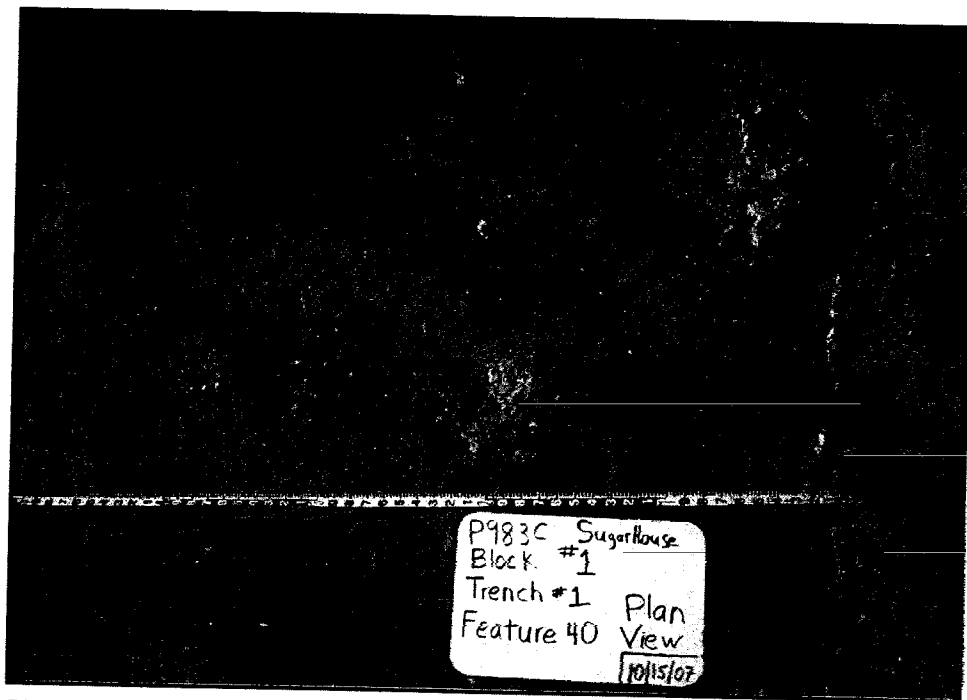
Photograph 11: Feature #29, eastern portion of a brick shaft feature. The feature is located in a back or side yard in area 1. View facing west (October 2007).



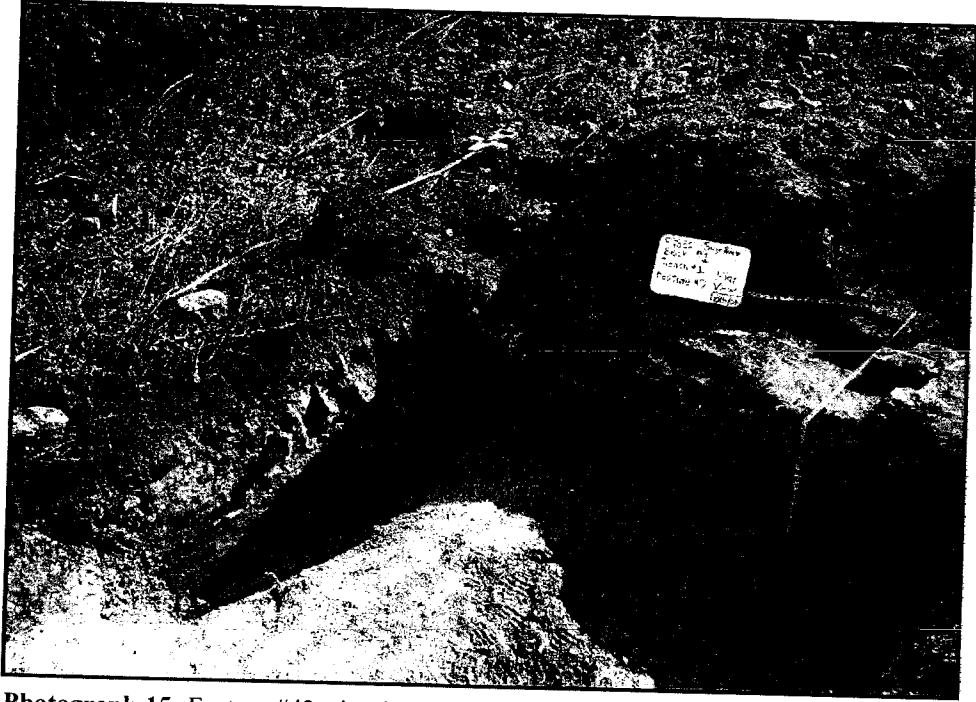
Photograph 12: Feature #33, stone foundation with brick features located within the building. View facing west (October 2007).



Photograph 13: Feature #34, brick feature within Feature #33. View facing north (October 2007).



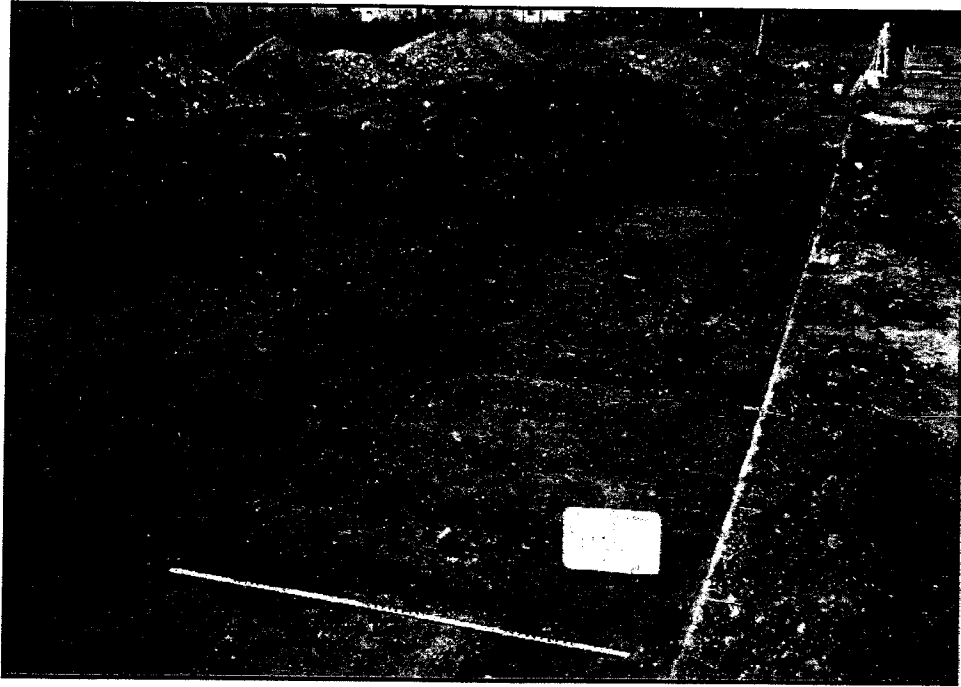
Photograph 14: Feature #40, shaft feature constructed out of stone. View facing west (October 2007).



