

Philadelphia Housing Authority (PHA)  
Queen Lane Apartments Project  
City of Philadelphia, Pennsylvania

# **PHASE I ARCHAEOLOGICAL SURVEY**

**ER# 2011-0018-101**

**Shoemaker/Synterra, a JV  
100 Front Street, Suite 365  
West Conshohocken, Pennsylvania 19428**

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Prepared

by

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## ABSTRACT

This report documents the results of a Phase I Archaeological Survey performed for the Philadelphia Housing Authority (PHA) Queen Lane Apartments Project in the City of Philadelphia, Philadelphia County, Pennsylvania. The Area of Potential Effect (APE) lies in the Piedmont Upland section of the Atlantic Coastal Plain Physiographic Province. The project APE is approximately 2.3 acres (0.9 hectares) and encompasses the city block bounded by West Queen Lane, Pulaski Avenue, Penn Street and Priscilla Street (Figure 1; USGS 1997; Figure 2; Google Earth 2011). The proposed project consists of the demolition of the extant 16-story Queen Lane Apartments and Wissahickon Playground and the construction of 55 affordable rental housing units along Pulaski Avenue, Penn Street and Priscilla Street. A portion of the APE measuring approximately 0.93 acres (0.37 hectares) which opens onto West Queen Lane is located within the mapped boundaries of the Germantown Potter's Field; no new construction is planned for this area. This is the third cultural resources report prepared for the project. *Pennsylvania Historic Resources Survey Forms* were prepared for the Queen Lane Apartments building (Miller Cruie 2012a), and the Wissahickon Playground (Miller Cruie 2012b). The cultural resources work was performed for the Philadelphia Housing Authority (PHA). The lead federal agency is the U.S. Department of Housing and Urban Development (HUD).

The goal of the archaeological work was to identify areas of archaeological potential within the project APE. This work was initially limited to background research concerning the history and development of the APE. As the background research progressed and details of a potter's field in the block emerged, a decision was reached to attempt to identify the extent of burials within the block using non-invasive means. A Ground Penetrating Radar (GPR) survey was undertaken across the block. The results of the GPR work were inconclusive. A decision was reached to archaeologically test the location of three of the geophysical anomalies in proximity to the potter's field boundary in an effort to clarify the GPR results. Pre-construction testing was proposed in the APE. Due to a concern that there might be human remains outside of the boundaries of the potter's field and the potential to encounter other archaeological deposits, archaeological excavation was also performed at the locations of the proposed pre-construction borings and percolation tests.

Background research provided details of the development of the project block through time. Ground penetrating radar and limited archaeological excavation have supplemented the background research and permitted a more detailed view of archaeological potential within the block. Based on the background research alone, the block could be expected to contain precontact remains as well as nineteenth- and twentieth-century historic residential deposits. In addition, a portion of the block was used for human burials from the mid-eighteenth century through to the early twentieth century. The GPR survey and limited archaeological excavations indicated that archaeological potential is more limited in scope than indicated by the background research. Archaeological excavations undertaken encountered no intact original ground surfaces. Based on the archaeological data, there is no precontact archaeological potential. The investigations identified numerous foundations from buildings constructed in the late nineteenth and early twentieth centuries. In addition, three cultural features were encountered that appear to be shaft features. The backyard areas of the historic house lots were identified as having the potential for shaft and other cultural features.

No significant ground disturbing activities are anticipated within the boundaries of the Germantown Potter's Field. While it cannot be said with absolute certainty that no burials were placed outside of the known potter's field boundaries, the archaeological testing of geophysical anomalies and pre-construction boring and percolation test locations did not encounter such

evidence. There was no evidence in any of the archaeological tests that fills that may have contained remains from disturbed burials were distributed outside of the boundaries of the potter's field.

Given the possibility of errantly placed burials, the uncertainty of shaft feature placement across the block, and the differing depths of fill across the block, Phase II archaeological testing is recommended. In accordance with the Programmatic agreement resulting from the Section 106 of the National Historic Preservation Act between the U.S. Department of Housing and Urban Development (HUD), PHA, the Pennsylvania State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) appropriate archaeological studies will be performed for the Queen Lane Apartment Project. Archaeological studies will be conducted in a manner consistent with the Secretary of the Interior's *Standards and Guidelines for Identification* (46 FR 44720-23), and *Standards and Guidelines for Archaeological Documentation* (48 FR 44734-37), also taking into account the National Park Service's publication *The Archaeological Survey: Methods and Uses* (1978: GPO stock #024-016-00091), the Advisory Council on Historic Preservation (Council)'s publication *Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites* and the Pennsylvania Historical and Museum Commission's *Guidelines for Archaeological Investigations* (PHMC 2008).

The final design, which includes the buildings, landscape plans, utility locations and other ground disturbing activities, was overlaid on historic maps of the APE in order to identify areas of the APE that retain high archaeological potential. Per correspondence from the PHMC (letter dating July 8, 2013) basement areas of historic buildings (that are no longer extant) do not retain archaeological potential; however, areas that were historically the backyards of these buildings do retain high potential for archaeology. These areas have been identified on the overlaid mapping. Prior to the construction of the proposed housing development these areas will be tested.

Archaeological testing will consist of a combination of mechanical and hand excavation. The areas of archaeological potential that may be impacted by the project will be mechanically stripped under the supervision of an archaeologist. Mechanical stripping and archaeological testing will be limited to those areas determined to have a high potential for archaeological resources which are to be impacted by the construction of the new housing units, underground utilities and ground-disturbing landscaping. Exposed archaeological features will be delineated through hand excavation, drawn, photographed, and mapped. Archaeological features that may be impacted by the proposed construction will be tested through hand excavation to evaluate the potential of the site to be eligible for listing in the National Register of Historic Places. Artifacts collected during excavation will be washed, inventoried, and catalogued. The material collected will be evaluated for its potential to provide information important to our understanding of local or regional history. If any human remains or grave-associated artifacts are encountered during the course of the project, they will be brought to the immediate attention of the SHPO and the Advisory Council on Historic Preservation (Council) and any federally-recognized Native American tribal organizations that attach religious and/or cultural significance to the affected property.

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## INTRODUCTION

This report documents the results of a Phase I Archaeological Survey performed for the Philadelphia Housing Authority (PHA) Queen Lane Apartments Project in the City of Philadelphia, Philadelphia County, Pennsylvania. The Area of Potential Effect (APE) lies in the Piedmont Upland section of the Atlantic Coastal Plain Physiographic Province. The project APE is approximately 2.3 acres (0.9 hectares) and encompasses the city block bounded by West Queen Lane, Pulaski Avenue, Penn Street and Priscilla Street (Figure 1; USGS 1997; Figure 2; Google Earth 2011). The proposed project consists of the demolition of the extant 16-story Queen Lane Apartments and Wissahickon Playground and the construction of 55 affordable rental housing units along Pulaski Avenue, Penn Street and Priscilla Street. A portion of the APE measuring approximately 0.93 acres (0.37 hectares) which opens onto West Queen Lane is located within the mapped boundaries of the Germantown Potter's Field; no new construction is planned for this area. This is the third cultural resources report prepared for the project. *Pennsylvania Historic Resources Survey Forms* were prepared for the Queen Lane Apartments building (Miller Cruie 2012a), and the Wissahickon Playground (Miller Cruie 2012b). The cultural resources work was performed for the Philadelphia Housing Authority (PHA). The lead federal agency is the U.S. Department of Housing and Urban Development (HUD).

This report was prepared in keeping with federal and state laws that protect significant cultural resources, including historical and archaeological sites. Federal and state mandates for cultural resources include: the National Environmental Policy Act of 1969; the National Historic Preservation Act of 1966 (NHPA) (as amended); Executive Order 11593; the Archaeological and Historic Preservation Act of 1974; and the Commonwealth of Pennsylvania State Act No. 1978-273, amended as Act No. 1988-72. This legislation requires that the effect of any federally assisted undertaking on historically significant buildings, structures, objects or sites be taken into account during project planning. All work was performed in accordance with regulations set forth in 36 CFR §800, and the Pennsylvania Historical and Museum Commission's (PHMC) *Guidelines for Archaeological Investigations in Pennsylvania* (PHMC 2008).

The work for this report was undertaken by Cultural Heritage Research Services, Inc. (CHRS) of Lansdale, Pennsylvania during February and March of 2013. Kenneth J. Basalik, Ph.D. served as the Principal Investigator. Rachael E. Fowler was project archaeologist. Philip Ruth conducted historical research. Graphics for the report were prepared by Crystal Hall. Kevin Quigg and Maria Rossi of the CHRS staff provided editorial services (Appendix A). This report was prepared under contract to Shoemaker/Synterra a JV of West Conshohocken, Pennsylvania.

## BACKGROUND

### Introduction

Background research was conducted in order to identify and provide a context for evaluating cultural resources within and immediately adjacent to the Area of Potential Effect (APE). Repositories and/or personnel consulted include those associated with the National Register of Historic Places, the Pennsylvania Historical and Museum Commission (including the Pennsylvania

Bureau for Historic Preservation), the Pennsylvania State Archives, the Pennsylvania State Library, the Free Library of Philadelphia, Temple University’s Urban Archives, the Philadelphia Historical Commission, the Philadelphia City Archives, and the Germantown Historical Society (Table 1). A variety of source materials were consulted, including regional and municipal histories, historical and archaeological resource files, as well as environmental, geological, archaeological, and other pertinent studies. Historic maps and aerial photographs were consulted in an attempt to identify and pinpoint the locations of historic structures within or immediately adjacent to the APE.

| <b>TABLE 1</b>  |   |
|---|---|
| <b>REPOSITORIES/INDIVIDUALS CONSULTED</b>                                   |   |
| <b>Queen Lane Apartments Project<br/>City of Philadelphia, Pennsylvania</b> |   |
| <b>Institution/Repository</b>   | <b>Records Consulted</b>  |
| National Register of Historic Places  | Historic resource files   |
| Pennsylvania Historical and Museum Commission                               | Environmental resource reports, archaeological site files                                 |
| Pennsylvania State Archives   | Historic maps, aerial photographs, regional histories                                     |
| Pennsylvania State Library  | Regional histories, historic maps   |
| Free Library of Philadelphia  | Aerial photographs, archival newspapers, regional histories                               |
| Temple University Urban Archives  | Archival newspaper clippings, pamphlets, brochures  |
| Philadelphia Historical Commission  | Information on history of block   |
| Philadelphia City Archives  | Architectural plans and drawings  |
| Germantown Historical Society   | Archival newspapers, historic maps, manuscript records, periodicals, historic photographs |

The Area of Potential Effect (APE) encompasses the city block bounded by West Queen Lane, Pulaski Avenue, Penn Street and Priscilla Street (Figure 1; USGS 1997).

Environment

Pennsylvania has undergone radical changes in environment during the last 15,000 years. Although the APE was not glaciated, the Pleistocene climate was colder and dryer than present conditions. During this period a forest tundra mosaic was likely to have existed, consisting of spruce stands intermingled with dwarf birch (Watts 1979). As the climate became warmer, following the retreat of the Wisconsin glaciation, fir, pine, and alder entered the forest. Birches were present by 13,000 BP, and hemlock and chestnut appeared ca. 8000 BP (Watts 1979). Although the forest species continued to shift until ca. 1500 BP, conditions similar to the modern forest were probably present by 5000 BP (Carbone 1976; Stewart 1981).

The study area is located in the Temperate Deciduous Forest Biome of North America (Shelford 1964:18). This biome, under pristine climax forest conditions, is a multi-layered forest with different species dominating the various layers. Large trees (oak, chestnut, hickory, elm, beech, and maple) form the canopy with young members and smaller species (dogwood, sassafras, and hornbeam) just below. Immediately beneath this understory tree layer is a bi-level shrub layer, under which is a bi-level herb layer (Shelford 1964:26). This diverse multi-layer forest provides many resources for animal and human exploitation, such as food (nuts, seeds, berries and fruit), fuel, wood, fiber, and various plant products used for dyes and medicinal purposes.

The forests in this region, at the time of European settlement, were not completely untouched; American Indian exploitation for thousands of years had modified considerable portions of them. The effects of the activities of these original inhabitants were minimal, however, compared to the impact of European settlement. The existing forests were extensively cleared for fuel, lumber, and agricultural purposes, rapidly destroying the integrity of the existing biotic community. Similarly, the faunal resources (elk, deer, bear, wolf, fox, rabbit, hare, beaver, turkey, partridge, pigeon, and other fowl) had been exploited by the American Indian populations, but their habitats were largely destroyed by European settlement, causing severe depletion. For the precontact and early historic populations, however, this region contained an abundance of resources.

### Precontact Context

Evidence from precontact sites in the eastern United States indicates a number of successive regional cultural traditions. Although the exact number and nature of these traditions, which varied locally, remains the subject of debate, three major cultural periods can be defined: Paleo-Indian, Archaic, and Woodland. These traditions are best viewed as responses to changing social and environmental conditions.

The Paleo-Indian Tradition, 12,000 - 8,000 BC. The earliest, widely recognized tradition in the northeastern United States is the Paleo-Indian. During the Paleo-Indian period, climatic conditions in Pennsylvania differed significantly from those of today. Large parts of northern North America were covered by continental glaciers, which produced a wetter, cooler climate in more southerly, non-glaciated regions. As a result of these conditions, spruce-pine-hemlock forests and Pleistocene, cold adapted animals, such as the mastodon, the woodland bison and the caribou, predominated. The Paleo-Indian tradition was characterized by small hunter-gatherer groups subsisting mainly on large mammals, many of which are now extinct or no longer present in the area (woolly mammoth, mastodon, and caribou). The artifact distinctive to this tradition is the fluted projectile point, lanceolate-shaped with a central flake removed from both faces along its longitudinal axis. This and related tools have been found in association with various floral and faunal resources in sites across the eastern U.S. (Funk 1969; Gardner 1974; Adovasio 1977; Dent and Kauffman 1978). This evidence suggests that these populations exploited a wide variety of terrestrial resources for subsistence.

Though a number of tools diagnostic of the Paleo-Indian tradition have been found in the Delaware and Schuylkill River Valleys (Mason 1959; Zatz et al. 1985), there is no published documentation of specimens for the immediate vicinity of the study area. Excavations in the southern sections of the Ridge and Valley Province reveal a complex of functionally specific sites.

Settlement pattern components suggest that Paleo-Indian hunters occupied home ranges containing resource locations visited on a regular or semi-regular basis (Hatch et al. 1985). Some other generalizations have been formulated regarding the settlement subsistence patterning of the American Indians within a temporal-periodization context. Starting with the Paleo-Indian and Early Archaic phase (about which very little is known) several types of sites have been identified from the Flint Run Paleo-Indian Complex, a series of Paleo-Indian sites located in the southern sections of the Ridge and Valley Province and excavated by Gardner (1974) and Carr (1975). These sites consist of a quarry, a quarry reduction station, and a quarry related base camp. In addition to lithic procurement and reduction sites, food procurement sites have been located in upland areas as well as bordering or overlooking floodplain zones (Hatch et al. 1985:102; Stewart 1981:324; Custer 1982:151).

The Archaic Tradition, 8,000 - 1,000 BC. The Archaic tradition emerged from the Paleo-Indian as a more generalized subsistence strategy in response to changing environmental and, perhaps, social conditions. Approximately 10,000 years ago, as glacial conditions slowly gave way to the warmer Holocene climate, hardwood forests gradually replaced the tundra-like vegetation (Sirkin 1977:214). Due to the disappearance of the megafauna and to the emergence of new subsistence items, resource procurement strategies changed. These changes, which included the exploitation of a wider range of floral and faunal resources than in the Paleo-Indian period, are reflected in material remains by new tool types. These new tool types, along with the new subsistence strategies, mark the beginning of the Archaic tradition (Bryan 1977:363).

