



December 28, 2007

Douglas McLearn,
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, Second Floor
400 North Street
Harrisburg, PA 17120-0093

**RE: Administrative Summary - Phase II Archaeological Research
SugarHouse Casino Property
Philadelphia County, Philadelphia, Pennsylvania**

Dear Mr. McLearn:

On December 21, 2007, A.D. Marble & Company completed the Phase II Archaeology Survey at the proposed location for the SugarHouse Casino in the City of Philadelphia.

The Phase II fieldwork followed the recommendations presented in the Phase IB Management Summary (October 2007) and the general agreements reached at the project meeting of October 25, 2007 attended by representatives of the United States Army Corps of Engineers (USACE), the Pennsylvania Historical and Museum Commission (PHMC), Keating Consulting, LLC, Urban Engineers, and A.D. Marble & Company.

The Phase IB field work identified four areas of moderate to high historic archaeological potential. They have been identified as Historic Areas H-1, H-2, H-3, and H-4. Background research identified properties of historic potential based on the time period, property use, and the social characteristics of the individuals who resided within the bounds of the subject property. Background research also identified areas of potential moderate to high disturbance from late 19th and 20th century industrial activities on the subject property.

The most prominent of the four areas identified was the part of Historic Area H-1 that contains residential foundations dating to the late eighteenth and early nineteenth centuries, along with shaft features. This is also the largest of the areas recommended for further study. It measures roughly 200x150 feet and was investigated by Trenches 1, 2 & 15 during the Phase IB study. Within Historic Area H-2, two areas were recommended for Phase II testing: the southernmost area directly north of H-1 (measuring roughly 150x100 feet) and the small foundation remnant along its extreme northeastern edge (measuring roughly 50 feet square). In Historic Area H-3, the foundation ruins from an oil processing mill and other residential usage identified in Trench 13 of the Phase IB were recommended for evaluation-level studies.

This area roughly measures 80x50 feet. Finally, Phase II testing was also recommended in Historic Area H-4 where brick features and timber cribbing were identified around ten feet below the present surface. Historic Area H-4 measures approximately 100 feet square.

Field Methods:

The vast majority of the initial Phase II field work consisted of mechanical stripping of large areas monitored by the project's Principal Investigator and the Field Director. These areas were identified in the Phase IB Management Summary and depicted in Figure 17. The mechanical stripping exposed full foundation remains, associated features such as shaft features (privies, wells and cisterns), fill soils, intact A and B horizon soil contexts, and areas of previous disturbance. The archaeological field team proceeded to shovel-scrape, brush and clean the varying features and soils uncovered by the stripping procedures. The cleared foundation ruins, shaft features, and other features were mapped, drawn, and photographed.

Results:

A total of 171 features have been identified by all the combined studies. During the Phase IA geomorphological study, Features 1 – 6 were identified. During the Phase IB identification level studies, Features 7 - 84 were identified. The Phase II investigation has identified Features 85 - 171. These features represent mainly architectural remains of stone and brick foundation walls, many of which relate directly to 19th century historic maps of the subject property. Other features of architectural function also were recovered including brick chimney supports inside buildings and occasional brick floors within buildings. Nineteen shaft features were found and evaluated during the Phase II survey.

Shaft features were recovered primarily from Historic Area H-1. Sixteen of these features were circular in shape and lined with brick and were primarily located in the rear yards of the residences that once existed in Historic Area H-1. One oval shaped cistern, constructed of a concrete-like substance and lined with mortar, was identified in Historic Area H-1. Also in Historic Area H-1, a rectangular, brick-lined shaft feature was found within the brick floor of a rear addition to one of the residential buildings facing Laurel Street. A barrel privy, built using buried wooden barrels positioned one above the other, was found in the extreme southern end of Historic Area H-2. We strongly believe that all the shaft features in H-1 suffered some degree of truncation by previous construction and demolition episodes, perhaps as much as one foot.