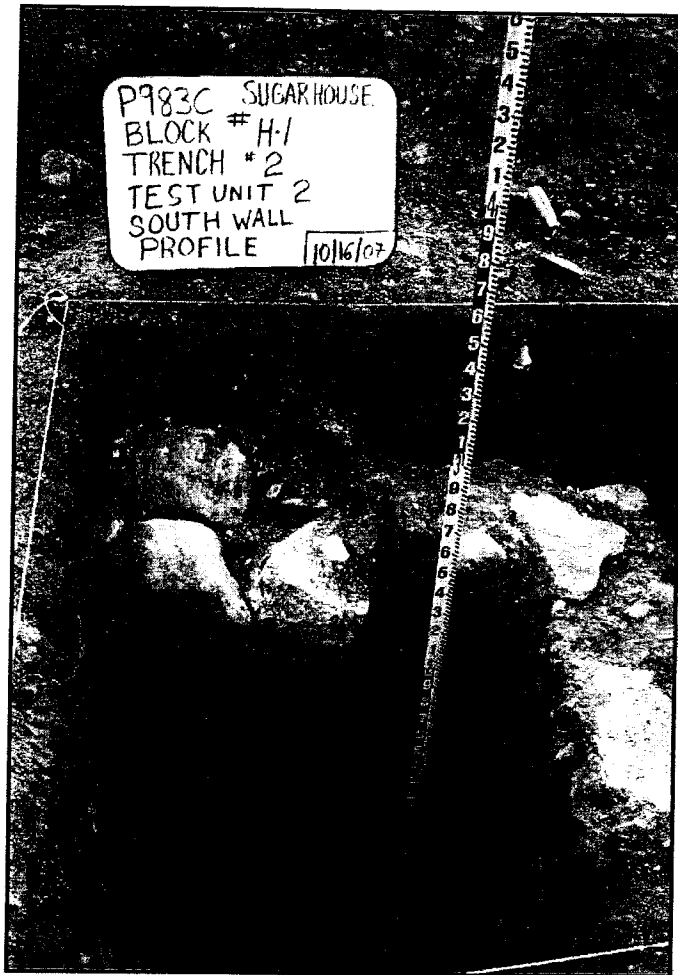
Photograph 15: Feature #42, sizeable brick foundation associated with the Beach Street Powerhouse. View facing east (October 2007).



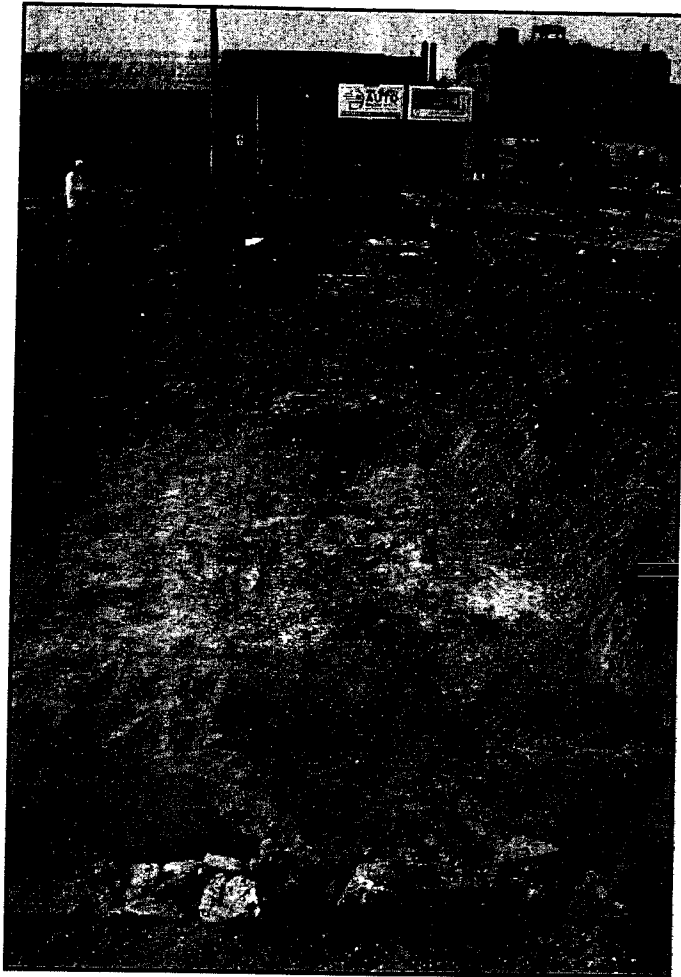
Photograph 16: Trench #2, overview showing test unit locations as well as Features #43-45 and #61. View facing south (October 2007).



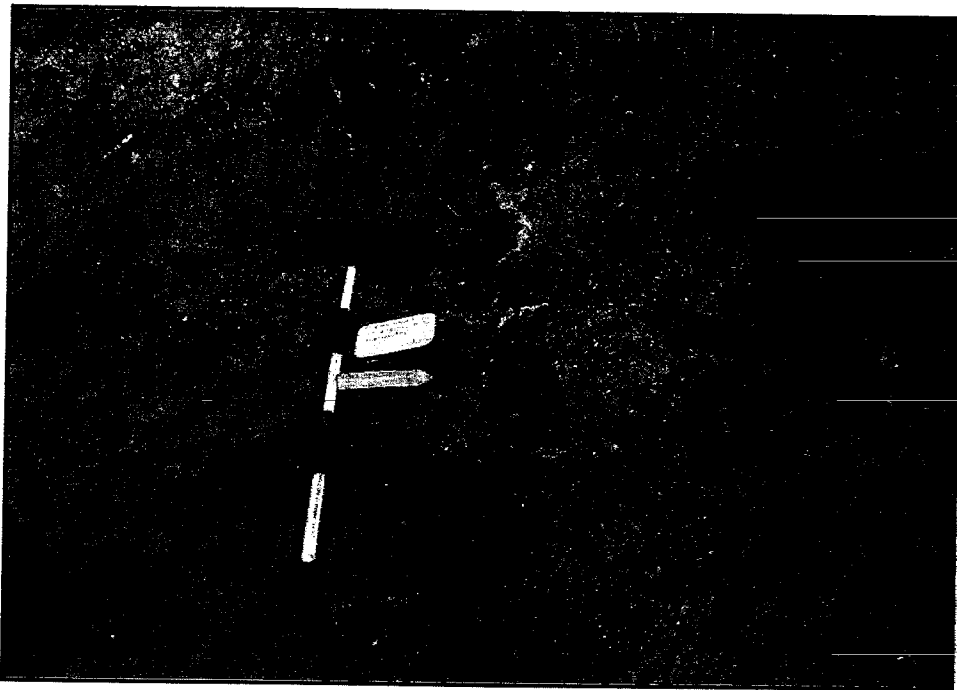
Photograph 17: Feature #45, a row of soil stains that represent the removal of railroad ties. View facing south (October 2007).