Evidence suggests that Archaic peoples lived in small nomadic groups (Cushman 1981:9). The resources exploited varied on the basis of local availability. This factor, coupled with the types and quantities of the lithic materials employed in tool-making, results in different artifact assemblages at different sites; therefore, it is difficult to characterize a typical regional Archaic tool assemblage. Archaic assemblages are, however, clearly distinguished from those of the preceding Paleo-Indian period by the replacement of fluted Paleo-Indian points by smaller points of cruder materials, along with the emergence of grinding and ground stone tools (axes, chisels, and gouges). In general, tool assemblages from this tradition are marked by increasing diversification and specialization through time.

The increased number of sites dating to the Archaic period is evidence that population density was greater during the Archaic than in the preceding Paleo-Indian period. This increase was possible because, as climatic fluctuations stabilized and hardwood forests became established, the carrying capacity of the environment increased. Also during this period the rising sea level formed extensive marshes and estuaries along the Delaware River; in these, fauna thrived. As resources became more abundant in and around these major waterways, settlement patterns became increasingly focused along them (Kraft 1977; Gardner 1980). Despite this trend there is evidence of continued seasonal nomadism based on a resource scheduling strategy (Cushman 1981:12). The late Transitional Archaic also witnessed expanding trade networks and some new artifact forms, among them soapstone (steatite) vessels and non-local, lithic materials. These attributes are borne out by the large number of sites and by the more diverse cultural assemblages found in the Delaware Valley from this cultural period. A larger population with more diverse procurement activities is likely to have increased the importance of upland areas in the region during this period.

The Woodland Tradition, 1,000 BC - AD 1600. The beginning of the Woodland tradition in this region is marked by the introduction of ceramics (Gardner 1980:3) and by two major trends: increasing sedentism and the development of extensive agriculture (Curry and Custer 1982:4; Cushman 1981:14). In this tradition, permanent or semi-permanent settlements replaced the seasonal base camp of the Archaic. Settlement pattern formulations derived from sites dating to this period show an aboriginal site location preference along the major waterways (Curry and Custer 1982:1), where the exploitable biomass was the greatest. The harvesting of various plants, waterfowl, fish, and shellfish would have provided a more than adequate supply of food. These waterways supplied relatively easy transportation, facilitating trade and increasing the range and quantity of resources that could be exploited. During the Late Woodland, the floodplains of these waterways would serve as fertile fields for crops, primarily maize, beans, squash, and pumpkins. The fact that these areas were highly favored for habitation is demonstrated by the scarcity of sites in upland areas (Cushman 1981:13).

The Woodland tradition is also marked by the growth of trade networks and the elaboration of specific cultural practices. Late Archaic trade networks in exotic, primarily lithic, raw materials expanded and became an important Woodland feature. There is evidence of increased mortuary ceremonialism and of specialized artifact forms, apparently for ceremonial use (Curry and Custer 1982:4). These traits suggest the emergence of a sociopolitical organization that had not previously existed. There is also evidence of tribal affiliations during the Late Woodland period, probably between the Delaware, or Lenape, Indians and other tribes in the area. The Late Woodland period ended with European contact, which lasted from 1550 to 1750 and which appears in the archaeological record as an intrusion of European artifacts into Late Woodland assemblages. Studies by Kent (1984) and Custer (1986) are providing a great deal of information about the dynamics of this initial integration and the subsequent disintegration of Late Woodland cultures.

Precontact archaeological sites have been found within the City of Philadelphia in widely spread areas across the city. In most areas of the city, the construction of buildings has destroyed original, and in many cases buried, surfaces. No precontact archaeological sites are recorded in or adjacent to the APE. However, as late as 1862 (Smedley 1862) a stream was present adjacent to the APE in what is now West Penn Street. The proximity of a source of water and a relatively flat landscape would indicate that undisturbed soils within the APE have moderate to high precontact archaeological potential.

### Study Area History

The APE is located in a portion of Germantown that was not thickly settled until the eighteenth century. The first non-agricultural use of the land within the APE was for the establishment of a potter's field. Established for public use in 1755, the Germantown Potter's Field within the APE was a relative late-comer to Germantown. In the quarter-century following its 1683 settlement, Germantown was equipped with "four principal burying grounds" (Garber et al. 1907:104). A "Lower Burying Ground" (later known as the Hood Cemetery; at 4901 Germantown Avenue) and an "Upper Burying Ground" (at 6309 Germantown Avenue) were established in 1693 for the respective use of residents of the settlement's southeastern ("Lower") and northwestern ("Upper") "districts" (Garber et al. 1907:230). About 15 years later, the first interments were made in burial

grounds beside the settlement's new Friends meetinghouse (at 47 W. Coulter St.) and the new Mennonite meetinghouse (at 6133 Germantown Avenue) (Hotchkin 1889:62, 159).

By 1738, the wooden fence marking the perimeter of the half-acre Lower Burying Ground was "in a very Shattered Condition," and some of Lower Germantown's prominent citizens were noting unhappily that the graveyard's "Fences and Inclosures[,] being often in Decay and Subject to constant repairs, were attended with continual Expences" (Lower Burying Ground Record Book n.d.; 1:5). That problem was addressed at a meeting held on February 3, 1738, wherein a "subscription was set on foot by the Generality of the Inhabitants of Germantown, in order to Enable them to Enclose the said [Lower] Burying Ground with A stone Wall." As enumerated in a record book commenced at that time (or some years thereafter), 140 men subscribed to the effort, and sufficient "Monies [were] raised" through subscriptions to erect a stone wall around the Lower Burying Ground (Lower Burying Ground Record Book n.d.; 1:5-9).

That community effort established a precedent for subsequent administration of the Lower Burying Ground (and the eventual spinoff of a separate potter's field). Thirteen years later, at a February 28, 1751 meeting of "Inhabitants of the Lower District of German Town and Others as properly belonged to the [Lower] Burying Ground," "Several Rules and orders relating [to] the future Regulation of the said Burying Ground and of the Burials in the same" were "mutually Subscribed, agreed and concluded on" (Lower Burying Ground Record Book n.d.; 1:9). As recorded in the untitled first volume of Lower Burying Ground records (now in the collection of the Germantown Historical Society), the "Regulations" were as follows (with original spelling):

**Whereas** Numbers of Strangers or Persons not residing in, and living out of Germantown Limits, by frequently bringing and burying their Dead (Even without leave, decency or order in respect of places, and intermixing with other Families) into such of our Burying Grounds in Germantown, as have formerly been purchase<sup>d</sup>, and granted for the only use of the Inhabitants of German Town, will, in all appearance very Soon render our Said Burying Grounds (Especially that at the Lower End of Germantown) insufficient to contain our own Dead. And having taken into consideration, That such Strangers or Persons, living in other Places and Townships have no right just to bury any of their Dead into our said Burying Grounds, which contain so little Ground and are allready very much filled; Besides as it will appear very Unjust to Every Considerate Person, that we the Inhabitants of Germantown afores<sup>d</sup> should bear all the Cost of making and keeping in repair, the Walls, Fences, Inclosures, Gates and Biers of the said Burying Yards, when Strangers who have no Right at all of or in the Same Do Escape without any Cost or Expence, Therefore be it known To all Whom it may Concern. That we the Subscribers, Freeholders and Inhabitants of the Lower District or Part of German Town (properly belonging to the Burying Ground at the lower End of German Town adjoining Jacob Millers Land and the Mill Road), have hereby Resolved concluded and Agreed upon the Terms and Regulations touching the premises as follows.

**First** That We Choose and have this Day choosen and appointed John Zachary, Jacob Miller, and Peter Miller Senr. Inhabitants of Germantown aforesaid to be the overseers

of the said Burying Ground at the lower end of Germantown, and either one of them to keep the Key of the same, during such Time till others shall be chosen in their Stead.

**Secondly** That they the said Overseers or any one (or in Matters of Dispute any two) of them shall be and is hereby fully empowered, to show point out, and Assign, unto such or any stranger or Persons living and Dwelling out of German Town proper Limits, A Place Spot or Room for digging and making of any Grave or Graves in the Easterly part or Quarter of the said Burying Ground and no where else. Except some of the Family or Relation of such dead stranger are buried in some other part of the said Burying Ground.

**Thirdly** That the said Overseers or any of them before He or they Assign such Place shall Demand and receive (which they or any of them are hereby empowered to do), of such Stranger or other Person for the burying Place of any Dead Strangers for Each Person above the Age of Ten years the Sum of Five Shillings, and for any child or Person under Ten years the Sum of Two Shillings.

**Fourthly** That they the said Overseers, or any two of them, upon the proper and reasonable Request or Intercession of the Relation of such Dead Stranger or of any other Person in that behalf, shall have a Discretionary Power to make only such reasonable Abatement or Allowance in the said respective Sums or Prices, as the Circumstances of such Dead Stranger (in respect to Estate or Poverty) shall unto them seem to require.

**Fifthly** That upon the Refusal of Payment of the said respective Sums in either of the Cases aforesaid or of giving Security for the Same (Regard being had to the Circumstances aforesaid), They the said Overseers or any two of them, shall and may utterly deny, oppose and prevent the Entrance, the digging or making of any Graves for any Stranger, and his Burial, in the same Burying Ground.

**Sixthly** That all the Monies so received & collected by the said Overseers or any of them, for any Grave Place or Burial of Any such stranger, shall be lawfully and honestly and safely kept and taken Care and a true Account of by the said overseers, or such as shall at any time be chosen, in their Stead, and Succeed them in the said Trust, and shall joyntly be accountable for all such Monies (without charging any commissions or making any Deductions for their [*illegible word*] or Service) unto any Twelve Substantial Freeholders in the said Lower District of Germantown if met, yearly, if required, in order That all Such Monies shall and may be applied for and toward the making and repairing the Walls, Fences and Inclosures of the said Burying Ground, As also That the said Overseers shall now Execute an obligatory Writing to render such true Account in Manner aforesaid.

**Seventhly** Butt if in Case such Monies so received for the Burial of such Strangers shall prove to be any more than what will be requisite for the Use aforesaid, Then such Overplus or Spare Money, Shall by the said Overseers be carefully kept in order to be

(when Sufficient) applied for and toward the purchasing of a Suitable Spot of Ground in Germantown for a Common Burial Place to Strangers and Negroes.

**Eightly** That as in particular our said Burying Ground aforementioned, contains much too little Ground (Even without the Reception of any Strangers) to contain our own Dead in times to come, Therefore they the said Overseers and their Successors or any of them are hereby empowered and shall & may joyntly and Severally Oppose, Deny and prevent the burying of any Negroe or Negroes or Mulattoe kind on the said Burying Ground whether such Negroe or Mullattoe may or shall belong to any Inhabitant of German Town or to a stranger under any Pretence whatsoever.

**Ninthly** That nothing herein contained shall in any ways have any Tendency to inroach upon, affect or infringe the [*illegible word*] proper Rights Liberties or Privileges of any Freeholder or other settled Inhabitant of German Town, as if this Instrument had not been made any Thing herein before contained to the contrary Notwithstanding.

**Lastly** We the Subscribers Do hereby promise to defend Protect keep harmless and Indemnified the said Overseers and their Successors and any of them in performing and observing the Content herein before Expressed. In Witness whereof We have hereunto set our Hands the Twenty Eighth Day of February In the year of our Lord One Thousand Seven Hundred and Fifty/fifty one” (Lower Burying Ground Record Book n.d.; 1:10-14).

There followed a list of 24 subscribers—all men, and most bearing a German surname (Lower Burying Ground Record Book n.d.; 1:15). One of the subscribers was Balltes Reser, who would soon figure in the establishment of the Germantown Potter’s Field (and whose Christian name was spelled various ways). “Not a great deal is known of [Reser],” observed the authors of a sesquicentennial history of Germantown Academy in 1910. In addition to being a member of the subscription committee for the proposed Academy in 1759, he was “a prosperous master tanner, and was early established in the town. . . . That he was one of the townsmen actively interested for the Lower Burying Ground is a matter of record, and his connection with the Germantown Academy is another indication of his public spirit, and that he was one of the town’s prominent men is shown by the fact that he was selected for the committee to secure subscriptions, which means that he must have been regarded as a man of persuasive power. He was one of the founders of the Fishing Company of Fort St. Davids, at the Falls of Schuylkill” (Brown et al. 1910:9).

At a “Publick Auction” conducted by Philadelphia City and County High Sheriff Samuel Morris on July 23, 1755, Balltes Reser purchased a rectangular, 140-square-perch (0.875-acre) parcel “Situat in the Lower Part of Germantown on the North West side of a Certain Public + recorded Fifty foot wide Road or Lane . . . leading from Schuylkill falls to the Germantown Main Street . . . (otherwise called Bowman’s Lane).” The parcel was “Surveyed before & after Said Sale” by Germantown surveyor Christian Lehman, who included a description of the property in a 1766 volume of drafts documenting land acquisitions in Germantown and adjoining Cresheim (“Creesam”) Townships (the surveyor may have drawn some details of Reser’s acquisition from “a deed recorded in Common Pleas Book 1A, p. 156 ff, Philadelphia,” as cited by Germantown

historian Eugene Glenn Stackhouse in a 2003 article titled “Germantown’s Potter’s Field”) (Lehman 1824:55; Stackhouse 2003:26). Beneath a draft of “The 1755 German Town Potter’s Field or Strangers Burying Ground” (Figure 3; Lehman 1755), surveyor Lehman reported that Balltes Reser had purchased the parcel “for the use of & for & as a Strangers Burying Ground or Potters Field for all Germantown to serve for a Burial Place for all Strangers, Negroes & Mulattoes as Die in any part of Germantown forever, And was for the Purpose aforesaid Purchas’d as part of the late George Arnold’s Estate” (Lehman 1824:55).

Balltes Reser paid £5. 10s for the prospective potter’s field (Lehman 1824:55). Given that he was a subscriber to the Lower Burying Ground resolutions adopted in 1751, and that one of those resolutions stipulated that any “Overplus or Spare Money . . . be (when Sufficient) applied for and toward the purchasing of a Suitable Spot of Ground in Germantown for a Common Burial Place to Strangers and Negroes,” it may be assumed that Reser was charged by his fellow subscribers in July 1755 with purchasing the prospective potter’s field for public (“common”) use, and that he made the purchase with funds collected by Lower Burying Ground Overseers as “overplus” payments during the previous four years. There would be no subsequent deeds for the Germantown Potter’s Field to shed additional light on Reser’s purchase. Reser himself apparently regarded the Potter’s Field as public property. In his will, probated shortly after his death on December 17, 1773, he made no mention of the burial ground (Historical Society of Pennsylvania 1900:444; Stackhouse 2003:27). Legal experts looking into the matter in the early twentieth century would also be stymied by a lack of evidence concerning High Sheriff Morris’ earlier claim to the parcel. As reported in a 1916 newspaper article, researchers discovered only that “the first [information] known of the property goes back to February 2, 1689, when the commissioners appointed by William Penn deeded it by patent to Daniel Pastorius. Going a little deeper into the law books of antiquity, Deputy City Solicitor Forster found the property mixed up in a court action. One Joshua Emlin was suing Catherine Arnold for title to the property in 1740. It is thought that out of this fight, the property finally found its way into the hands of High Sheriff Morris” (*Philadelphia Evening Bulletin* 1916:n.p.).

Christian Lehman’s annotations on the “1755 [draft of the] German Town Potter’s Field or Strangers Burying Ground” indicate that the southeast side of the rectangular plot fronted for a distance of “10 [linear] perches” (165 feet) on the “Road leading from Schuylkill falls to the Germantown Main Street” (Figure 3; Lehman 1755). That road would be referred to as “Bowman’s Lane in Lower Germantown” in minutes of an October 1766 meeting of Germantown inhabitants (Keyser 1884:419). During the nineteenth and twentieth centuries, the road would be known by at least a few other names, including “Riters Lane” (1804 reference), “Wittal’s Lane” (1812 reference), “Indian Queen Lane,” and (ultimately) “W. Queen Lane” (Stackhouse 2003:27; Ward 1882:131).

On Lehman’s 1755 draft, he indicated that the eastern corner of the new Germantown Potter’s Field was “152 p<sup>s</sup>” (152 linear perches, or 2,508 feet) southwestward of Germantown’s “Main Street,” which was apparently the nearest fixed landmark (the street known today as “Pulaski Avenue” did not exist in 1755) (Figure 3; Lehman 1755).