During the Phase II field work, all shaft features were individually mapped and photographed. Subsurface testing was undertaken to establish the integrity of the shaft feature contents and to record their depths below surface. A portion of each feature was investigated through hand excavation and mechanical means when archaeologically appropriate. Of the 19 shaft features identified, six have been found to contain historic artifact remains of contextual and stratigraphic integrity. Photographs 1 and 2 show the typical horizontal manner in which the shaft features were found and the manner in which they were investigated. It should be possible to link these artifacts with particular residential lots and thereby with individual owners or inhabitants of those properties. We believe that four of the six shaft features containing significant historic remains will provide artifact material that will date to the mid 19th to early 20th century. The other two shaft features appear to contain artifacts from the mid 18th to early 19th centuries.

The rest of the 13 shaft features contained no archaeological deposits of significance. These features were primarily devoid of artifacts and filled with the same demolition debris, brick rubble, coal cinder and coal ash that characterizes the upper soil conditions that existed across the area covered by Historic Area H-1. Such conditions are shown in Photographs 3 and 4 which detail the type of infilling encountered during the investigation of these features. We believe that these features had been cleaned out prior to their infilling with demolition debris. Additionally, the six shaft features considered to have archaeological integrity also contain similar demolition debris and fill within the upper portions of their fills.

Based on historic map analysis, what were thought to be yard areas of residential lots and alleyways in Historic Areas H-1, H-2 and H-4 were tested with a grid based survey and randomly positioned shovel tests and excavation units. A total of 48 shovel tests and nine excavation units have been excavated over the project area. These efforts of subsurface investigation were used to identify any soil horizons that could be tied to the occupation periods represented by the building foundations that had been found during the Phase IB excavation.

A small area measuring 50 x 30 feet within the central portion of Historic Area H-1 was identified as containing Native American artifacts. This area was intensively investigated using 10 shovel tests and four one meter square excavation units to evaluate the significance and integrity of the archaeological deposits. The excavation units yielded primarily artifacts identified as primary and secondary flakes of jasper, quartz and argillite, probably created during the manufacture or maintenance of stone tools. Of secondary frequency was a collection of fire-cracked rock that did not form any distribution patterns in any of the four excavation units that would suggest the presence of a hearth. A broad-bladed, stemmed point was also recovered within this area. In analysis, it is our opinion that the prehistoric artifact frequency is low and there are no associated features that could be related to the artifacts recovered from the Phase II excavations. We do not believe these remains represent a significant archaeological resource warranting further investigation.

The Phase II archaeological investigation within Historic Area H-2 was concentrated at the area's southern and northern extremes. The northern area's excavation found the remains of two stone foundations likely related to residential structures. No evidence of exterior soils that could contain artifacts related to the structures' occupants or owners was found. The rear yard of each structure was investigated but the earlier construction activity related to the former sugar refinery has completely disturbed the potential for significant archaeological deposits in the northern area of H-2. No further work in this area is recommended.

The southern portion of Historic Area H-2 contained many features that can be related to late nineteenth and twentieth-century railroad activities and, to a much lesser degree, early to mid-nineteenth century residential and commercial occupation. We do not believe any further work is warranted in this area except for a shaft feature associated with a yard office that existed during the late nineteenth and early twentieth century in the Pennsylvania Railroad's Shackamaxon Yard and the adjacent Merchant Warehouse/Shackamaxon Stores facilities. The feature associated with the yard office is unique to the overall project site since it is likely a privy that is definitely constructed using wooden barrels, positioned one on top of the other. Phase II work has found that it contains artifact material that will date to the active period of the railroad

yard office. This type of archaeological deposit should differ from the other shaft features within the project area because it should contain less domestic related material and other material associated with railroad activities.

Phase II investigations within Historic Area H-3 did not yield positive results for archaeological deposits of integrity. While it was understood that a 19th century building in this particular location had been used to produce lubricating oil, no such evidence for that activity was identified during the investigation. While brick and stone foundations were encountered in Historic Area H-3, so were concrete floors and other modern intrusions whose construction caused significant disturbance to any deposits associated with previous historical activities.