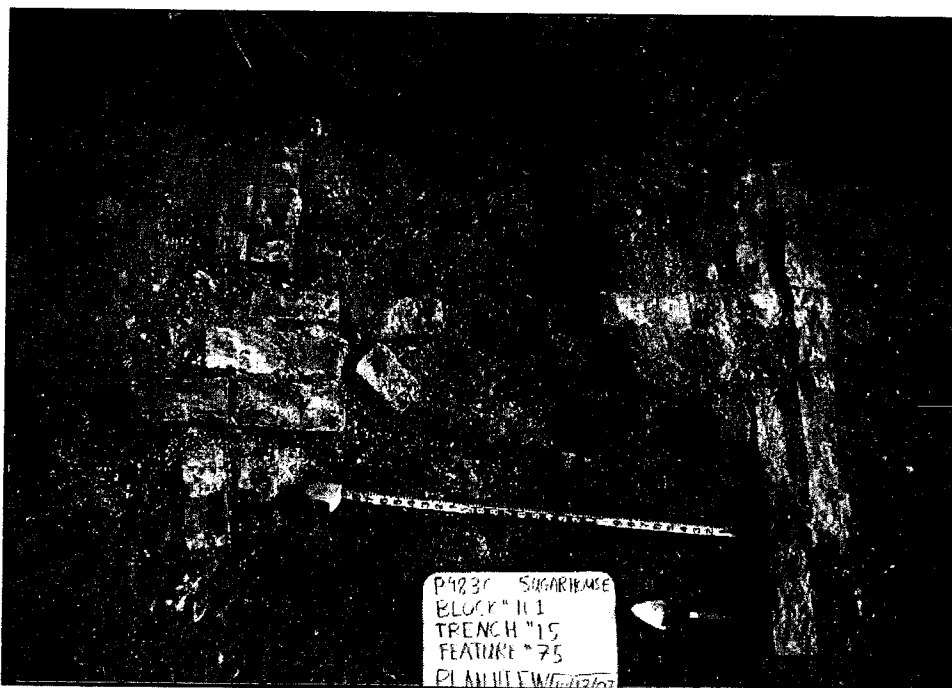
Photograph 18: Feature #61, a stone foundation featuring a corner that has been located within test unit #2. View facing south (October 2007).:



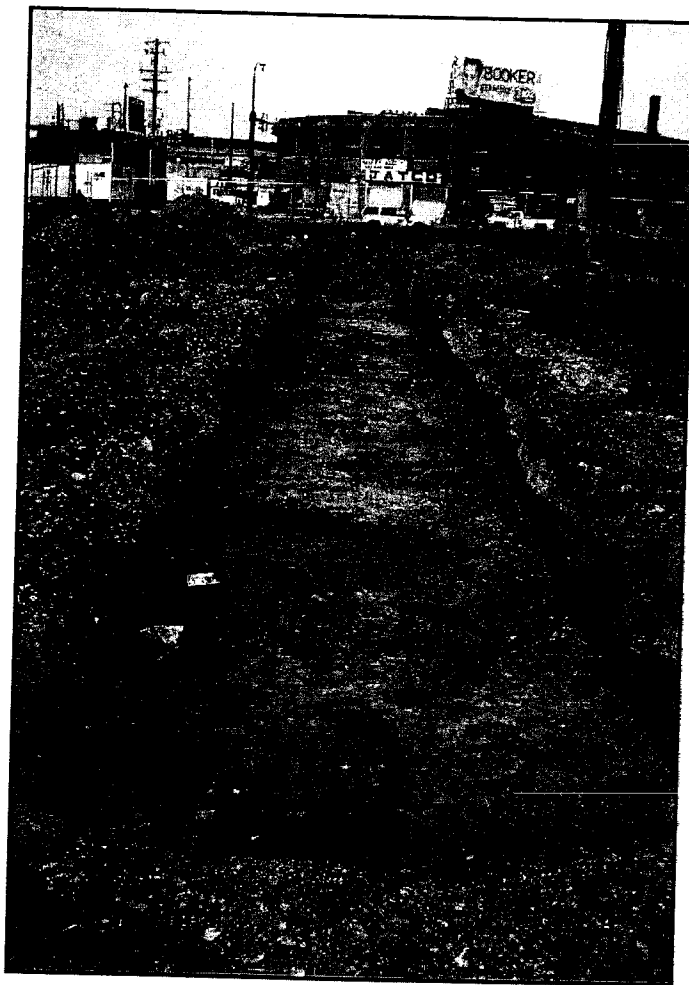
Photograph 19: Trench #15, overview showing Features #21 and #75-80. View facing south (October 2007).



Photograph 20: Feature #21, stone foundation that was identified during earlier investigations and re-exposed. View facing north (October 2007).



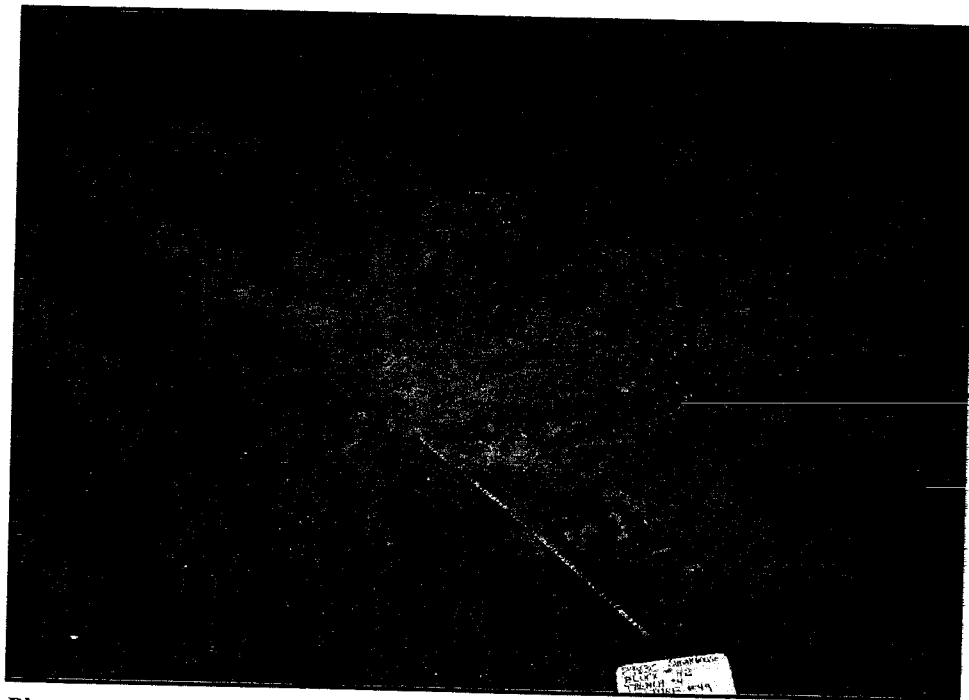
Photograph 21: Feature #75, unknown brick feature east of a stone foundation. View facing east (October 2007).