As depicted on the 1755 draft, the Germantown Potter’s Field extended 14 linear perches (231 feet) northwestward from Bowman’s Lane (Figure 3; Lehman 1755). At that length (and with a

width of 10 linear perches, or 165 feet), the rectangular lot embraced an area of 140 square perches (38,115 square feet; 0.875 acres), or approximately 37% of the 2.36-acre block presently bounded by W. Queen Lane, Priscilla Street, W. Penn Street, and Pulaski Avenue. A “gate” denoted on the 1755 draft in the center of the side of the “burying ground” fronting on Bowman’s Lane suggested that a gated wooden fence and/or stone wall defined the perimeter of the Germantown Potter’s Field from its inception. Privately-owned parcels of land abutted the northeast, northwest, and southwest sides of the newly-formed cemetery, which was apparently designed to be accessed only via the Bowman’s Lane gateway.

Historian Eugene Stackhouse’s review of “the old record book of the Lower Burial Ground of Germantown, now known as the Hood Cemetery,” as well as a few records relating to the Upper Burial Ground, led him to assert that “the next record of the [Germantown] Potter’s Field [after Lehman’s 1755 annotated draft] comes from the minutes of the Upper Burial Ground of Germantown from a meeting held 24 March 1766” (Stackhouse 2003:26). That meeting, as described in a history of the Upper Burial Ground published in 1884, had been “occasioned by the request of Christian Warmer to bury his dead negroe child in the said [Upper] burying ground.” According to the meeting minutes:

[After some discussion] it was unanimously Resolved by the said Inhabitants: That as a separate lot of land of sufficient largeness situate on the Northwest side in Bowman’s Lane in Lower Germantown, has several years ago by the whole Germantown Inhabitants been purchased on purpose for and as a separate and distinct Burying ground for all Strangers, and negroes and mulattoes as die in any part of Germantown;—

That therefore henceforth no Negroe or Mulattoes shall be buried or suffered to be buried in the said upper Germantown Burying Ground nor on any part thereof on any pretence whatsoever, —nor any stranger but what by the overseers of the said Burying Ground for the time being shall in their judgment and discretion shall be judged suitable and be admitted to be buried in the said upper Germantown Burying Ground (Keyser 1884:419).

Eugene Stackhouse’s review of “the old record book of the Lower Burial Ground” turned up only a few more allusions to the Germantown Potter’s Field during the eighteenth and nineteenth centuries, as follows:

At some point, responsibility for the Potter’s Field became a function of the trustees of the Lower Burial Ground. We find an entry in the old record book of the Lower Burial Ground for January 1, 1788: “Christian Laashet and Justus Fox are appointed to a Committee to settle the accompts of the Burying Ground in Bowman’s Lane with Henry Sorber the present Treasurer.” There are no other earlier known records regarding this supervision of the Potter’s Field.

The old record book of the Lower Burial Ground also states: “At a meeting of the Trustees of the Burying Ground at the Lower End of Germantown held . . . January 1<sup>st</sup>, 1791 . . . Henry Sorber was chosen Trustee of the Burying Ground in what is commonly called Bowman’s Lane.” Henry Sorber was again chosen trustee from 1791 through

1802 and Jacob Gardner was also chosen gravedigger for the Potter's Field. From the old record book, January 1, also 1803: Jacob Gardner was chosen gravedigger and manager.

January 1, 1804: Jacob Gardner is appointed manager for "the one back Ritters Lane." Also: ". . . it is further Resolved that Each & Every person Buried in the Burial ground back Ritters Lane Shall pay for every grown person one Dollar Into the hands of Who Shall at the time have the Management of Said burial ground and Children shall pay half price that is 50/100."

In 1805 "Saml Bringham Frederich Warren & Jacob Miller appointed a committee for the purpose of Doing business Relative to the two Publick Burial Grounds for the year 1805." This was continued for the years 1806, 1807, and 1808.

In 1812 the Potter's Field was referred to as the "one back Wittals Lane."

At the meeting of 22 January 1838 the burial ground was recorded as the "Potters Field in Indian Queen Lane."

The last reference to the Potter's Field in the old record book shows: "February 1, 1860: Amount received for digging single strangers ground: \$23.00 [approximately \$600 in 2013 currency, after adjusting for inflation]."

The Lower Burial Ground was incorporated as the Hood Cemetery Company in 1867 with no mention of the Potter's Field.

Sometime after this time, the Germantown Poor Board took responsibility for the Potter's Field. I have found no record of this transfer of responsibility (Stackhouse 2003:26-27).

At least some of the graves placed in the Germantown Potter's Field during the nineteenth century would still be "marked by rough stones" early in the twentieth century, reported the writer of a circa-1915 newspaper article. Of the "few graves" so marked, "there is just one stone bearing lettering," the writer observed. "This marks the grave of George Brown, who died in 1840, at the age of 16 years" (Anonymous 1915a:n.p.). Eugene Stackhouse quoted in his "Germantown's Potter's Field" history a news item from 1920 claiming that "two large headstones were uncovered last Saturday by workmen grading the old Germantown potter's field, Queen lane, west of Pulaski avenue. . . . Years ago there were at least three inscribed headstones on the tract, but all [had] disappeared. One of those [recently] unearthed bore the inscription, 'W.H., 1840,' and the other 'S.H., 1848.' Old residents recall that a third stone bore the name 'John Brown,' and the date 1914. This has not been found" (Stackhouse 2003:27). Unanswered is the question of why all three legible gravestones witnessed on the Germantown Potter's Field in the early twentieth century bore dates from the 1840s.

Sometime during the mid-nineteenth century, the Germantown Almshouse (or "Poor House") Board of Managers "exercised supervision over the [potter's field], and persons who died in the

almshouse were buried there, until 1915” wrote historian Edward W. Hocker in *Germantown 1683-1933* (Hocker 1933:79). That practice might not have started until 1871, as the first Germantown Almshouse—erected in 1809 on a strip of land along the northwest side of W. Rittenhouse Street between Germantown Avenue and Greene Street—had its own graveyard near the intersection of Greene Street and W. Rittenhouse Street (Scharf and Westcott 1884:1452; Ployd 1898:n.p.; “Uncle Peter” 1903:n.p.). When a new Germantown Almshouse was built on a tract along Pulaski Avenue between W. Rittenhouse Street and W. Cheltenham Avenue in 1870-71, the old “Poor House” property was sold at public auction, and “the old graveyard . . . near Greene street” was vacated (*Daily Evening Telegraph* 1870:8; Ployd 1898:n.p.). As Germantown historian Naaman Keyser Ployd noted several decades later, “the bodies [in the old Poor House graveyard] were finally removed to the Potter’s field on Queen lane” (Ployd 1898:n.p.).

Maps of Germantown published in the mid-nineteenth century indicate that land abutting the northeast, northwest, and southwest sides of the Potter’s Field remained vacant through the early 1860s (Sydney 1849; Smedley 1862). An 1862 map of Germantown (which had become the 22<sup>nd</sup> Ward of Philadelphia City in 1854; Pennsylvania General Assembly 1854:21) further indicated that—while Pulaski Avenue, W. Penn Street, and Morris Street had been laid out a few years earlier (northeast, northwest, and southwest of the Potter’s Field, respectively), residential development extending southwestward down W. Queen Lane from the heavily-developed Germantown Avenue corridor was only just reaching Pulaski Avenue. The southwesternmost dwelling on the northwest (Potter’s Field) side of W. Queen Lane was denoted approximately 500 feet northeast of the Potter’s Field, and the southwesternmost dwelling on the southeast side of W. Queen Lane was denoted on the southern corner of W. Queen Lane’s intersection with Pulaski Avenue (Smedley 1862).

As real estate development ramped up in Philadelphia’s 22<sup>nd</sup> Ward following the close of the Civil War, the short street presently known as “Priscilla” (but originally called “Patton”) was laid out between W. Queen Lane and W. Penn Street, southwest of the Potter’s Field (Figure 4; Hopkins 1871). A map published in 1871 indicated that, during that same period, land surrounding the Potter’s Field in the recently created block bounded by W. Queen Lane, Pulaski Avenue, W. Penn Street, and Patton Street was divided into approximately two-dozen town lots, about half of which were equipped with dwellings by 1871 (Figure 4; Hopkins 1871). Most conspicuously, a block of 8 rowhouses had been erected along the southwest side of Pulaski Avenue, on narrow lots extending just under 58 feet back from the Avenue to the northeast boundary of the Potter’s Field. The Potter’s Field was clearly labeled and demarcated on the 1871 map, with boundaries matching those of the parcel delineated on the 1755 Potter’s Field draft. The recently created lots between the Potter’s Field and Patton (present-day Priscilla) Street were longer (at approximately 75 feet) than those fronting on Pulaski Avenue, and the new lots fronting on W. Penn Street were even longer, at approximately 104 feet. Five lots had been created with frontage on W. Queen Lane—three on the southwest side of the Potter’s Field, and two on the northeast. The southern lots, which were not yet developed in 1871, were 100 feet long. Both northern lots fronting on W. Queen Street, at approximately 86 feet in length, were already equipped with house-sized structures.

The continued residential development of land surrounding the Potter’s Field on three sides was reflected on maps published in 1876, 1885, 1889, 1895, and 1899 (Figure 5; Hopkins 1876; Figure 6; Hopkins 1885; Figure 7; Bromley and Bromley 1889; Figure 8; Bromley and Bromley

1895; Figure 9; Bromley and Bromley 1899). The most notable changes reflected on those maps were as follows:

- The subdivision of a large vacant lot fronting on W. Penn Street into seven lots during the period 1871-1876, and the erection of dwellings on each of the subdivided lots
- The subdivision of two large lots fronting on Patton (Priscilla) Street into five lots during the period 1871-1876, and the erection of dwellings on two of the subdivided lots
- The erection during the period 1871-1876 of a duplex a few feet west of the Potter's Field's northern corner
- The erection during the period 1876-1885 of a block of three rowhouses on lots fronting on W. Penn Street
- The further subdivision of lots fronting on W. Queen Lane south of the Potter's Field, and the erection thereon of five dwellings during the period 1876-1885
- The placement of two large outbuildings on lots abutting the Potter's Field's northern corner during the period 1885-1889
- The placement of a large outbuilding beside the western corner of the Potter's Field during the period 1895-1899

The Germantown "Poor Board" practice of having unclaimed bodies of deceased Almshouse inmates buried in Germantown's Potter's Field was curtailed by the Pennsylvania Legislature's passage in 1883 of an act pertaining to the "Distribution and Disposition [of] Unclaimed Cadavers" (Act of Jun. 13, 1883, P.L. 119, No. 106, Cl.: "An Act for the Promotion of Medical Science by the Distribution and use of unclaimed Human Bodies for Scientific Purposes, through a Board Created for that Purpose, and to Prevent Unauthorized Uses and Traffic in Human Bodies"; Forbes 1898:23). Passed at the urging of physicians and scientists eager to ensure a regulated source of human specimens for dissection, the "Pennsylvania Anatomical Act" (as it was informally known) established a State Anatomical Board, while mandating such practices as the following:

All public officers, agents and servants, and all officers, agents and servants of any and every [Pennsylvania] county, city, township, borough, district and other municipality, and of any and every alms-house, prison, morgue, hospital, or other public institution having charge or control over dead human bodies, required to be buried at the public expense, are hereby required to notify the said board of distribution or such person or persons as may, from time to time, be designated by said board or its duly authorized officer or agent, whenever any such body or bodies come to his or their possession, charge or control, and shall, without fee or reward, deliver such body or bodies, and permit and suffer the said board and its agents, and the physicians and surgeons from time to time designated by them, who may comply with the provisions of this act, to take and remove all such bodies to be used within this State for the advancement of medical science, but no such notice need be given nor shall any such body be delivered if any person claiming to be and satisfying the authorities in charge of said body that he or she is of kindred or is related by marriage to the deceased, shall claim the said body for burial, but it shall be surrendered for interment, nor shall the notice be given or body delivered if such deceased person was a traveler who died suddenly, in which case the said body shall be buried. . . . The said board or their duly authorized agent may take and receive such bodies so delivered as aforesaid, and shall, upon receiving them,

distribute and deliver them to and among the schools, colleges, physicians and surgeons aforesaid. . . . (Forbes 1898:23-24).

The writer of a November 29, 1912 newspaper article concerning the Germantown Potter's Field reported that "burials of homeless and indigent persons were made there in considerable numbers until the State law giving the bodies of such persons to the State Anatomical Board was passed [in 1883]. Since then only the bodies of infants have been interred in the grounds" (Anonymous 1912a:n.p.). That article was occasioned by fall-out from a decision of the "Germantown Poor Board"—at their monthly meeting in October 1912—to "consider the advisability of disposing of the [Potter's Field] tract and buying another site at a distance from the built-up part of the ward, if it is found that such a burial place is still needed" (Anonymous 1912b:n.p.). The challenge facing the Board (as *de facto* custodians of the Potter's Field), was described in a November 1, 1912, newspaper article as follows:

**Would Abolish Potter's Field  
Poor Board Considers Proposition to Dispose of Old Burial Ground on Queen  
Lane  
Rubbish Thrown There**

Acting upon the contention that Germantown's ancient potter's field has become a mere dumping ground for refuse, the members of the Poor Board, at their monthly meeting on Wednesday [October 30, 1912], decided to appoint a committee to consider the advisability of disposing of the tract and buying another site at a distance from the built-up part of the ward, if it is found that such a burial place is still needed.

Germantown's potter's field was established in the middle of the eighteenth century, and is situated on Queen lane west of Pulaski avenue. The ground is about an acre in extent. Since the law giving unclaimed corpses to the State anatomical board has been in effect, few burials have been made there, and the tract has been used as a playground by the boys of the neighborhood. From time to time the Poor Board has the lot cleaned, when it is necessary to haul away many cartloads of discarded tinware, household waste and the like that is thrown there.

The matter was brought to the attention of the board by the receipt of a notice from the highway bureau to reset the curb in front of the burial ground, preliminary to the paving of the street.

William Wilkie, William H. Coupe and Charles Super were appointed [to] the committee to determine what should be done with the potter's field.

According to old records, the Germantown potter's field consists of 140 perches and was bought by Balltes Reser at sheriff's sale in 1755 for £5 10s, it having been part of the estate of George Arnold. It was set apart as a "burial place for all Strangers, Negroes and Mulattoes as Die in any part of Germantown, forever" (Anonymous 1912b:n.p.).

The committee appointed by the Poor Board “to determine what should be done with the potter’s field” had no answers for the Board when the next monthly meeting was held on November 27, 1912. Indeed, as reported in a November 29, 1912 newspaper article as follows, the questions had multiplied:

**Seeking the Owner of Potter’s Field  
Ancient Title Seems to Show that the Poor Board Has No Right to the Tract.  
Problem for the Solicitor**

The harder the members of the Germantown Poor Board try to determine what to do with the forsaken plot of ground on Queen lane west of Pulaski avenue that has been used as a potter’s field for a century and a half, the more they become convinced that they cannot do anything with it.

The matter was again discussed at the monthly meeting of the board, on Wednesday. At the October meeting complaint was made about the disreputable appearance of the tract because it is used as a dumping ground for refuse. At the meeting on Wednesday a communication was received from Stanley R. Yarnall, principal of the Coulter Street Friends’ School, suggesting that the plot of ground be converted into a playground for negro children.

However, when the deed covering the sale of the potter’s field property, in 1755, was consulted, no evidence was found therein that the burial ground is the property of the poor district. The property was sold at sheriff’s sale, Samuel Morris being then sheriff of Philadelphia . . . Baltus Reser was the purchaser, and it is specified that the land is to be used “for a stranger ground, or potter’s field, for all Germantown, to serve for a burial place for all strangers, negroes and mulattoes as die in any part for Germantown, forever.”