In Historic Area H-4, a series of stone and brick foundations were encountered that demonstrate this particular land area was used from the late 18th through the early 20th centuries. Some intact foundation work, brick floors, brick and stone walls, and other architectural features were found and recorded during the Phase II investigation. In addition, remnants of a wharf were also encountered within the area of investigation that articulated with some of the 19th century buildings. The archaeological investigations that followed the initial discoveries found that the surrounding soil matrices that could be associated with these features had been seriously compromised by 19th and 20th activities and could not be distinguished from fill soils deposited after demolition of 20th century businesses. With these contextual problems, it was determined that this area would not contain significant archaeological deposits that could be directly associated with 18th or 19th century activities documented through the historic record.

Subsequent to the Phase IA and IB investigations, it came to A.D. Marble & Company's attention that a Revolutionary War period fort was potentially located within the subject property. The Fort, or more likely a redoubt, is identified as Fort No.1 on a 1777 military map depicting the British's Philadelphia Northern Line of Defense. Fort No. 1 served as the defensive line's eastern terminus and also provided protection from anything floating down river. The map is attributed to Pierre Nicole, who prepared the map for Captain John Montresor, chief military engineer of General Howe at that time. Based on this map, it appears that a guard house sits inside a four sided earthen embankment that is likely surrounded by a depression several feet in depth. A raised roadway leads to the Fort from the intersection of today's Delaware Avenue and Frankford Avenue. The Fort itself measures approximately 125 feet square.

The potential of archaeological remains related to the Fort's existence was thoroughly investigated during the Phase II study. The Fort's approximate location was plotted on a map of the subject property and it was determined that the guardhouse depicted in the center of the Fort was likely located under, or slightly east of Penn Street. The Fort's exterior features were likely less affected by construction of Penn Street. Trenches 16 and 17 were excavated along the east and west sides respectively of Penn Street in order to ascertain any existence of the Fort. Trench 16 uncovered demolition remains from the sugar refinery down to depths reaching nine feet below surface. No remains of any kind were identified in Trench 17 even though it covered over 200 linear feet and ranged in width from 10 to 20 feet. Based on the extensive Phase II fieldwork, we believe, that the position of the former fort has been severely impacted several times by 19th and 20th century industrial activities that include: 1) the construction and demolition of the railroad, 2) multiple utility line installations underneath Penn Street, 3) the

construction of Penn Street and 4) the construction and demolition of the sugar refinery buildings. We believe no other significant remains from the fort exist. If any remains could possibly still exist, it would only be the filled in portion of the depression that likely surrounded the Fort. However, the Phase II field work found no evidence of such a feature. It is our contention that any remains of any kind would be difficult to interpret without the existence of the overall resource. No further action is recommended within the area of the former Fort.

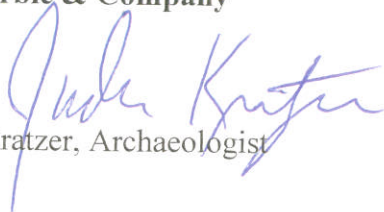
Recommendations

Five shaft features in Historic Area H-1 and one shaft feature in Historic Area H-2 have been determined to have significant archaeological deposits and we recommend that these features be fully excavated of their contents. In order to conduct the excavation, large areas surrounding each shaft feature need to be excavated to ensure a safe working position for the archaeologists. Once the proper safety concerns are in place, then the entire contents of each feature will be removed following archaeological procedures as agreed to by the Pennsylvania Historical and Museum Commission and that meet the *Secretary of the Interior's Standards for Archaeology and Historic Preservation* (44FR 44716).

A.D. Marble & Company is currently preparing a Phase II Archaeology Management Summary Report and Phase III Survey Work Plan. The report will be submitted in the near future.

Sincerely,

A.D. Marble & Company



Judson Kratzer, Archaeologist

cc: James Boyer, U.S. Army Corps of Engineers, Philadelphia District
Terry McKenna, Keating



Photograph 1: View to the east showing the tops of Shaft Features # 127 and 128 (December 2007).



Photograph 2: View to the southeast showing the excavated portion of Shaft Feature 125. The portion of the feature with archaeological integrity begins at the 5-foot mark and continues downward (December 2007).



Photograph 3: View to the east of the debris that filled Shaft Feature 137 (December 2007).



Photograph 4: View to the south showing the coal, coal ash, and cinder fill that exists within Feature 2 (December 2007).