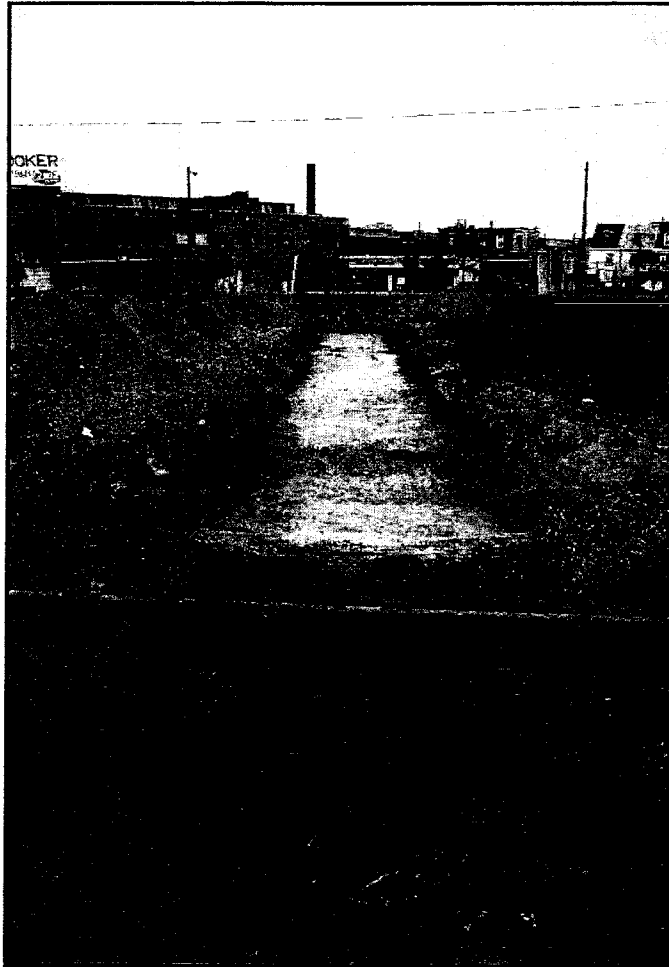
Photograph 22: Trench #3, overview showing Feature #46. View facing west (October 2007).



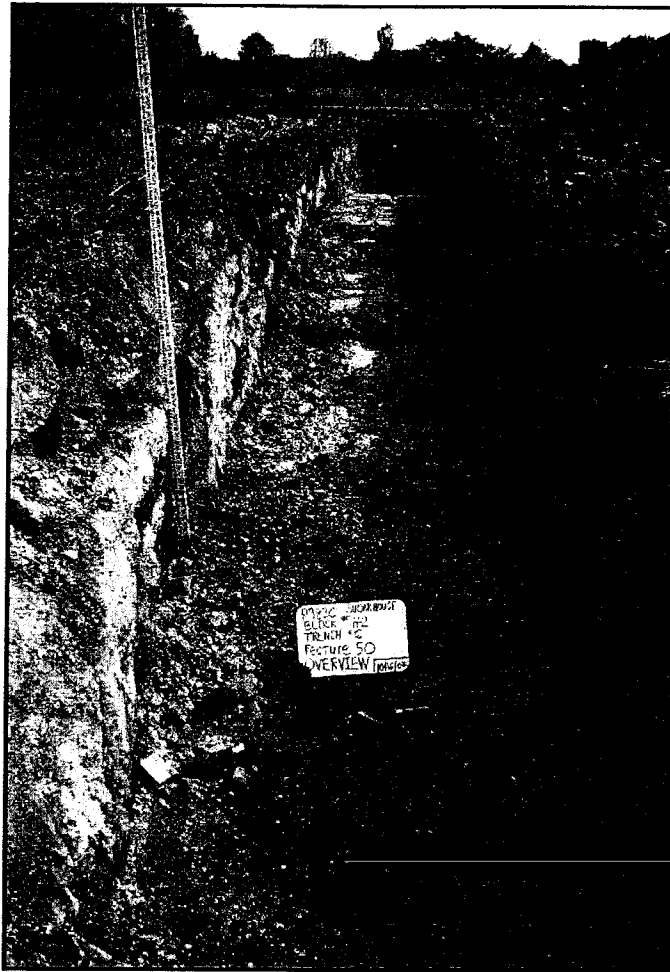
Photograph 23: Feature #47, an unknown wood and stone feature. View facing south (October 2007).



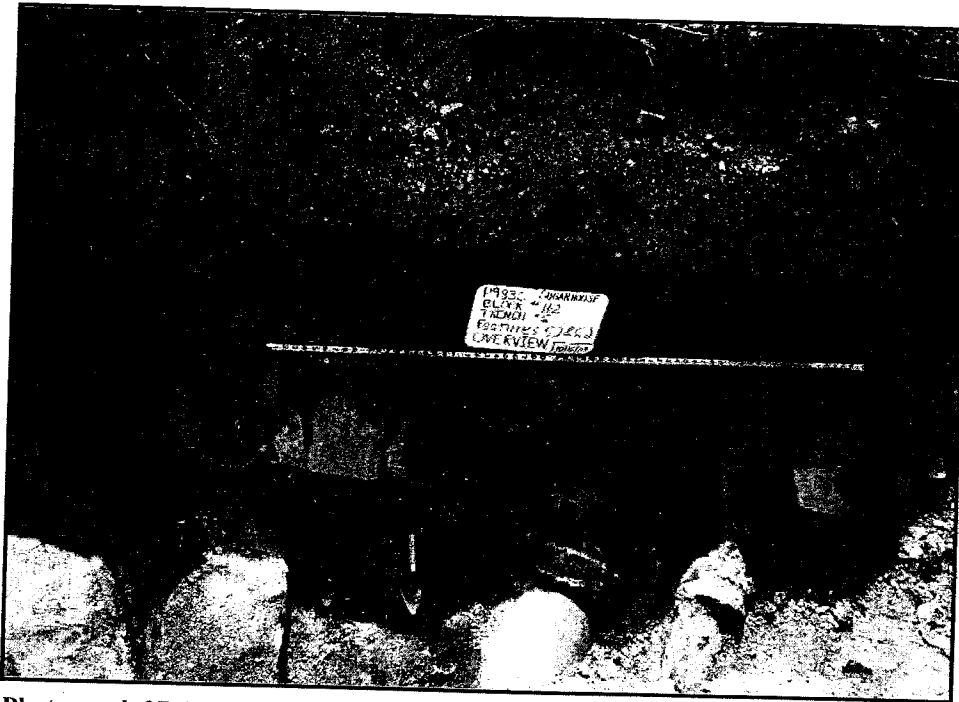
Photograph 24: Trench #4, overview showing Feature #49. View facing west (October 2007).