No subsequent deeds pertaining to the property are on record, nor is it known whether Reser, the buyer, was acting in his individual capacity, or as a representative of the people of Germantown.

Burials of homeless and indigent persons were made there in considerable numbers until the State law giving the bodies of such persons to the State Anatomical Board was passed. Since then only the bodies of infants have been interred in the grounds.

It was proposed at the Poor Board meeting that the board dispose of the potter’s field and buy another tract for a burial ground. Some of the members, however, pointed out that it would be exceedingly difficult to obtain land anywhere within the city limits, for use for burial purposes. It was also intimated that the people living in the neighborhood of the potter’s field, while they are not particularly pleased by the present condition of the ground, would probably prefer that to having a playground for negro boys established there.

Finally, when the members realized that the problem was too big for them, they decided to refer Mr. Yarnall's suggestion and all the other suggestions about the potter's field to Paul Reilly, the solicitor of the board, awaiting his opinion as to the ownership of the tract (Anonymous 1912a:n.p.).

The opinion eventually submitted by solicitor Paul Reilly was that "the place had been set apart in the eighteenth century as a burial ground for the poor and homeless, to be used for that purpose forever, and therefore it was impossible to use it for a playground" (Anonymous 1913:n.p.). Reilly's decision hardly put the matter to rest. By the spring of 1913, parties interested in converting the Potter's Field into a playground or park had renewed their efforts, as reported in the following newspaper article, published on April 25, 1913:

**Planning Park for Potter's Field  
City Authorities Want to Use a Germantown Tract and Ask the City Solicitor's  
Advice  
To Get Reyburn Pergola**

Another effort is to be made to utilize the old Germantown potter's field, on Queen lane west of Pulaski avenue, as a public park or playground.

William H. Ball, of Germantown, chief of the bureau of city property, has taken up the matter, and at his suggestion the city forester, Raymond Pond, called on Jacob C. Bockius, special representative of the Germantown and Chestnut Hill Improvement Association, to discuss the project.

The neglected condition of the ground has long been a source of complaint. Some time ago the Germantown Poor Board, in whose custody the property is supposed to be, was asked to give its consent to have the grounds converted into a playground, but Paul Reilly, solicitor of the board, declared that the place had been set apart in the eighteenth century as a burial ground for the poor and homeless, to be used for that purpose forever, and therefore it was impossible to use it for a playground.

Mr. Ball has now submitted the question to Michael J. Ryan, city solicitor, and will be guided by his opinion as to the future use of the site.

If it should be decided that the ground is the property of the city and could legally be converted into a park, it is the intention of Mr. Ball and Mr. Pond to plant trees and shrubbery on the tract and to beautify it in other ways and throw it open for the use of the public. A feature of the plan is that one of the pergolas erected on the Parkway under Mayor Reyburn's administration is to be placed on the grounds.

The improvement association's committee on parks and playgrounds, of which Charles A. Ziegler is chairman, will cooperate with the city authorities in their efforts to make use of the old burial ground for the benefit of the public.

The city solicitor's investigation into ownership of the Potter's Field "led to the conviction [around April 1914] that the city is the owner," a reporter asserted in a March 1915 newspaper article (Anonymous 1915a:n.p.). From that time forward, the Poor Board made no effort to clean up the grounds, nor did it put a halt to burials, which amounted to "about fifty burials . . . yearly in recent years," according to another report (Anonymous 1915b:n.p.). The troubled state of the Potter's Field in March 1915 was described as follows in an unattributed newsclipping (Anonymous 1915a:n.p.):

**Potter's Field a Desolate Spot  
Ancient Burial Ground, Littered With Rubbish and Broken Glass,  
is a Playground for Boys  
Still Used for Burials**

One of the places to which the attention of the city's special cleaning force will be directed, if it ever reaches Germantown, is the old potter's field, on Queen lane, west of Pulaski avenue.

Several weeks ago the city authorities promised to send a large party of men, engaged under the emergency relief appropriation, to clean up any places in Germantown which the regular highway forces do not reach. In anticipation of this visit, Jacob C. Bockius, special representative of the Germantown and Chestnut Hill Improvement Association, has been looking about for spots requiring attention. He has decided to place the Potter's field at the head of his list.

From Queen Lane a high terrace prevents a view of the grounds, so that persons passing are spared a shock to their nerves. But when entrance is gained to the grounds they present a scene of desolation and dishevelment.

First the visitor will wonder how so much broken glass could possibly be collected in one place. Apparently the boys of the neighborhood, who use the place as a playground, have a habit of collecting bottles and using them as targets. Hundreds of milk bottles have been smashed into fragments, besides various other kinds of bottles, jugs and jars.

In addition to the broken glass, the field is littered with all kinds of old tinware and household rubbish, ranging from tomato cans to bedsprings. Chickens, ducks and cats roam about when the boys are at school.

At frequent intervals are depressions, indicating graves. A few graves are marked by rough stones. There is just one stone bearing lettering. This marks the grave of George Brown, who died in 1840, at the age of 16 years.

Between the potter's field and Penn street is a settlement of old houses intertwined with courts, the place bearing the euphonic name of the Devil's Pocket. Two of the houses face the burial ground, the fence here, as well as elsewhere on the boundaries of the burial ground having disappeared. It is from this side that the boys obtain access to the grounds.

Burials are still occasionally made in the potter's field, the corpses generally being those of negro infants which are placed in a hole in the ground, without rite or ceremony of any kind. Only the past week in this desolate spot an interment took place, without mourners or clergy, and with a few boys of the vicinity as the only spectators.

Mr. Bockius was told that following a recent interment the custodian of the grounds failed to fill up the grave, and after some lapse of time, a man living nearby climbed the fence and filled up the grave.

There is considerable uncertainty as to who is responsible for the care of the potter's field. The ground, comprising fourteen [*sic*] square perches, was set apart in 1755 "to serve for a burial place for all strangers, negroes and mulattoes as die in any part of Germantown, forever." Many interments were made there until the passage of the law giving the bodies of indigent persons to the State anatomical board. Since then the burials have nearly all been those of the bodies of infants.

In 1912 an effort was made to have the place converted into a public playground, but this failed because of the stipulation in the original deed that the ground was to be used for burials "forever."

In the absence of any other custodian, the authorities of the Germantown poor district have been exercising supervision over the grounds (Anonymous 1915a:n.p.).

The "settlement of old houses intertwined with courts . . . between the potter's field and Penn street . . . bearing the eupheneous name of the Devil's Pocket" was depicted in detail on 22<sup>nd</sup> Ward maps published in 1906, 1910, and 1911 (Figure 10; Smith 1906; Bromley and Bromley 1910; Figure 11; Bromley and Bromley 1911). On the latter map, the several lots between the northern corner of the Potter's Field and the intersection of Pulaski Avenue and W. Penn Street were collectively attributed to "J.W. Thewlis"—the same owner-name that had been applied to the lots on the 1871 map (Figure 11; Bromley and Bromley 1911; Figure 4; Hopkins 1871). The "Devil's Pocket" dwelling standing several feet west of the Potter's Field's northern corner was characterized on the 1911 map as a three-story, brick quadruplex (Figure 11; Bromley and Bromley 1911). The height of that structure, and its size relative to other structures on the block, was documented on a southward-looking aerial photograph taken on April 20, 1930 (Figure 12; Aero Service Corporation 1930).

In preparation for the proposed Potter's Field clean-up in the spring of 1915, William Ball, "chief of the bureau of city property," sent a letter to the Poor House Board in hopes of convincing its members to put a halt to burials on the site. Ball's letter was addressed by the Board at its March 31 meeting, with the following results, as described in a pair of newspaper articles published on April 2 and April 25, 1915, respectively:

**Hunting Owner of Potter's Field  
Poor Board Disavows Responsibility for the Care of the Grounds But Makes  
Burials There  
Cremations is Proposed**

Disgraceful and unsanitary conditions existing at the ancient potter's field, on Queen lane west of Pulaski avenue, have been brought to the attention both of the Germantown Poor Board and the department of health and charities of the city administration, through the instrumentality of Jacob C. Bockius, special representative of the Germantown and Chestnut Hill Improvement Association. The Poor Board promptly disavowed responsibility.

A letter from Mr. Bockius on the subject was read at the monthly meeting of the Germantown Poor Board, on Wednesday evening. In his letter Mr. Bockius, said:

In its present condition it is not only a menace to the health and morals of this community, but a disgrace to Germantown. From what I have learned I am led to believe that interments have been made in this plot without permit or permission. I am advised that the grave digger comes from the Poor House—whether by authority of your board or not, I do not know. Up to the present year I believe your board did exercise a certain amount of care in the upkeep of the grounds, but nothing has been done for some time, with the result that conditions have grown worse and worse.

Mr. Bockius suggested that a committee of the board co-operate with a committee of the Improvement Association to consider what should be done with the grounds.

The board directed the secretary to notify Mr. Bockius that it has no jurisdiction over the grounds. The grounds were supposed to be the property of the poor district until about a year ago, when an examination of the title led to the conviction that the city is the owner. Since then the Poor Board, has not cleaned up the grounds.

It was admitted, however, that burials are made there by direction of the authorities of the poor district and by the undertaker of the Poor Board. This is done, it was contended, because the grounds are for the burial of the indigent. About fifty burials have taken place there yearly in recent years, all being burials of bodies of infants and mostly negroes. Bodies of indigent adults are sent to the State anatomical board.

The Poor Board appointed a committee consisting of Pringle Borthwick, Charles Super and William H. Coupe to investigate the matter of buying a burial ground for the indigent outside the city limits or of having bodies cremated.

In response to his complaint to the department of health and charities, Mr. Bockius has been informed that a force of men will be sent out to clean up the grounds (Anonymous 1915b).

**No More Burials in Potter's Field**  
**Poor Board's Action the First Step Toward Making the Place a Public Playground**  
**Chief Ball Shows How**

Co-operating with the endeavor of the Germantown and Chestnut Hill Improvement Association to have the neglected potter's field, on Queen lane west of Pulaski avenue, put to some good use, William H. Ball, of Germantown, chief of the bureau of city property, has made a careful investigation of the circumstances connected with the burial ground and believes a way can be found to abolish the present eyesore and convert the site into a playground.

The chief obstacle up to the present time has been that burials were still made there, at the direction of the Germantown Poor Board. If it were an abandoned burial ground, steps could be taken to have it used for other purposes. Accordingly Mr. Ball concluded that the first thing necessary is to discontinue burials there. He brought the matter to the attention of the Germantown Poor Board at its meeting on Wednesday [April 28, 1915], and the board decided to have no more burials made in the grounds.

Mr. Ball told the members of the board that an effort is being made by the bureau of city property to convert the ground into a children's playground. He said that as there are no trustees for this ground, and as the Germantown Poor Board has refused to assume any responsibility in the matter, he thought the city of Philadelphia should act as the trustee.

If the board decides that it would not bury bodies there in the future, Mr. Ball said he would do all that was possible to have a children's playground made of the old cemetery.

Mr. Ball explained that the Wissahickon School Club, composed of negroes, with the support of Alfred G. Scattergood and John T. Emlen, would assist.

The board, after hearing Mr. Ball's statement, unanimously passed a resolution requesting its undertaker in the future not to bury any more bodies in the potter's field.

The only bodies buried there in recent years were those of children under 1 year of age. All unclaimed bodies of persons more than 1 year of age go to the State Anatomical Board (Anonymous 1915c).

With the possible exception of a superficial cleaning as proposed in the spring of 1915, the Potter's Field languished out of the public eye over the course of the following year. Then, on May 12, 1916, the City Board of Health thrust the graveyard back into the limelight when it "ordered the place closed as a burial ground"—whether for Poor House residents or otherwise. That act, and the longstanding questions it revived, were described in an article in the May 15, 1916 edition of the *Philadelphia Evening Bulletin* as follows:

**Potter's Field is Burden to City  
None Knows Who Owns Germantown Plot or What to Do with it.**

Somebody put a joker in the statute books, and now the city, or somebody, no one knows just who, has a white elephant on its hands in the shape of a large tract of valuable land formerly known as Potter's Field, in Germantown. Chinese puzzles, Spanish fakes and three-shell games fade into insignificance compared with the problems this land has put up to the city solicitor's office.

Deputy City Solicitor Forster knows that the land originally was granted by William Penn and that after passing through several estates, found its way to the hands of the High Sheriff of Philadelphia, Samuel Morris, in 1755. Now nobody knows just who owns it; it has been closed as a burial ground for health's sake and all the turning, twisting and bending of the elastic laws of the day fail to give a single soul or corporation a title to the property.

For Homeless Wanderers.

The property is situated at Queen Street and Pulaski Avenues, Germantown, in a highly-respectable neighborhood, but since 1755 homeless wanderers and many colored persons who died in Germantown have been buried there. Time and the elements have effaced all of the old mounds, relics of the day when "business" flourished not far away.

Since the passage of the law giving the unidentified bodies of adults to the State Anatomical Society, only babies have been laid in Germantown's Potter's Field. The last funeral was more than a year ago, when two colored babies found graves within its bounds.

These two little mounds are the only signs of the purpose for which the property was intended. On two sides of the lot small boys have fashioned baseball diamonds, not realizing that they were desecrating the city of the forgotten dead.

The first known of the property goes back to February 2, 1689, when the commissioners appointed by William Penn deeded it by patent to Daniel Pastorius. Going a little deeper into the law books of antiquity, Deputy City Solicitor Forster found the property mixed up in a court action. One Joshua Emlin was suing Catherine Arnold for title to the property in 1740. It is thought that out of this fight, the property finally found its way into the hands of High Sheriff Morris.

He put it up for public sale. Just what right he had to do this is unknown, but it is believed he seized it for debt of some kind. From whom he seized it, however, the files fail to show. History here aided the lawyers and they found in Scharf and Westcott's *History of Philadelphia*, published in 1884, details of the sale of the property by the Sheriff to one Baltus Reser.

## He Left No Will.

Baltus Reser left no will stipulating that the property should be used as a cemetery. In the bill of sale, however, from the Sheriff to himself, Reser had it read that it was to be used “for a strangers’ burial ground or Potter’s Field, for all Germantown, to serve the burial places of all strangers, colored and mulattos as die in any part of Germantown forever.”

Baltus Reser evidently is dead, but no one can prove this. He left no will and, so far as can be learned, never again found his way into the pages of history. Efforts to find antecedents failed and possibly the trouble never would have started had not the Board of Health, last Friday [May 12, 1916], ordered the place closed as a burial ground. In view of the fact that no will could be found this was perfectly legal.

Mr. Forster, who attended the meeting, then suggested that the property be condemned by the city and used as a playground. This probably will be the only way out of the difficulty, but there the condemnation laws hold up a forbidding finger.

## How About the Money?

When the city condemns property it must first assess it and pay to the owner what the city believes is a fair price. The men who drafted the law, however, failed to take into consideration property that apparently has no owner. So that if the city does buy it the only thing left to do is to store the money in a bank, where it will accumulate interest, until some one returns from the land of mystery to claim it.

The Board of Health looked upon the property as a menace to the neighborhood as it was feared colored people, should they find the actual reason of the property, would insist on many burials. There was no other way the city could have stopped this (*Philadelphia Evening Bulletin* 1916:n.p.).

The Board of Health’s ban on burials in the Potter’s Field was followed by several more years of unregulated use of the former burial ground as a recreational lot and refuse dumping area. By 1919, some area residents were incensed enough by the deteriorating conditions to consider legal action. The state of affairs was described as follows in a March 15, 1919 *Evening Public Ledger* article:

### **Old Burial Ground Arouses Protest Potter’s Field in Germantown Object of Indignation for Alleged Bad Condition**

Citizens in the neighborhood of Potter’s Field, Queen lane west of Pulaski avenue, Germantown, are indignant over the alleged bad conditions of this burial ground of unfortunates.

They threaten to file a petition with the city to have the plot of ground transformed into a playground. It is said to contain about 500 bodies, mostly negroes, who died in the Germantown Almshouse.

The graves are unmarked and undesignated in any way. There are not even little mounds of earth to show where the bodies lie. Only two or three have markings of any sort.

Recently numbers of dead cats have been found in the field, creating a bad odor and insanitary conditions in the neighborhood, it is said. The fences are dilapidated, as is everything about the field. Portions of the wooden section of the fence on the Penn street side were torn away for fire wood during the cold spell last winter. Part of the fence is iron.

The field is in plain view of passerby although it stands at an elevation of about four feet above the sidewalk. Boys play in it and conduct miniature trench warfare. The place has no caretaker. Milkmen leave boxes of bottles along the fence and many of the bottles find their way into the lot, presumably thrown by mischievous children (*Evening Public Ledger* 1919:3).

Another year passed before a group of concerned citizens, led by Pulaski Avenue resident George S. Young, followed through on the threat of petitioning the City to turn the former Potter's Field into a playground. Once again the question of legal ownership arose, as noted in the following newspaper article, published on April 7, 1920:

**May Reclaim Cemetery  
Seek to Make Playground Out of Germantown Potter's Field**

A petition is being circulated today to convert Potter's Field, Germantown, into a children's playground.

An involved title to the property, which fronts about 150 feet on Queen lane, west of Pulaski ave., complicates presentation of the petition to the city. The Germantown Poor Board disclaimed ownership. Chief Arthur, of the Bureau of City Property, said while his bureau has jurisdiction of it, the city probably would have to institute condemnation proceedings to get exclusive possession.

George S. Young, Pulaski av., near Queen Lane, who originated the petition, expects to get 1,000 names while ownership is being cleared up. He said the plot has become an unsightly dumping ground for tin cans, dead cats, and rubbish. It contains over 300 bodies" (Anonymous 1920:n.p.).

The results of that community campaign, if any, are not known. Within a few months, however, a separate initiative finally led to the official conversion of the former Potter's Field into a playground. A description of that effort, mounted on behalf of the Wissahickon Boys' Club, was described in an August 12, 1920 *Germantown Independent-Gazette* article as follows:

**Old Potter's Field to be a Playground**  
**Work is Begun to Make the Long Neglected Burial Ground Serviceable for Negro Children.**

**Puzzle as to Ownership**

After many years of agitation for the abolition of the old potter's field, on Queen lane, west of Pulaski avenue, work has now been begun on the conversion of the plot into a playground.

The board of managers of the Wissahickon School Club, a boys' club for negroes, at Coulter street and Pulaski avenue, has taken the initiative in bringing about the improvement. John Thompson Emlen, president of the board, and other members have long, been urging the establishment of such a playground. They have now obtained the right to use the grounds by lease from the Germantown Poor Board, the papers in the matter being drawn up by Paul Reilly, solicitor of the Poor Board.

A force of men with a plow began work this week grading the ground. The Queen lane front, where there was a high bank, was lowered eighteen inches, the earth being used to fill up depressions at the rear.

No human remains were unearthed, as the excavations are not deep. Traces of graves, however, were apparent.

After the ground is graded the men interested in the undertaking will provide a drinking fountain and some other essential equipment, and the purpose is then to turn the tract over to the city's bureau of recreation, to equip the grounds with playground apparatus and provide instructors and a caretaker.

As there is a numerous community of negroes in the neighborhood, the playground will inure largely to their benefit.

. . . An element of uncertainty has for years surrounded the ownership of the field. This week, in trying to ascertain who was responsible for the work begun at the burial ground, The Independent-Gazette called up the bureau of city property and was told that the city had no control over the potter's field, it belonging to the Germantown Poor Board. Then The Independent-Gazette made inquiries of John Marsden, president of the Poor Board, who said the Poor Board had no jurisdiction over the potter's field, but he did not know who was the owner. . . .

Hundreds of burials were made in the potter's field up to the time that the State law was passed giving the bodies of unclaimed adults to the State anatomical board, for dissection in medical colleges. After that only the bodies of infants were buried there. Five years ago there were several headstones in the field. These have since disappeared.

## Gave Rise to Much Complaint

The discontinuance of burials, however, did not improve conditions insofar as the neglected state of the lot was concerned. It continued to be utilized as a dumping ground for all kinds of household refuse, and the boys of the district made it the center of their games and sports. For some weeks two decrepit horses have been pastured on the grounds.

The past spring complaint about the place was renewed. The city's bureau of sanitation promised to have the lot cleaned, but neighbors say this was not done.

Though the neighbors are not all jubilant over the plan of having a playground for negroes there, yet they admit that the change will at least not be for the worse (*Germantown Independent-Gazette* 1920:n.p.).

A "History of the Tract" in the middle of the article (omitted in the extract above) recited the details of Balltes Reser's acquisition that were by now common knowledge to all parties interested in the old Potter's Field. That section concluded with a statement that "the evidence indicates that this land was public property, and with other public property of Germantown it passed into the possession of the city of Philadelphia at the consolidation of Germantown with the city" in 1854 (*Germantown Independent-Gazette* 1920:n.p.). The article left unanswered the question of the Germantown Poor Board's authority to lease the ground to the Wissahickon Boys' Club, given the Board's admission to having "no jurisdiction over the potter's field."

In any case, the conversion of the graveyard into a playground was soon completed. A January 1921 magazine article titled "Wissahickon Boys' Club Expanding" reported that "a plot of ground, 225x175, within one block of the club house [on the northern corner of the intersection of W. Coulter Street and Pulaski Avenue], has been leased from the city for ten years, and will be known as the 'Wissahickon Playground.' It has been leveled, resurfaced and equipped with drinking fountains and apparatus, including toilets" (Boys' Club Federation 1921:14-15). The structure housing the toilets, and presumably the "drinking fountains and apparatus," appears to have been documented on an aerial photograph of the playground taken on April 20, 1930 (Figure 12; Aero Service Corporation 1930). A one-story structure with a footprint measuring approximately 12 by 20 feet, is discernible on that photograph standing at the entrance to the playground beside W. Queen Lane. Unaccountably, no structure was depicted in that location—or anywhere on the new playground—on a map of the 22<sup>nd</sup> Ward published in 1923 (Figure 13; Bromley and Bromley 1923). The former Potter's Field was, nonetheless, clearly labeled "PLAYGROUND."

The "Wissahickon Playground" served the Wissahickon Boys' Club for nearly a decade. Shortly before the Club's ten-year lease was scheduled to expire, the Club stopped using the playground, and by July 9, 1929, "the old potter's field [was] once more abandoned and neglected" (*Philadelphia Evening Bulletin* 1929:n.p.). Over the course of the next six years, the vacated ground became "an automobile graveyard" (Anonymous 1935:n.p.).

In or shortly before June 1935, Councilman Samuel Emlen sponsored an ordinance requesting "City Solicitor Smyth to prepare a quit claim deed which would give the city possession of the

[former Potter's Field] property without cost." Upon approval by the Council's Committee on Welfare, the ordinance was presented to Philadelphia Mayor J. Hampton Moore for signing (Anonymous 1935:n.p.). As reported in a July 14, 1935 *Philadelphia Inquirer* article, Mayor Moore signed the ordinance "enabling two doubtful owners [. . . of the] old Potter's Field . . . to yield their claims to the city." The Mayor was quoted as explaining that "the city derives no taxes from this ground at the present time because the ownership apparently is in the Hood Cemetery of Germantown and the Germantown Poor Board. The purpose of the ordinance is to enable these apparent owners to quit claim to the city if they are willing to do so, in order that the city may apply the ground to playground purposes. Eventually, of course, there would be a necessity for improving the ground for playground purposes, but this should not be at a very great cost" (*Philadelphia Inquirer* 1935:n.p.)

The immediate results of Mayor Moore's signing of the ordinance have not been ascertained. On a land use map published in 1942, the 0.875-acre former Potter's Field—still surrounded on three sides by residential and commercial lots—was identified as a "City Playground" (Federal Works Progress Administration 1942). Five years later, all 42 lots surrounding the playground in the block bounded by W. Queen Lane, Pulaski Avenue, W. Penn Street, and Priscilla Street were acquired by the City "for recreational purposes [through] passage of the 'omnibus' playground ordinance in 1947. . . . A great portion of the plot was occupied by small homes paying rents from \$12 to \$25 per month, and because of the difficulty of re-housing the occupants, possession of the plot was not obtained until late 1951 and 1952 when the last of these families were finally persuaded to vacate" (*Germantown Courier* 1953a:1, 12; Brunt 1953:n.p.).

A couple of years earlier, the Philadelphia Housing Authority (PHA) had identified the Potter's Field parcel as one of 25 potential sites for a public housing project (Bureau for Historic Preservation 2013:n.p.). That possibility was the apparent inspiration behind a March 27, 1952 introduction by "Constance Dallas . . . into City Council [of an] ordinance which made the ground available for a low-cost housing unit" (*Germantown Courier* 1952a:14) (the previous year, Dallas had become "the first woman to be elected to the Philadelphia City Council where she represented the 8<sup>th</sup> district [21<sup>st</sup> and 22<sup>nd</sup> Wards] composed of Germantown, West Oak Lane and Chestnut Hill"; Historical Society of Pennsylvania 2013:n.p.). While that ordinance awaited a vote in City Council, the PHA conducted a public meeting on April 21, 1952 to present its proposal for constructing a high-rise, low-rent, public housing apartment building in the eastern corner of the block bounded by W. Queen Lane, Pulaski Avenue, W. Penn Street, and Priscilla Street. Meeting minutes indicate that officials and neighborhood representatives recognized a need for affordable housing in the vicinity and supported a PHA building project on the City-owned site. In a letter eventually attached to the minutes, Edmund Bacon, the executive director of the City Planning Commission, observed that "it would appear that there is sufficient space to develop this building immediately on the present Potters' field and that the land exchanges required for the ultimate development could be worked out with the city following the acquisition and demolition of the remaining properties." In this letter, Bacon indicated that the Commission approved of the project with minor revisions to the site plan (Philadelphia Housing Authority 1952:n.p.).

In the wake of that public meeting, the City Council passed the ordinance "for a low-cost housing unit" along W. Queen Lane on April 24, 1952. Approval of the PHA plan was subsequently expressed by "the Federal Housing Administration as well as a number of local organizations,

including the Germantown Community Council, Westside Neighborhood Council, Germantown Business Men's Association and Germantown-Chestnut Hill Housing Committee" (*Germantown Courier* 1952a:14). By the following November, the PHA could announce a construction schedule, as reported in the following newspaper article, published on November 6, 1952:

### **Low-Rent Housing Project To Start Within 5 Months**

Construction of the low-rent public housing project at Queen Lane and Pulaski Ave. is expected to begin within the next five months, the Philadelphia Housing Authority declared here last week.

Speaking informally to members of Germantown civic organizations at Vernon, Drayton S. Bryant, assistant to the executive director, announced that approval on the funds has been given by the Federal Government.

#### Schedule Outlined

Bryant outlined the tentative schedule for completion of the project that will provide units for 120 families in a 15-floor building on the site bordered by Queen Lane, Pulaski Ave., Penn St. and Priscilla St.

The final plans and specifications will be issued by Jan. 15, he said, following which bids will be received for a one-month period.

Starting date for the actual construction is expected to be between March 15 and April 1. Bryant expressed the hope that tenants would be moving in by the spring of 1954.

Current plans call for a 15-floor building with dwellings on all but the ground level, which will be reserved for an assembly room for occupants and neighbors.

It is expected to be built at a cost of approximately \$1,300,000.

Rent charges to occupants of the apartments will vary according to the size of the family, ranging from \$21 to \$48 monthly, including utilities.

Families with one or two children would pay approximately one-fifth of their incomes while those with three or more would pay only one-sixth.

The Public Housing Authority will start interviewing current residents of the apartment site this month to determine what they want to do when the construction begins.

The group also must determine whether each individual family is eligible to move into the new project.

The housing project will take only two-fifths of the available ground, recreation facilities utilizing the remaining three-fifths. . . . (*Germantown Courier* 1952a:1, 14).

Plans for the playground portion of the project were presented to the public by Recreation Commission Frederic R. Mann early in the week of November 10, 1952. Demolition of “35 dwellings” on the playground site was “expected to begin within 10 days.” That would clear the way for construction of a city playground “based on a new concept,” explained by Mann as follows:

“The Wissahickon Playground is our first opportunity to start from scratch to build a playground based on the new concept of recreation,” Mann declared.

He said that although the area is relatively small—about one-and-one-half acres—there would be space and facilities provided for “all ages and serving the entire neighborhood.”

The playground will have separate fenced and shaded areas for pre-school children and for children of elementary school age.

Both areas will be constructed with soft ground surfaces, sand for the youngsters’ area and tan-bark in that for the older children.

For the first time in any Philadelphia playground, a “whirl” will be installed. This was described by Mann as a rotating platform with six sections.

Children start it by pushing before they jump on for a Merry-go-round ride, Mann added.

The playground will also have the city’s first spray pool, which will be surrounded by trees and shrubs.

The pool will be about 40 feet in diameter and water will be constantly circulated.

Other plans include basketball and volleyball areas on one side of the playground with horseshoe pitching and shuffleboard courts in another section.

The Commission will also widen the sidewalks on Pulaski Ave. and Priscilla St., where benches will be placed to create a neighborhood “sitting” area (*Germantown Courier* 1952b:1, 14).

By December 23, 1952, the Cleveland Wrecking Company had “reduced 10 of the vacated houses on Penn St.,” a newspaper article reported. “The buildings were of frame construction. . . . Only about 12 families are left [on the block]. They will move to other lodgings after the Christmas season, the PHA said. . . . Final architectural designs are expected by Jan. 15 [1953.] Specifications will be announced by mid-February, contracts awarded by March 1, and constructions should start by March 31, the Authority said. . . . The architects for the Queen Lane development are Roth & Fleisher, Phila.” (*Germantown Courier* 1952c:1). The principals of Roth & Fleisher were Gabriel

Blum Roth (1893-1960) and Elizabeth Hirsch Fleisher (1892-1975), who had formed their partnership in 1941. Fleisher, whose husband Horace Fleisher served as landscape engineer on the Queen Lane Project, was only the fourth woman to become a registered architect in the Commonwealth of Pennsylvania. In addition to designing “several apartment buildings in Philadelphia, including Parkway House Apartments (1952), Fairfax Apartments, and Sedgewick Gardens Apartments,” Roth & Fleisher designed buildings for “Autocars Company, Ardmore, PA; Scott-Smith Cadillac; Hiway Theater, York, PA; Pix Theater, Philadelphia; and RKO Film Exchange Building, Pittsburgh, PA” (*Philadelphia Evening Bulletin* 1975:n.p.; Tatman 2012:n.p.).

Roth & Fleisher submitted plans for “Queen Lane Project No. PA-2-24” to the PHA on January 20, 1953, and PHA chairman P. Blair Lee signed them later that day. The “Topographic and Utility Map” included in the plans—submitted by the engineering firm of Barton & Martin on August 11, 1952—indicated that the southeastern corner of the former Potter’s field parcel rose 6 feet above the level of the sidewalk (from EL. 221.4 to EL. 227.6) over a distance of approximately 20 feet, while the northeastern corner of the parcel rose only about 2 feet above the level of the sidewalk (Philadelphia Housing Authority 1953:C-181-2). That rise was steep enough that a visitor to the Potter’s Field in 1915 had observed: “From Queen lane a high terrace prevents a view of the grounds, so that persons passing are spared a shock to their nerves” (Anonymous 1915a:n.p.). The 1952 “Topographic and Utility Map” included in the January 20, 1953 plans also indicated that a fence defined the perimeter of at least the eastern section of the former Potter’s field in 1952 (Philadelphia Housing Authority 1953:C-181-2).

After paying the City \$70,000 for the 0.96-acre eastern portion of the 2.36-acre block bounded by W. Queen Lane, Pulaski Avenue, W. Penn Street, and Priscilla Street, the PHA received title to the parcel on January 9, 1953 (Brunt 1953:n.p.). Excluded from the conveyance was a still-occupied tavern lot on the northwest corner of W. Queen Lane and Priscilla Street (333 W. Queen Lane), which the City had offered to buy for \$59,000, but whose owners were insisting was worth \$70,000. The ongoing dispute was described in a March 12, 1953 *Germantown Courier* article as follows:

**Attack Renewed Against Taproom on Housing Site  
Payment of Damages Preferable to Allowing Its Operation, Barber Tells Mayor**

Elimination of a taproom situated on a corner of the Queen Lane housing development and playground site transcends all legal questions involved.