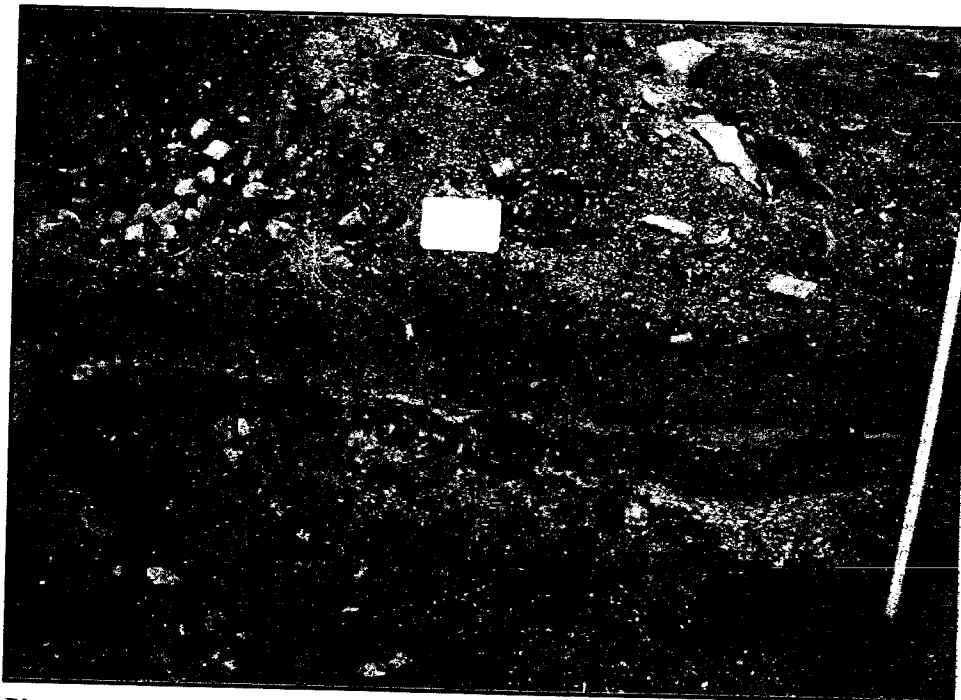
Photograph 25: Trench #5, overview showing sterile subsoil. No features are present. View facing west (October 2007).



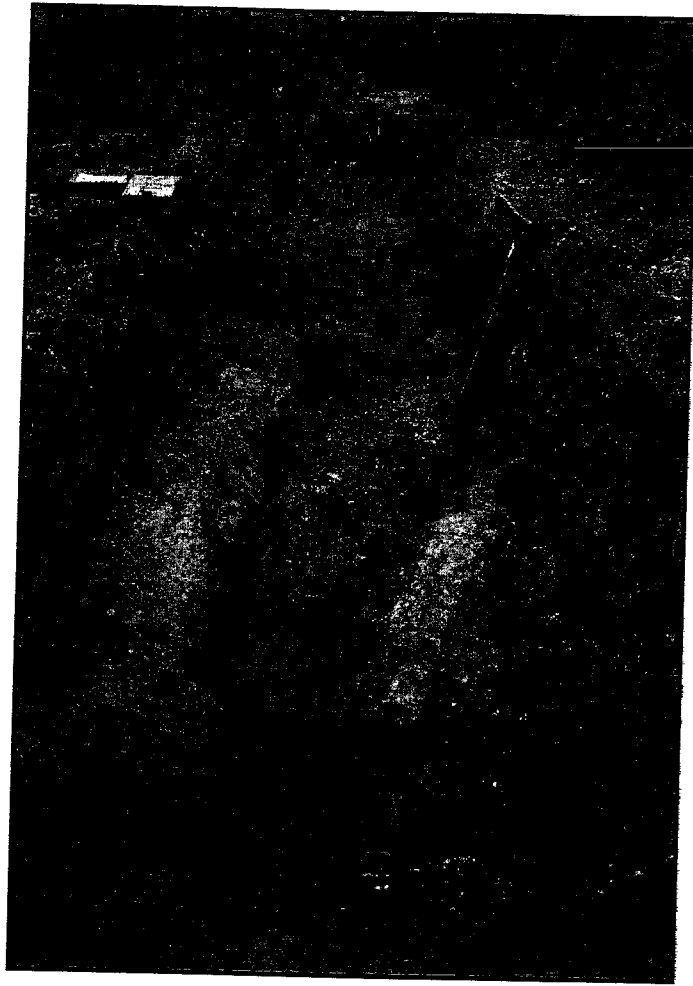
Photograph 26: Trench #6, overview showing Features #50-52 and #62. View facing west (October 2007).



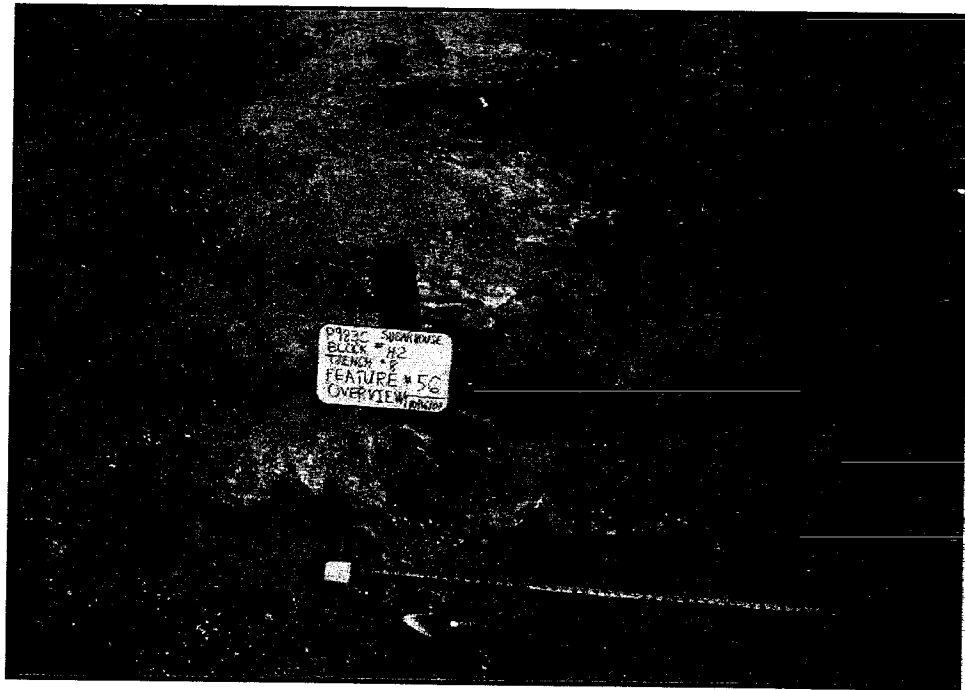
Photograph 27: Features #52 and #62, modern utility pipes truncating a stone foundation. View facing south (October 2007).