Earl N. Barber, president of the Germantown, Mt, Airy & Chestnut Hill Improvement Association, so declares in a letter sent last Thursday to the office of Mayor Joseph S. Clark.

Payment of disputed damages amounting to \$59,000 he asserts in his letter, is preferable to allowing the taproom to continue operating on the site.

## At First of Year

The question of the taproom, the housing site and the damages came to the fore during January, following Barber's election as president of the Improvement Association.

Under date of Jan. 21, he wrote to Mayor Clark, charging that the taproom was doing business tax-free in the area, "while citizens of limited income have been forced to vacated."

Barber indicated, during a meeting of the Improvement Association the evening of March 4 that legal action to bring about the taproom's removal might be taken through the Germantown Realty Board.

### Mayor's Office Answers

A reply had meanwhile been sent to his first letter by William L. Rafsky, executive secretary to the Mayor. It said in part:

"When the property was being considered for a playground prior to this administration, it was the intention to condemn the taproom and to use that land as well. The Board of View, on May 31, 1951, however, made an award of damages, in the sum of \$59,000. Since the city felt that this amount was excessive, it appealed the award to the Court of Common Pleas where the case is still pending."

"With reference to the non-payment of taxes by the taproom, the city is now negotiating with the owners about a proper settlement. The company maintains that the city put it to unnecessary expense in defending the court case and obtaining an appraisal on the property. The taproom has paid water taxes, but not real estate taxes because legally the property is under city ownership.

"The current negotiations are designed to achieve a settlement whereby in returning the property to the taproom it will pay its back taxes and the City will in turn reimburse the owners, for the expense to which they were put in defending the value of the property."

### Sees Threat

Barber's letter of March 5 stresses:

We can appreciate the legal questions involved in this matter, but it is the opinion of the members of the Improvement Association and other interested Germantown groups that the importance of eliminating the taproom from the housing authority site transcends any legal implications. In other words we feel it is a threat to the well-being of the entire project, both from the standpoint of its real estate value and its moral worth to the community . . .

“We feel that a subsidy of the entire \$59,000 to the Housing Authority by the City of Philadelphia (if that were necessary) would be by far more desirable than allowing a liquor business to continue on this site.”

Hamilton Vogdes, director of project development, Philadelphia Housing Authority, last week declared that acquisition of the taproom site by the PHA was impossible, “due to lack of money.”

“The PHA has paid \$70,000 for the tract,” he said “We can’t afford \$59,000 on top of that. If the city wants to take the site, fine! Meanwhile we’re going ahead without it.”

The management of the taproom, the Old English Tavern at 333 Queen Lane, said regarding new developments in the case, “We haven’t heard a word” (*Germantown Courier* 1953b:1, 16).

The tavern lot would remain privately owned and occupied over the course of the next 20 months, while the Queen Lane Apartment building was constructed and the new Wissahickon Playground was created on the remainder of the block. The playground was completed first, and was thus open and available to host a dedication ceremony for the Queen Lane Apartments on October 24, 1954 (*Philadelphia Evening Bulletin* 1954:n.p.). An article published in the *Philadelphia Evening Bulletin* on that date under the heading “Queen Lane Housing Project, City’s Sixth, to Be Dedicated” provided the following details concerning the event:

Dedication ceremonies will be held today at the Philadelphia Housing Authority’s Queen Lane Housing Project, the sixth of the city’s low-rent public housing developments.

The 16-story building and its surrounding ground occupy a third of a block bounded by Queen lane, Pulaski av., Penn st. and Priscilla st. The rest of the block is devoted to the recently opened Wissahickon Playground.

The dedication will be on the playground at 2 P.M. The scheduled speakers are Congressman Hugh D. Scott, City Controller Foster A. Dunlap, Councilwoman Constance M. Dallas and the Rev. Clarence Cave, of Faith Presbyterian Church, representing the neighborhood.

#### Tenants Next Month

A sample apartment will be open to the public from 1 to 5 P.M. The first tenants are expected to move in early next month. There are 120 apartments in the building, and each has its own screened-in balcony.

The structure, built at a cost of \$1,616,848, is also unusual in other aspects, said the architects, Roth and Fleisher.

It is a flat-slab, concrete, cantilevered structure without beams and girders. This gives it unbroken ceilings and saved 20 to 24 feet in additional height that would have been required had it been designed in steel or conventional concrete.

### Rigid Structure

In addition to saving construction costs, said Roth and Fleisher, the construction provides a much more rigid structure.

Additional economies in first cost and maintenance were achieved by the use of unplastered and unpainted concrete block walls in all public places and by omitting plaster and paint on all ceilings.

All exterior columns were set back, making possible unbroken glass enclosing walls (*Philadelphia Evening Bulletin* 1954:n.p.).

On a map of Philadelphia's 22<sup>nd</sup> Ward published in 1955, the footprint of the 16-story apartment building was denoted, as was the footprint of the multi-story tavern building on the northwest corner of W. Queen Lane and Priscilla Street (Figure 14; Franklin Survey Company 1955). By 1962—as reflected on a land-use map published in that year—the tavern would be removed, and the Queen Lane Apartments would occupy a simple rectangular lot measuring 307.48 feet along W. Queen Lane, and 145 feet along Pulaski Avenue and Priscilla Street. The adjoining parcel to the west was labeled “Wissahickon Playground” on the 1962 map (Federal Works Progress Administration 1962).

## METHODS

The goal of the archaeological work was to identify areas of archaeological potential within the project APE. This work was initially limited to background research concerning the history and development of the APE. As the background research progressed and details of the potter's field in the block emerged, a decision was reached to attempt to identify the extent of burials within the block using non-invasive means. A Ground Penetrating Radar (GPR) survey was undertaken across the block. The results of the GPR work were inconclusive as to the location of human burials. The majority of geophysical anomalies identified by the GPR survey outside of the boundary for the potter's field could be correlated with historic building locations. Individual burials could not be discerned either inside or outside of the potter's field boundaries. A decision was reached to archaeologically test the location of three of the geophysical anomalies in proximity to the potter's field boundary in an effort to clarify the GPR results.

The original plan for archaeological testing for the geophysical anomalies had been to mechanically strip fill soils from each of the three geophysical anomaly areas and to examine the exposed surfaces for intact cultural features. A concern was raised that there might be human remains scattered in the fill as a result of the construction of the apartment tower on a portion of the Potter's field in the 1950s. The plan for testing the geophysical anomalies was altered to include

only hand excavation in the archaeological testing of these three areas after the pavement had been mechanically removed from these areas.

Prior to the archaeological testing of the geophysical anomalies, pre-construction activities were developed. These activities were to include core borings and percolation tests. Because of the concern for possible burials outside of the potter's field boundary, and the concern that there might be human remains scattered in the fill as a result of the construction of the apartment tower on a portion of the Potter's field in the 1950s, archaeological hand excavation was to be undertaken at the locations of the proposed pre-construction borings and perc tests.

The archaeological work was performed in accordance with *Guidelines for Archaeological Investigations in Pennsylvania* (PHMC 2008). A total of 19 areas were subjected to archaeological testing. Testing consisted of 14 shovel test pits (STPs), one 5-foot by 5-foot test unit (TU 1), two 6-foot by 6-foot test units (TUs 5 and 6), one 5-foot by 15-foot trench (Trench 1) and three 3-foot by 5-foot test units (TUs 7, 8 and 9). Archaeological tests were excavated by natural strata. The excavations extended 10 centimeters into culturally sterile subsoil or until building debris or other interferences made continued excavation impossible within the confines of the unit. All soil was screened through 0.63-centimeter (0.25-inch) hardware cloth. Information regarding Munsell soil color, soil texture, and depth was recorded on excavation record forms. Soil profiles were drawn and photographs were taken.

## **GROUND PENETRATING RADAR SURVEY**

Background research had indicated the presence of a potter's field in a portion of the block. A decision was reached to attempt to identify the extent of burials within the block using non-invasive means. A Ground Penetrating Radar (GPR) survey was undertaken across the block. The purpose of the GPR scan was to use a non-invasive method to search for and identify any areas outside of the Germantown Potter's Field which have the potential for archaeological deposits or burials.

Ground Penetrating Radar is a widely accepted means of non-destructive testing with applications in fields such as soil sciences, engineering and archaeology. The purpose of GPR is to identify subsurface disturbances, differences or anomalies through the use of radio waves. Ground penetrating radar (GPR) systems produce cross-sectional images of subsurface features and layers by continuously emitting pulses of radar-frequency energy from a scanning antenna as it is towed along a survey profile. The radar pulses are reflected by interfaces between materials with differing dielectric properties. The reflections return to the antenna and are displayed on a video monitor as a continuous cross-section in real time. Disturbed soils, stone, and wood targets, as well as subsurface voids produce subtle but recognizable reflections. Enviroscan, Inc. performed GPR scanning of the survey area using a GSSI SIR-2000 GPR controller with an internal hard drive and color display, along with a 500 MHz scanning antenna with an optical survey wheel for accurate scanning distance control. The survey areas were scanned along an orthogonal grid of profiles spaced 2 feet apart north to south and 5 feet apart east to west. Although GPR is ideal when the goal is avoiding ground disturbances or destruction, the method does have some limitations. For example, very rocky soils or clay can potentially skew the results of a GPR scan.

The GPR survey of the paved parking area and playground was conducted by William Steinhart III of Enviroscan, Inc. in April, 2012 (Appendix E). Scanning occurred over the course of two days and consisted of surveying the area in both a north-south and an east-west direction. Results of the GPR scan identified multiple subsurface disturbances throughout the block (Figure 15; Bromley and Bromley 1923; Steinhart and Bechtel 2012; Figure 16; Steinhart and Bechtel 2012).

Individual burials could not be discerned either inside or outside of the potter's field boundaries. A comparison of the GPR scan with historic maps revealed that most of the disturbed areas were situated in the footprints of mapped historic houses. Three anomalous areas (A, B, and C1) were identified through the GPR that did not correlate with known mapped structures and were not obviously related to underground utilities. Anomaly A was a rectangular shape measuring approximately 4 feet by 7 feet. Anomaly B was a circular shape approximately 4 feet in diameter situated south-southwest of Anomaly A. Anomaly C1 was the largest of the scanned anomalies, measuring approximately 73 feet by 33 feet. All three anomalies were located in proximity to the mapped boundaries of the Potter's Field. These three anomalies were not situated in the footprints of historic buildings and their proximity to the cemetery raised questions. A decision was reached to archaeologically test the location of these three geophysical anomalies in an effort to clarify the GPR results.

## RESULTS

### Introduction

The Area of Potential Effect (APE) encompasses the city block bounded by West Queen Lane, Pulaski Avenue, Penn Street and Priscilla Street. The APE for this project measures approximately 2.3 acres (0.9 hectares), approximately 0.93 acres (0.37 hectares) of which lies within the mapped boundaries of the Germantown Potter's Field. No ground disturbing activity is planned for the Potter's Field; therefore archaeological testing was limited to the area around the cemetery. Approximately 273 square feet (25.36 square meters) was tested.

### Field Data

At the time of the archaeological fieldwork the APE was paved. The locations of the three geophysical anomalies to be archaeologically examined were mapped by Enviroscan personnel. The location of proposed boring and perc tests were mapped by the site contractor (Figure 17; Stantec Consulting Service, Inc. 2013). The asphalt from each of the areas to be archaeologically tested was mechanically removed. Archaeological monitors were present to oversee the mechanical stripping of paved surfaces. No soil was removed by machine and only those locations requiring archaeological testing were subject to pavement removal. All other material was removed by hand and screened through 0.63-centimeter (0.25-inch) hardware cloth.

Archaeological testing consisted of excavating 14 shovel test pits (STPs) and three 3-foot by 5-foot test units (TUs 7, 8 and 9) in locations where soil borings and percolation tests would be placed (Figure 18; Google Earth 2011). Two 6-foot by 6-foot test units (TUs 5 and 6) were excavated; one each at the locations of Anomaly A (TU 6) and Anomaly B (TU 5). One 5-foot by 5-foot test unit

(TU 1) and one 5-foot by 15-foot trench (Trench 1) were excavated within Anomaly C1. Excavations extended 10 centimeters into culturally sterile subsoil or until building debris or other interferences made it impossible to continue within the confines of the archaeological unit. The archaeological test units were performed on seven of 44 lots that once occupied the block (Table 2).

| <b>TABLE 2</b>  |                              |                                   |
|---|------------------------------|-----------------------------------|
| <b>ANOMALY AND TEST LOCATIONS BY 1923 ADDRESS</b>                           |                              |                                   |
| <b>Queen Lane Apartments Project<br/>City of Philadelphia, Pennsylvania</b> |                              |                                   |
| <b>TEST AREA</b>  | <b>1923 ADDRESS</b>          | <b>EARLIEST MAPPED STRUCTURES</b> |
| Anomaly C1<br>(TU 1)  | 5319 Priscilla Street        | 1876                              |
| Anomaly C1 Trench 1<br>(TU 2, 3 & 4)  | 5323 & 5325 Priscilla Street | 1885                              |
| Anomaly B<br>(TU 5)   | 5327 Priscilla Street        | 1899                              |
| Anomaly A<br>(TU 6)   | 5329 Priscilla Street        | 1876                              |
| TU 7  | 324 W. Penn Street           | 1876                              |
| TU 8  | 5334 Pulaski Avenue          | 1876                              |
| TU 9  | 329 & 331 W. Queen Lane      | 1885                              |

Test Unit 1 (TU 1) was excavated within Anomaly C1 in what was historically the rear yard of 5319 Priscilla Street. Beneath the pavement, the uppermost stratum of soil consisted of approximately 35 centimeters of modern fill. This was underlain by an approximately 25 centimeter thick, fill layer and a culturally sterile subsoil that consisted of decayed schist. A discoloration was found within the fill layer and designated as Feature 1. The discoloration was found to be a pocket of darker fill within the fill layer. A likely shaft feature (Feature 4) was found within TU 1 (Figure 19; Photograph 1). Feature 4 consisted of a wall located in the northeast corner of the test unit. Only a small portion of Feature 4 was uncovered and excavated; a majority of it extends beyond the boundaries of TU 1. Soil within the feature consisted of a coal, cinder and ash fill. The date of the feature is uncertain. A residence was built at 5319 Priscilla Street between 1871 and 1876 (Table 2).

Test Units 2, 3 and 4 were excavated adjacent to each other and form Trench 1. Trench 1, located within Anomaly C1, is in the back yards of what was historically 5323 and 5325 Priscilla Street. The stratigraphy was comprised of three distinct strata (Figure 20; Photograph 2). The uppermost stratum consisted of approximately 33 centimeters of what was determined to be modern fill due to the presence of a large amount of modern bottle glass. This was underlain by a second, approximately 25 centimeter thick, fill layer. Below this was approximately 38 centimeters of a mottled sandy loam and clay with brick fragments.

Trench 1 contained a shaft feature (Feature 2) located in the rough center of the trench at approximately 1 meter below the ground surface (Figure 21; Photograph 3). Feature 2 consisted of a

circle of bricks approximately 5 feet in diameter which extends beyond the southern edge of the Trench 1 (Figure 22). Soil inside Feature 2 was a mottled sandy loam and clay with brick fragments. The date of the feature is uncertain. A residence was built at 5323 and 5325 Priscilla Street between 1876 and 1885 (Table 2).

Test Unit 5 was placed atop the area designated as Anomaly B in the GPR report. The test unit is located in what historically was 5327 Priscilla Street. The stratigraphy was comprised of approximately 40 centimeters of a mix of pockets of fill soils. A layer of decaying schist subsoil was below this (Figure 23; Photograph 4). A bucket auger showed that the decaying schist subsoil continued with no change to a depth of at least 2 meters. A number of decaying roots, located in the rough center of Test Unit 5 may have been the source of the GPR anomaly. No cultural material was present within Test Unit 5. A structure was mapped on the front of this lot since at least 1899.