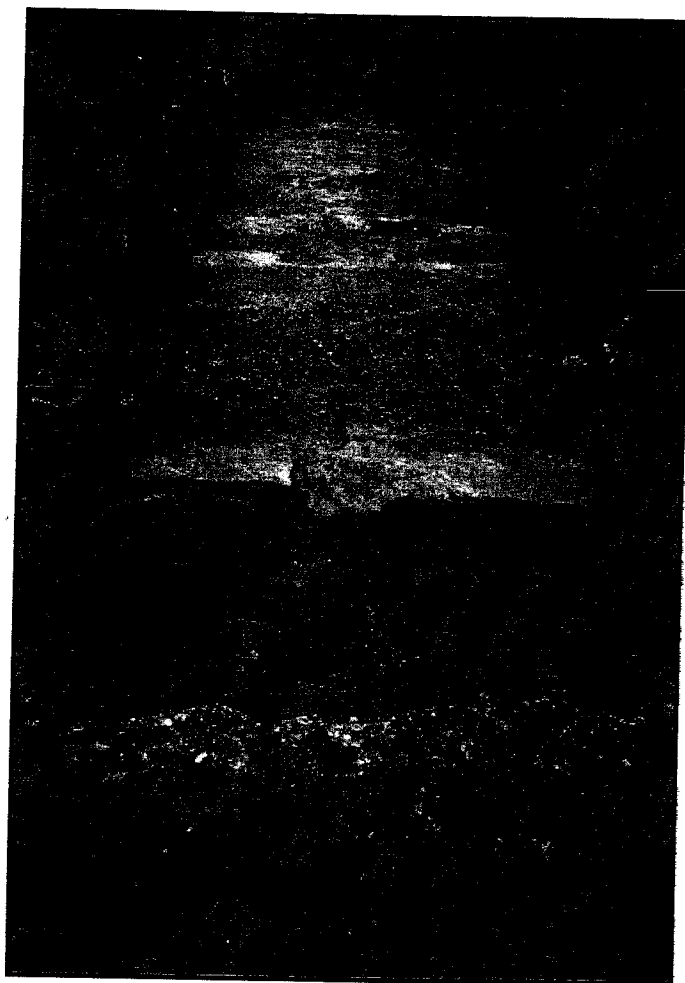
Photograph 28: Trench #7, view showing fill horizons prior to backfilling. View facing north (October 2007).



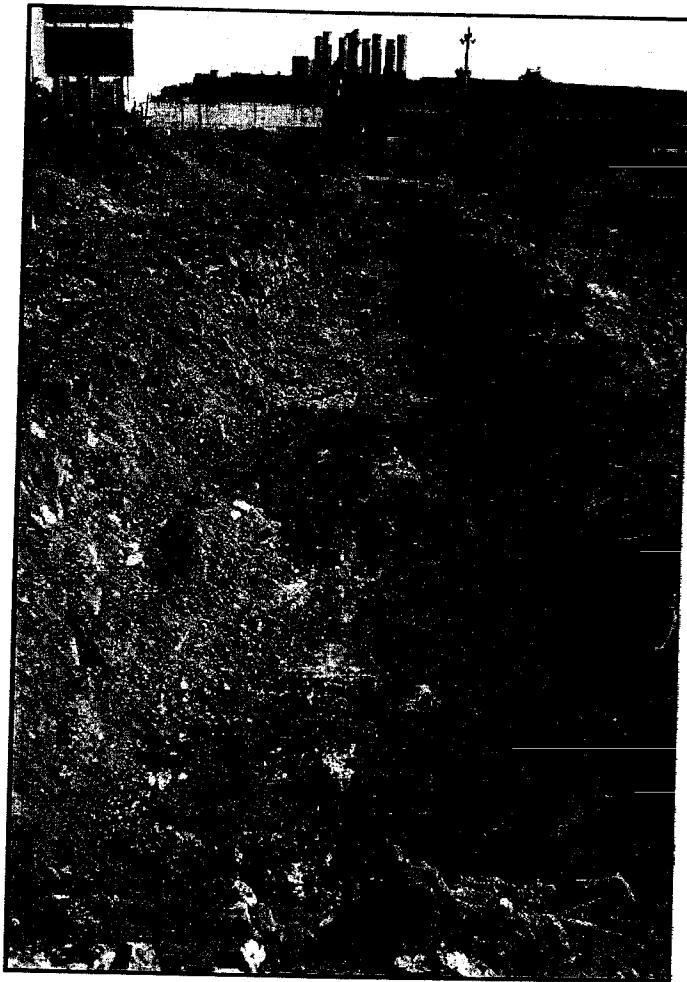
Photograph 29: Trench #8, overview showing Features #54-58. View facing west (October 2007).



Photograph 30: Features #56-58, stone foundations and modern utility lines. View facing east (October 2007).



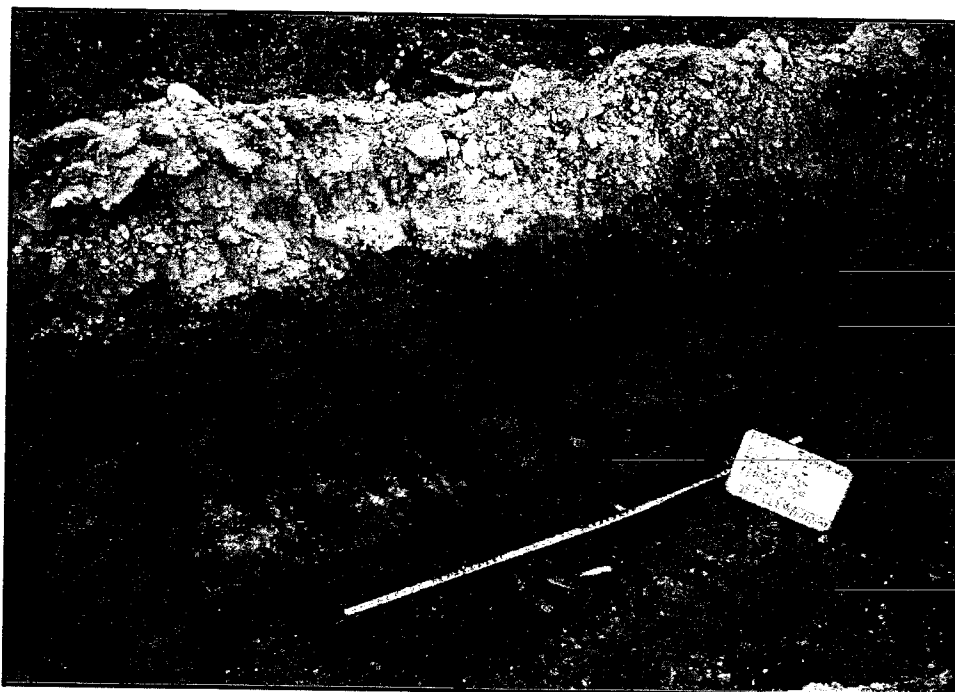
Photograph 31: Trench #9, overview showing Feature #59. View facing west (October 2007).



Photograph 32: Trench #14, overview showing Features #81-84. View facing northeast (October 2007).



Photograph 33: Feature #83, stone foundation. View facing west (October 2007).



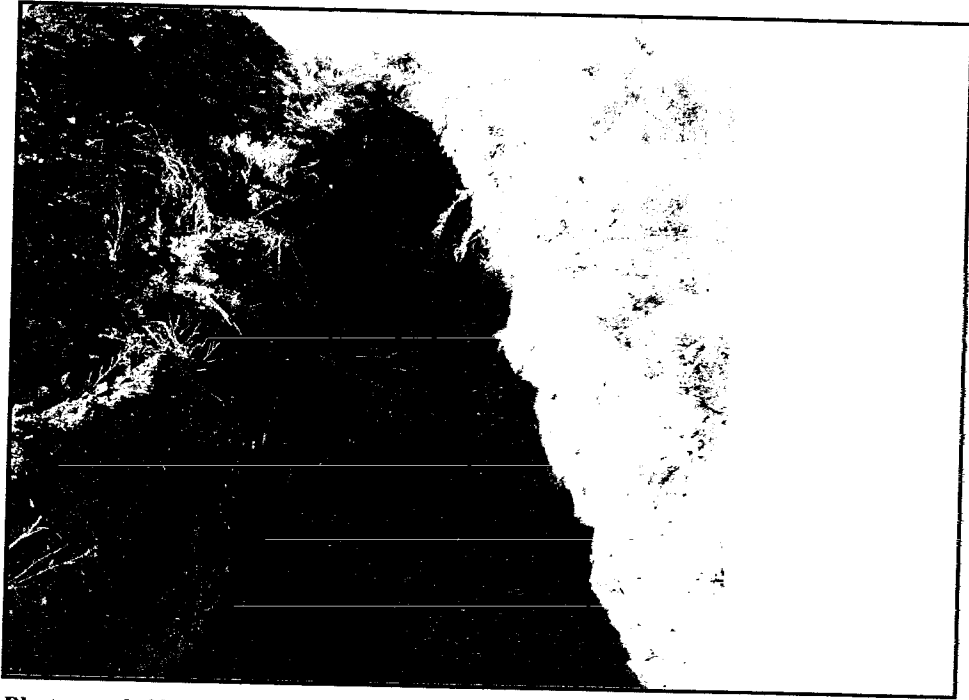
Photograph 34: Feature #84, wooden bridge overlying a ceramic utility line. View facing east (October 2007).



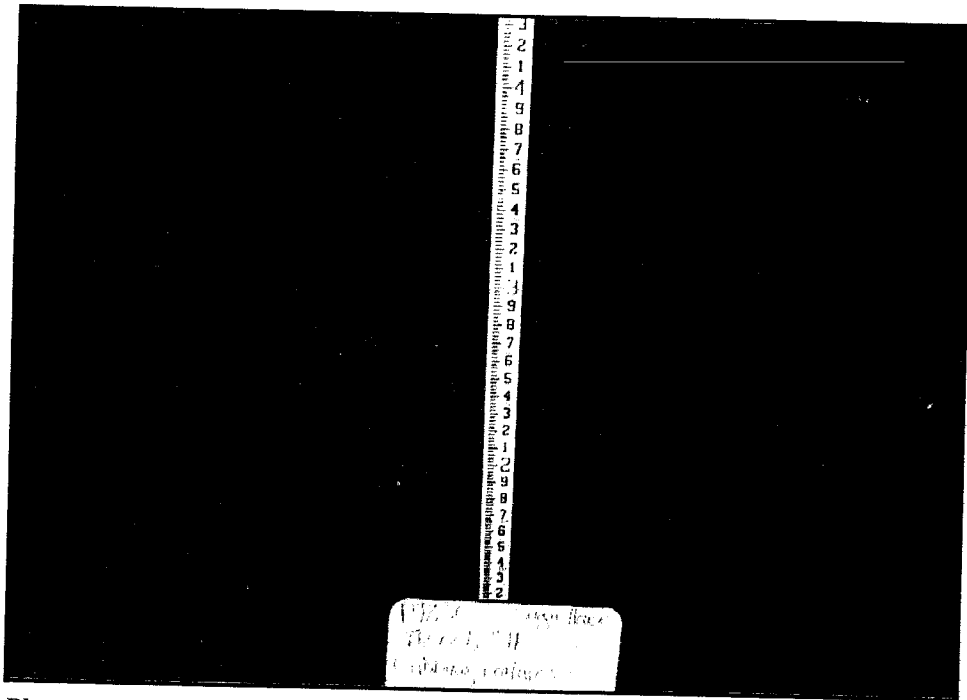
Photograph 35: Trench #13, overview showing Features #12 and #65. View facing east (October 2007).



Photograph 36: Trench #10, overview showing fills and modern utility lines featuring PVC piping. View facing south (October 2007).