Test Unit 6 was excavated at the location of Anomaly A. The stratigraphy was comprised of approximately 28 centimeters of a compact yellowish brown (10YR 5/4) silt clay loam underlain by a compact brown (10YR 4/3) sandy loam. Below this was culturally sterile decaying schist subsoil. A wall (Feature 3), visible at the top of the adjusted ground surface, ran roughly parallel to the eastern test unit boundary and extended beyond the borders in the east and south walls of the unit (Figure 24; Photographs 5 and 6). Two rubber-coated high-voltage electrical lines, covered in a layer of rocks, ran diagonally through TU 6 from the northeast corner to the southwestern section of the test unit. These utility wires do not seem to be related to the rock wall. No structures appear on historic maps in the direct area of Test Unit 6. A residence was built on the lot between 1871 and 1876. The property lines changed several times between 1885 and 1911, when it was incorporated into the plot of a brick and frame structure facing Priscilla Street (5329 Priscilla Street; Table 2). It is likely that Anomaly A represents a shaft feature, the interior of which is located immediately outside of TU 6. Feature 3, within TU 6 was likely constructed between the last quarter of the nineteenth century and the first half of the twentieth century.

Test Unit 7 was located in the rear yard area of what was historically 324 Penn Street. This was the location of a proposed percolation test. The stratigraphy was comprised of approximately 30 centimeters of compact yellowish brown (10YR 5/4) silt loam atop approximately 55 centimeters of a compact, rocky yellowish brown (10YR 5/4) silt loam. This was underlain by a decayed schist and mica subsoil (Figure 25; Photograph 7). The high voltage electrical lines present in Test Unit 6 extend into TU 7 at approximately 35 centimeters below the adjusted ground surface. No cultural features were present below the high voltage electrical lines.

Test Unit 8 was the location of a proposed percolation test. The test unit was located within the footprint of a brick structure (5334 Pulaski Street) noted on historic maps from at least 1876 until the first quarter of the twentieth century (Table 2). The stratigraphic profile of TU 8 consisted of approximately 15 centimeters of modern fill atop at least 140 centimeters of loose brick and mortar building debris (Photograph 8). Excavation ceased when it became too dangerous to continue due to slumpage. The brick and mortar debris is likely filling the basement associated with the mapped historic structure.

Test Unit 9 was the location of a proposed percolation test. The unit was placed on the lot that historically was 329 & 331 Queen Lane. The stratigraphic soil profile was comprised of

approximately 30 centimeters of yellowish brown (10YR 5/6) compact sand mixed with decaying schist underlain by a decayed schist subsoil (Figure 26; Photograph 9). No cultural material was present within TU 9.

In addition to the three areas of anomaly testing and the percolation test locations, archaeological testing was performed at each of the 14 soil boring test locations (Table 3). The archaeological testing at the boring locations was undertaken using shovel test pits. The shovel test pits were excavated systematically around the perimeter of the block.

Shovel Test Pits 1, 3 and 4, located along Priscilla Street shared similar soil profiles. The stratigraphy was generally comprised of 40 centimeters to 65 centimeters of fill atop a decayed schist subsoil. A wall, likely associated with the historic structures mapped along Priscilla and Penn Streets, was found in STP 4.

Shovel Test Pit 2, also located along Priscilla Street, had a stratigraphic profile that consisted of approximately 40 centimeters of a coal ash, brick and cinder fill atop approximately 50 centimeters of a compact and culturally sterile dark yellowish brown (10YR 4/6) sandy loam. This was underlain by culturally sterile decaying schist subsoil.

| <b>TABLE 3</b>  |                       |                                   |
|---|-----------------------|-----------------------------------|
| <b>SHOVEL TEST PIT LOCATIONS BY 1923 ADDRESS</b>                            |                       |                                   |
| <b>Queen Lane Apartments Project<br/>City of Philadelphia, Pennsylvania</b> |                       |                                   |
| <b>SHOVEL TEST PIT</b>  | <b>1923 ADDRESS</b>   | <b>EARLIEST MAPPED STRUCTURES</b> |
| STP 1   | 5319 & 5321 Priscilla | 1876                              |
| STP 2   | 5325 Priscilla        | 1885                              |
| STP 3   | 5331 Priscilla        | 1871                              |
| STP 4   | 5337 Priscilla        | 1871                              |
| STP 5   | 324 Penn              | 1876                              |
| STP 6   | 316 Penn              | 1876                              |
| STP 7   | Thewlis               | 1889                              |
| STP 8   | Thewlis               | 1871                              |
| STP 9   | 5332 Pulaski          | 1889                              |
| STP 10  | 5326 Pulaski          | 1871                              |
| STP 11  | 5314 & 5316 Pulaski   | 1871                              |
| STP 12  | 301 Queen             | 1876                              |
| STP 13  | 329 & 331 Queen       | 1885                              |
| STP 14  | 5315 Queen            | 1876                              |

Shovel Test Pits 5, 6, 8, 11 and 13 all fall within the footprints of structures mapped from 1871 (STP 11), 1876 (STPs 5, 6, and 8) or 1885 (STP 13). The shovel test pits contained similar soil profiles. The shovel test pits contained loose brick and mortar debris. A portion of a brick wall was

found within STP 5 (Photograph 10). Stone foundation walls were uncovered immediately below the surface in both STP 8 and 11(Photographs 11 and 12).

Shovel Test Pit 7 consisted of approximately 53 centimeters of compact coal ash and cinder fill atop an oxidized brown (10YR 4/3) silt clay loam. A rubber-coated utility line was encountered at approximately 26 centimeters below the adjusted ground surface. A rock foundation wall was encountered at approximately 50 centimeters below adjusted ground surface. A brick structure was mapped at this location in 1889.

The soil profile of Shovel Test Pit 9 was comprised of approximately 20 centimeters of compact coal ash and cinder fill atop approximately 30 centimeters of dark yellowish brown (10YR 3/4) sand. This was underlain by approximately 55 centimeters of brown (10YR 4/3) silt clay loam with oxidation atop a light yellowish brown (2.5Y 6/4) clay loam with oxidation. No cultural material was present beneath the upper coal ash and cinder fill. Shovel Test Pit 9 sits on the footprint of a frame structure dating to at least 1889.

Shovel Test Pit 10 consisted of a loose strong brown (7.5YR 5/8) sand and rock fill surrounding a sewage pipe. A rock impasse was encountered at approximately 85 centimeters below the adjusted ground surface. A structure first appeared at this location in 1871 and remained until the first half of the twentieth century.

Shovel Test Pit 12, located at the corner of West Queen Lane and Pulaski Avenue, consisted of approximately 10 centimeters of a very dark brown (10YR 2/2) silt loam atop approximately 15 centimeters of dark yellowish brown (10YR 4/6) friable silt loam. This was underlain by culturally sterile decaying schist subsoil.

Shovel Test Pit 14 was similar to TU 9 and consisted of approximately 23 centimeters of yellowish brown (10YR 5/6) compact and rocky sand underlain by a decaying schist subsoil. A rock wall was encountered immediately below the adjusted ground surface.

### Fieldwork Results

One historic archaeological site, the Queen Lane Apartments Project Site, was identified. Prior to excavation, it was known that a historic potter's field was located within the block. It was also known that houses were located outside of the potter's field boundaries, lining Pulaski Avenue, Priscilla Street and Penn Street. The footprints of several of these structures can be seen in the results of the GPR survey. The walls and brick and mortar building debris found within Test Unit 8 and Shovel Test Pits 4, 5, 6, 7, 8, 11, 13, and 14 confirm what had been known about the APE from documentary and photographic sources. In addition to foundation walls associated with the building that once stood on the block, stone and brick lined features were encountered.

Two probable shaft features, Features 2 and 4, were found within Anomaly C1. Both Feature 2 and Feature 4 were situated approximately 16 feet from the rear of the buildings on the 1923 map of the area (Bromley 1923). Structures were mapped on the lots containing these features as early as 1876 (Hopkins 1876). The two shaft features located within Anomaly C1 could date as early as the last quarter of the nineteenth century.

Feature 3, a stone-lined shaft feature found within Test Unit 6, is located in an area where no structures were mapped. The earliest evidence of this area being part of a lot that contained a structure was in 1876 (Hopkins 1876). The location of Test Unit 6 remained part of this parcel, which faced Penn Street, until at least 1885. According to maps from 1889 (Bromley 1889), 1899 (Bromley 1899) and 1906 (Smith 1906), this plot of land had been subdivided several times. In 1911, the location of TU 6 was incorporated into a structure-bearing plot facing Priscilla Street. The feature within TU 6 is situated approximately 40 feet from the back of the structure denoted on the 1911 map. It is unclear if Feature 3 is associated with the structure fronting onto Penn Street or that facing Priscilla Street. The earliest date for this feature is 1876; however, it could have been constructed as late as 1911. Feature 3 was not excavated, as only a small section of it was located within Test Unit 6.

During the course of the work, a major question was whether burials were located outside of the area mapped as the Potter's Field. Anomalies A, B, and C1 were located just outside of the known boundaries of the cemetery; therefore, excavations were conducted with extreme care and with the knowledge that burials or scattered human remains may be present. No human remains or burials were encountered during the course of the work. While it is possible that burial took place outside of the mapped boundaries of the potter's field, the historical data suggests that the boundaries of the potter's field were delineated from its inception. The earliest map of the Potter's Field, dating from 1755, notes the presence of a gate facing Queen Lane. The Potter's Field also is delineated using several lines, suggesting that the cemetery was likely fenced. Nineteenth-century maps are consistent in their mapping of the boundaries of the cemetery. Once the APE had been parceled into individual lots and used for residential purposes it is unlikely that burial would be performed outside of the cemetery boundary. Documents dating from the early twentieth century consistently mention a fence. When the potter's field was made into a playground it was plowed and leveled (*Germantown Independent-Gazette*1920). The work presumably did not extend to the depth of the burials, as it was specifically reported that no remains were encountered during this activity. Prior to construction of the high rise, the buildings surrounding the playground were demolished. Based upon the archaeological work performed, some of the demolition debris was pushed into building basements. The extant high rise apartment building may have disturbed some burials. At least one local resident has reported seeing bones when the apartment building was constructed in the 1950s. There is no evidence within the archaeological work performed to date that indicates that any material from the 1950s construction was spread outside of the playground area. While it cannot be said with absolute certainty that no burials were placed outside of the known potter's field boundaries, the archaeological testing of geophysical anomalies and pre-construction boring and percolation test locations did not encounter such evidence.

## RECOMMENDATIONS

### Introduction

Background research has provided details of the development of the project block through time. Ground penetrating radar and limited archaeological excavation have supplemented the background research and permitted a more detailed view of archaeological potential within the block. Based on the background research alone, the block could be expected to contain precontact remains as well as nineteenth- and twentieth-century historic residential deposits. In addition, a portion of the block was used for human burials from the mid-eighteenth century through to the early twentieth century. The GPR survey and archaeological excavations indicate that archaeological potential is more limited in scope than indicated by the background research.

### Precontact Archaeological Potential

Precontact archaeological sites have been found within the City of Philadelphia in widely spread locations across the city. In most areas of the city, the construction of buildings has destroyed original, and in many cases buried, surfaces. No precontact archaeological sites are recorded in or adjacent to the APE. However, as late as 1862 (Smedley 1862) a stream was present adjacent to the APE in what is now West Penn Street. The proximity of a source of water and a relatively flat landscape would indicate that undisturbed soils within the APE have moderate to high precontact archaeological potential. However, the areas that would have been closest to the stream during the nineteenth century have been disturbed through the construction of housing. In addition, archaeological excavations undertaken on the block have encountered no intact original ground surfaces. Based on the archaeological data, there is no precontact archaeological potential.

### Historic Archaeological Potential

The historical development of the block includes residential and commercial buildings as well as a burial ground. The proposed project consists of the demolition of the extant 16-story Queen Lane Apartments and Wissahickon Playground and the construction of 55 affordable rental housing units along Pulaski Avenue, Penn Street and Priscilla Street. A commitment has been made to avoid impacts to the Germantown Potter's Field. This area is assumed to have high historic archaeological potential. The discussion that follows deals only with the areas of the block outside of the boundaries of the potter's field. As no construction is to take place within the area of the Potter's Field, the area within the boundary of the Potter's Field is outside of the Area of Potential Effect.

Historic maps show that there were no structures on this block prior to 1862. However, by 1871, the land abutting the Germantown Potter's Field was moderately developed. One house was located fronting West Queen Lane (303), five houses fronted Priscilla Street (5315, 5329, 5331, 5333 and 5341), and one structure fronted Penn Street (Thewlis lot). Additionally, almost all of the structures (5312, 5314, 5316, 5318, 5320, 5322, 5324, 5326 and 5328) along Pulaski Avenue were built by 1871 (note for consistency, all street addresses are based on Bromley 1923). By 1889, the portions of the block surrounding the Potter's Field were almost fully developed, and although the land parcels underwent some changes and new structures were added, the buildings remained until at least 1930, where they are visible on an aerial photograph (Figure 12; Aero Service Corporation

1930) (Appendix D; Table 4). All of the buildings on the PHA owned parcel were demolished in 1952. Based on the background research alone, the block has a high potential for historic archaeological deposits. These deposits could potentially include building foundations, yard deposits, artifact middens, and shaft features such as wells, privies and cisterns. The GPR survey and archaeological excavation have confirmed the presence of building foundations, however no intact ground surfaces were encountered, indicating that yard deposits or surficial artifact middens are unlikely to be present. The limited archaeological investigations indicate that intact shaft features are present. Although historic archaeological deposits are present, not all of this material has the potential to add to our understanding of the past.

Foundations and building debris are present throughout the non-potter's field portion of the block. The informational potential for this type of archaeological deposit is limited. Historical maps provide a detailed narrative of the development of the block. The archaeological remains relating to buildings will not provide additional information concerning the development of the block or the block inhabitants. Based on the limited archaeological excavation, much of the building debris is likely to have been pushed into basements. While it is possible that non-architectural deposits may be present in the basement areas, beneath the demolition debris, this material would be limited in type, and associated with the last period of occupation, during the late 1940s. The areas that include the foundations for the buildings that ring most of the block have little potential to add to our understanding of local and regional prehistory and are viewed as having low historic archaeological potential.

Houses were first constructed on the block between 1862 and 1871. These properties would have required facilities for both water and the disposal of waste. These facilities usually took the form of a brick or stone lined shaft. Through time these shaft features required maintenance and eventually replacement. When a shaft was abandoned, it was usually filled. In many cases this fill was comprised of household debris. These filled shafts provide archaeological time capsules. The analysis of the artifacts contained within the shaft features has the potential to provide information to our understanding of the past. Archaeological excavations have encountered three features, two stone and one brick, which appear to be shaft features. As the archaeological excavations were limited, the fill of these features were not excavated. While it is possible that these features do not contain deposits that can be used to explore our past, it is likely that other such features are present on the block that would contain such deposits. The presence of these three features indicates that the rear yard areas of the houses that once stood on the block have the potential to contain archaeological deposits.

The locations of shaft features in urban settings are often along the rear of the property lot. However, these shafts can be found in a variety of locations. In many cases privies were constructed to the rear of the main house and beneath frame additions such as those evident behind the stone buildings that faced West Penn Street (Figure 27; Bromley and Bromley 1923). In other situations, privy shafts were located along property lines and may have been shared by more than one family. None of the three possible shaft features encountered by the archaeological excavations was encountered along the rear of the property lot. The two features identified on properties along Priscilla Street (in TU 1 and Trench 1) were both located to the rear of the houses that once stood on these lots. The brick feature in Trench 1 appears to be along the property line between two lots, but the stone feature is set back from the property line (Figure 27; Bromley and Bromley 1923). The

stone feature in TU 6 is also located in a rear yard, but not at or adjacent to the rear or side property boundaries (Figure 27; Bromley and Bromley 1923). Based upon the archaeological work performed, shaft features could be located in a variety of areas behind the buildings that once stood on the block.