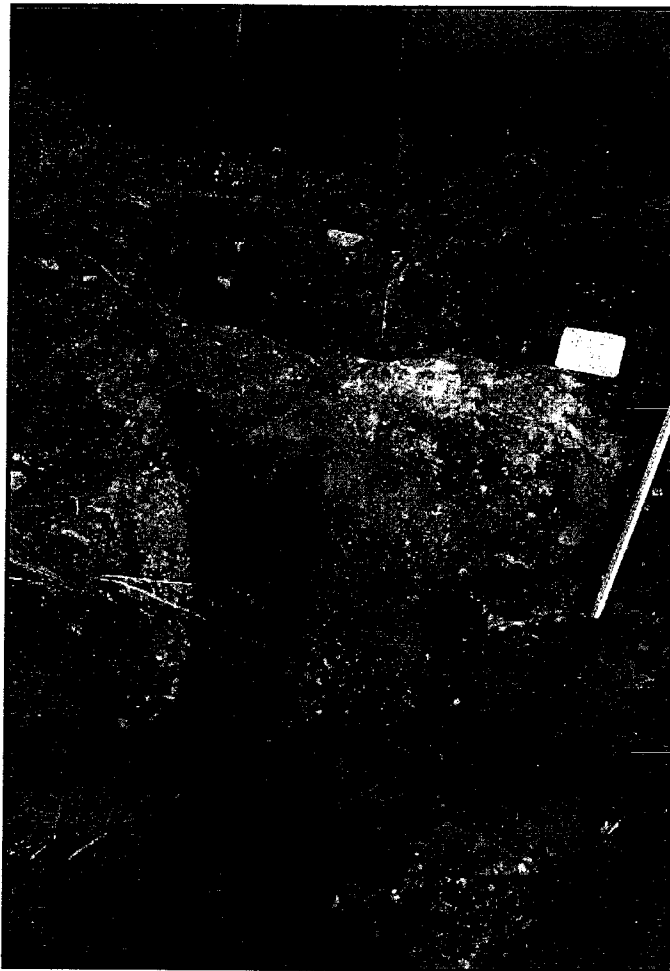
Photograph 37: Trench #11, overview showing wood timber cribbing. View facing south (October 2007).



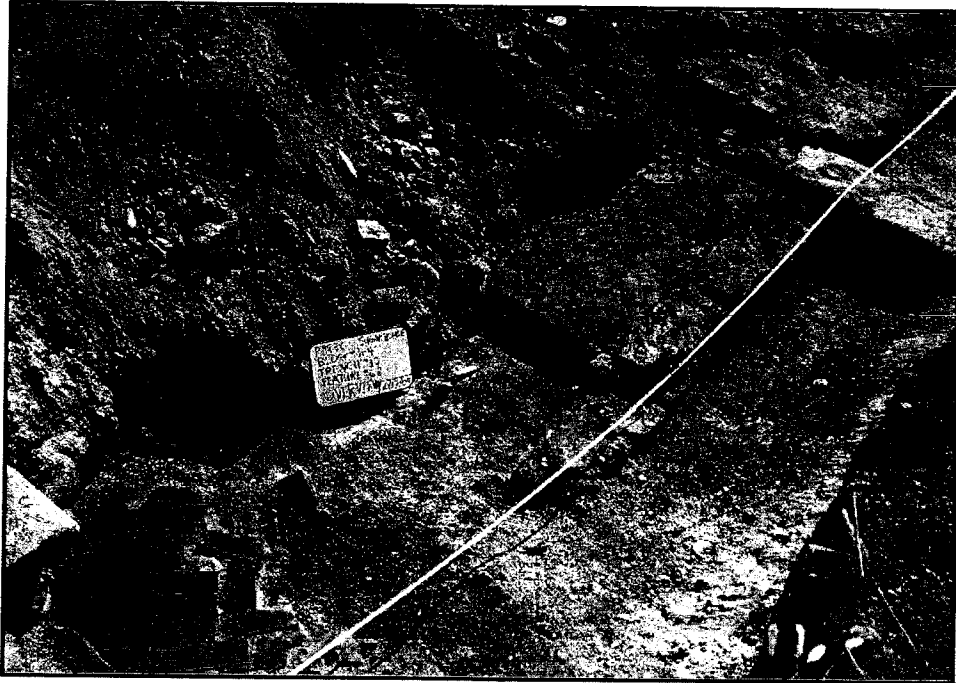
Photograph 38: Vertical wood cribbing found in Trench #11. View facing east (October 2007).



Photograph 39: Trench #12, overview showing Features #66-72. View facing south (October 2007).



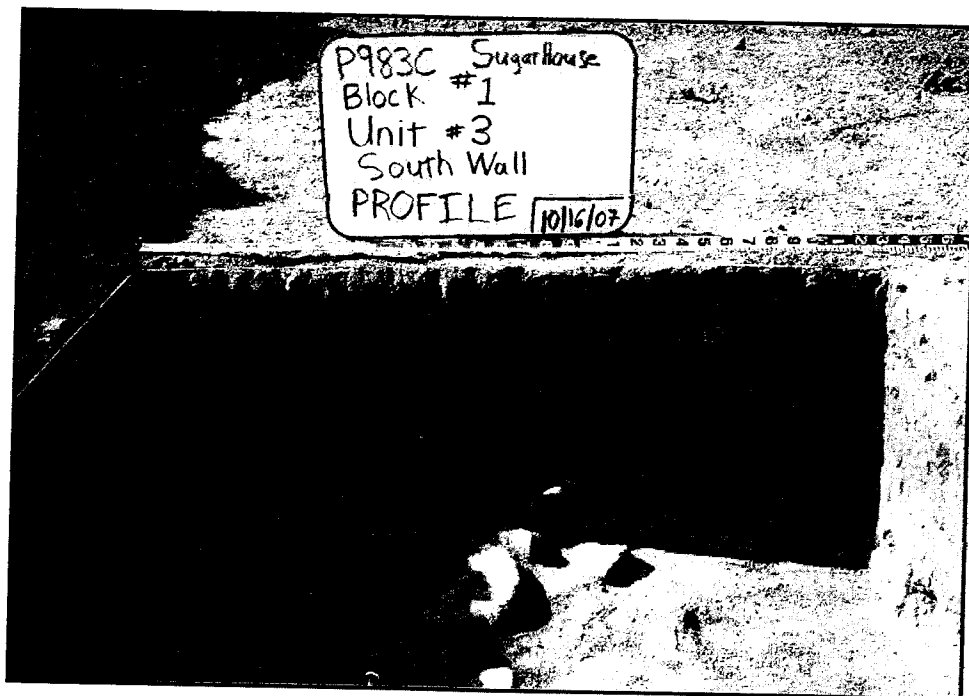
Photograph 40: Feature #66, modern concrete and stone walls. View facing north (October 2007).



Photograph 41: Feature #68, buried brick and stone feature. View facing east (October 2007).



Photograph 42: Feature #72, manhole and cover found in Trench #12. View facing northeast (October 2007).



Photograph 43: South wall profile of Test Unit #3 and Trench #2 located in Area PH1. View facing south (October 2007).