The areas of archaeological potential for the block are shown on Figure 28 (Bromley and Bromley 1923; Google Earth 2011) and Figure 29 (Stantec Consulting Services, Inc. 2014). The areas that contain disturbances associated with the buildings that were constructed on the block are disturbed and lack the potential to provide information to our understanding of the past. The area associated with the Germantown Potter's Field is designated separately. Although this area has archaeological potential, a commitment has been made not to disturb this portion of the block. A small portion of the block is not owned by PHA and is not part of any proposed work to be performed here. The remaining areas have the potential to contain cultural features that have the potential to provide information concerning local and regional history.

### Recommendations

The proposed project consists of the demolition of the extant 16-story Queen Lane Apartments and Wissahickon Playground and the construction of 55 affordable rental housing units along Pulaski Avenue, Penn Street and Priscilla Street. Future archaeological work will focus on areas that will be impacted by the construction of the new structures, including the locations of any underground utilities and ground-disturbing landscaping. The area of archaeology concern is indicated on Figure 28 (Bromley and Bromley 1923; Google Earth 2011) and Figure 29 (Stantec Consulting Services, Inc. 2014). As with most urban environments the stratigraphy of the block is complex. Cultural features along the southern end of Priscilla Street were buried beneath nearly 3 feet of fill, while the features closer to West Penn Street were encountered just below the modern disturbances at the site. The finalized design plans limit the depth of disturbance to approximately 7 feet for the footings of the proposed buildings and 3 feet for the utility locations (Appendix H).

While it cannot be said with absolute certainty that no burials were placed outside of the known Potter's Field boundaries, the archaeological testing of geophysical anomalies and pre-construction boring and percolation test locations did not encounter such evidence. There was no evidence in any of the archaeological tests that fills that may have contained remains from disturbed burials were distributed outside of the boundaries of the potter's field.

Given the possibility of errantly placed burials, the uncertainty of shaft feature placement across the block, and the differing depths of fill across the block, Phase II archaeological testing is recommended. Areas with high potential for cultural features which will be impacted by the planned ground disturbance, namely portions of the backyard areas of the historic houses, should be mechanically stripped under an archaeologist's supervision. Soil should be removed in 1-foot passes, and archaeologists should examine the stripped area for cultural features. Exposed archaeological features will be delineated through hand excavation, drawn, photographed, and mapped. Mechanical stripping and archaeological testing will be limited to only those areas which are to be impacted by the construction of the new housing units, underground utilities and ground-disturbing landscaping. Archaeological features that may be impacted by the proposed construction will be tested through hand excavation to evaluate the potential of the site to be eligible for listing in

the National Register of Historic Places. Artifacts collected during excavation will be washed, inventoried, and catalogued. The material collected will be evaluated for its potential to provide information important to our understanding of local or regional history.

If any human remains and grave-associated artifacts are encountered during the archaeological monitoring, they should be brought to the immediate attention of the SHPO and the Advisory Council on Historic Preservation (Council) and any federally-recognized Native American tribal organizations that attach religious and/or cultural significance to the affected property. Notification should be within 24 hours of the discovery. The SHPO and interested federally-recognized tribes will respond within one working day. No activities which might disturb or damage the remains should be conducted until all parties have determined whether excavation is necessary and/or desirable. All procedures will follow guidance outlined in the National Park Service Publication, *National Register Bulletin 41: Guidelines for Evaluating and Registering Cemeteries and Burial Places*, the Native American Graves Protection and Repatriation Act of 1990 (PL 101-601) and the Pennsylvania Historical and Museum Commission's *Policy for the Treatment of Burials and Human Remains* (1993).

A full archaeological report will be prepared that provides the details of the methodology and assumptions of the researchers, an environmental and cultural history background overview, the results of the research, and the analysis of the data collected. The report will be fully illustrated with maps, photographs, and drawings. The report will include a bibliography of references, and (if appropriate) a catalog of the artifacts recovered.

All work will be performed in accordance with regulations set forth in 36 CFR §800, and will be conducted in a manner consistent with the Secretary of the Interior's *Standards and Guidelines for Identification* (46 FR 44720-23), and *Standards and Guidelines for Archaeological Documentation* (48 FR 44734-37), also taking into account the National Park Service's publication *The Archaeological Survey: Methods and Uses* (1978: GPO stock #024-016-00091), the Advisory Council on Historic Preservation (Council)'s publication *Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites* and the Pennsylvania Historical and Museum Commission's *Guidelines for Archaeological Investigations* (PHMC 2008).

## SUMMARY

This report documents the results of a Phase I Archaeological Survey performed for the Philadelphia Housing Authority (PHA) Queen Lane Apartments Project in the City of Philadelphia, Philadelphia County, Pennsylvania. The Area of Potential Effect (APE) lies in the Piedmont Upland section of the Atlantic Coastal Plain Physiographic Province. The project APE is approximately 2.3 acres (0.9 hectares) and encompasses the city block bounded by West Queen Lane, Pulaski Avenue, Penn Street and Priscilla Street (Figure 1; USGS 1997). The proposed project consists of the demolition of the extant 16-story Queen Lane Apartments and Wissahickon Playground and the construction of 55 affordable rental housing units along Pulaski Avenue, Penn Street and Priscilla Street. A portion of the APE measuring approximately 0.93 acres (0.37 hectares) which opens onto West Queen Lane is located within the mapped boundaries of the Germantown Potter's Field; no new construction is planned for this area. This is the third cultural resources report prepared for the

project. *Pennsylvania Historic Resources Survey Forms* were prepared for the Queen Lane Apartments building (Miller Cruiss 2012a), and the Wissahickon Playground (Miller Cruiss 2012b). The cultural resources work was performed for the Philadelphia Housing Authority (PHA). The lead federal agency is the U.S. Department of Housing and Urban Development (HUD).

The goal of the archaeological work was to identify areas of archaeological potential within the project APE. This work was initially limited to background research concerning the history and development of the APE. As the background research progressed and details of a potter's field in the block emerged, a decision was reached to attempt to identify the extent of burials within the block using non-invasive means. A Ground Penetrating Radar (GPR) survey was undertaken across the block. The results of the GPR work were inconclusive. A decision was reached to archaeologically test the location of three of the geophysical anomalies in proximity to the potter's field boundary in an effort to clarify the GPR results. Pre-construction testing was proposed in the APE. Due to a concern that there might be human remains outside of the boundaries of the potter's field and the potential to encounter other archaeological deposits, archaeological excavation was also performed at the locations of the proposed pre-construction borings and percolation tests.

Background research provided details of the development of the project block through time. Ground penetrating radar and limited archaeological excavation have supplemented the background research and permitted a more detailed view of archaeological potential within the block. Based on the background research alone the block could be expected to contain precontact remains as well as nineteenth- and twentieth-century historic residential deposits. In addition, a portion of the block was used for human burials from the mid-eighteenth century through to the early twentieth century. The GPR survey and limited archaeological excavations indicated that archaeological potential is more limited in scope than indicated by the background research. Archaeological excavations undertaken encountered no intact original ground surfaces. Based on the archaeological data, there is no precontact archaeological potential. The investigations identified numerous foundations from buildings constructed in the late nineteenth and early twentieth centuries. In addition, three cultural features were encountered that appear to be shaft features. The backyard areas of the historic house lots were identified as having the potential for shaft and other cultural features.

No significant ground disturbing activities are anticipated within the boundaries of the Germantown Potter's Field. While it cannot be said with absolute certainty that no burials were placed outside of the known potter's field boundaries, the archaeological testing of geophysical anomalies and pre-construction boring and percolation test locations did not encounter such evidence. There was no evidence in any of the archaeological tests that fills that may have contained remains from disturbed burials were distributed outside of the boundaries of the potter's field.

Given the possibility of errantly placed burials, the uncertainty of shaft feature placement across the block, and the differing depths of fill across the block, Phase II archaeological testing is recommended. In accordance with the Programmatic agreement resulting from the Section 106 of the National Historic Preservation Act between the U.S. Department of Housing and Urban Development (HUD), PHA, the Pennsylvania State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) appropriate archaeological studies will be performed for the Queen Lane Apartment Project. Archaeological studies will be conducted in a manner consistent with the Secretary of the Interior's *Standards and Guidelines for Identification*

(46 FR 44720-23), and *Standards and Guidelines for Archaeological Documentation* (48 FR 44734-37), also taking into account the National Park Service's publication *The Archaeological Survey: Methods and Uses* (1978: GPO stock #024-016-00091), the Advisory Council on Historic Preservation (Council)'s publication *Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites* and the Pennsylvania Historical and Museum Commission's *Guidelines for Archaeological Investigations* (PHMC 2008).

The final design, which includes the buildings, landscape plans, utility locations and other ground disturbing activities, was overlaid on historic maps of the APE in order to identify areas of the APE that retain high archaeological potential. Per correspondence from the PHMC (letter dating July 8, 2013) basement areas of historic buildings (that are no longer extant) do not retain archaeological potential; however, areas that were historically the backyards of these buildings do retain high potential for archaeology. These areas have been identified on the overlaid mapping (Figure 29; Stantec Consulting Services, Inc. 2014). Prior to the construction of the proposed housing development locations within the zone of high archaeological potential which will be impacted by the project will be tested.

Archaeological testing will consist of a combination of mechanical and hand excavation. The areas of archaeological potential that may be impacted by the project will be mechanically stripped under the supervision of an archaeologist. Mechanical stripping and archaeological testing will be limited to those areas determined to have a high potential for archaeological resources which are to be impacted by the construction of the new housing units, underground utilities and ground-disturbing landscaping. Exposed archaeological features will be delineated through hand excavation, drawn, photographed, and mapped. Archaeological features that may be impacted by the proposed construction will be tested through hand excavation to evaluate the potential of the site to be eligible for listing in the National Register of Historic Places. Artifacts collected during excavation will be washed, inventoried, and catalogued. The material collected will be evaluated for its potential to provide information important to our understanding of local or regional history. If any human remains or grave-associated artifacts are encountered during the course of the project, they will be brought to the immediate attention of the SHPO and the Advisory Council on Historic Preservation (Council) and any federally-recognized Native American tribal organizations that attach religious and/or cultural significance to the affected property.

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## APPENDIX A

### QUALIFICATIONS OF RESEARCHERS

## QUALIFICATIONS OF RESEARCHERS

Principal Investigator: Kenneth J. Basalik, Ph.D.  
Professional Experience: 36 years  
Education: Ph.D. Anthropology, Temple University  
M.A. Anthropology, Temple University  
B.A. Anthropology, University of Pennsylvania  
Project Responsibility: Administration, report writing and review

Project Archaeologist: Rachael E. Fowler, RPA  
Professional Experience: 4 years  
Education: M.A. Art History and Archaeology, Temple University  
B.F.A. Painting and Art History, Temple University's Tyler School of Art  
Project Responsibility: Fieldwork, analysis, report writing

Senior Historian: Philip Ruth  
Professional Experience: 26 years  
Education: M.A. English, University Of New Hampshire  
B.A. English, Goshen College  
Project Responsibility: Historical research, review, analysis, and report writing

Archaeology Lab Manager: Christina Civello  
Professional Experience: 20 years  
Education: B.A. Anthropology/Art History, University of Delaware  
Project Responsibility: Artifact processing, supervision, artifact inventories and curation

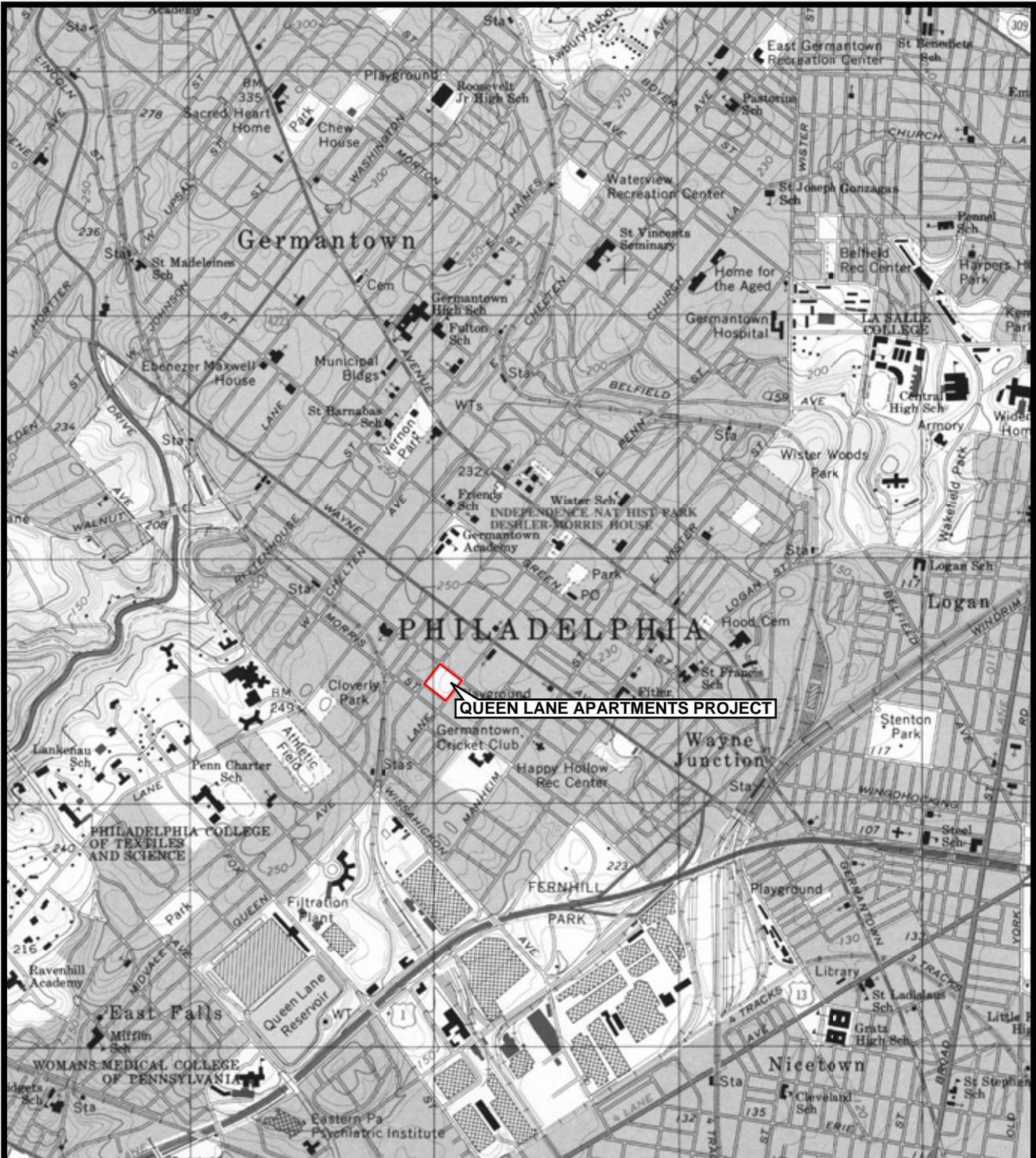
Graphic Illustrator: Crystal Hall  
Professional Experience: 3 years  
Education: Advertising Design, Hussian School of Art  
Social Services, Bucks County Community College  
Project Responsibility: Graphics preparation

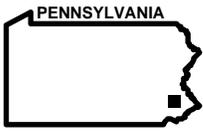
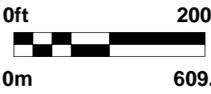
Editor: Kevin Quigg  
Professional Experience: 17 years  
Education: M.A. English, Beaver College  
B.A. Communications, Temple University  
Project Responsibility: Report editing

Editor: Maria Rossi  
Professional Experience: 7 years  
Education: B.A. English with Communications, Gwynedd-Mercy College  
Project Responsibility: Report editing

# APPENDIX B

## FIGURES



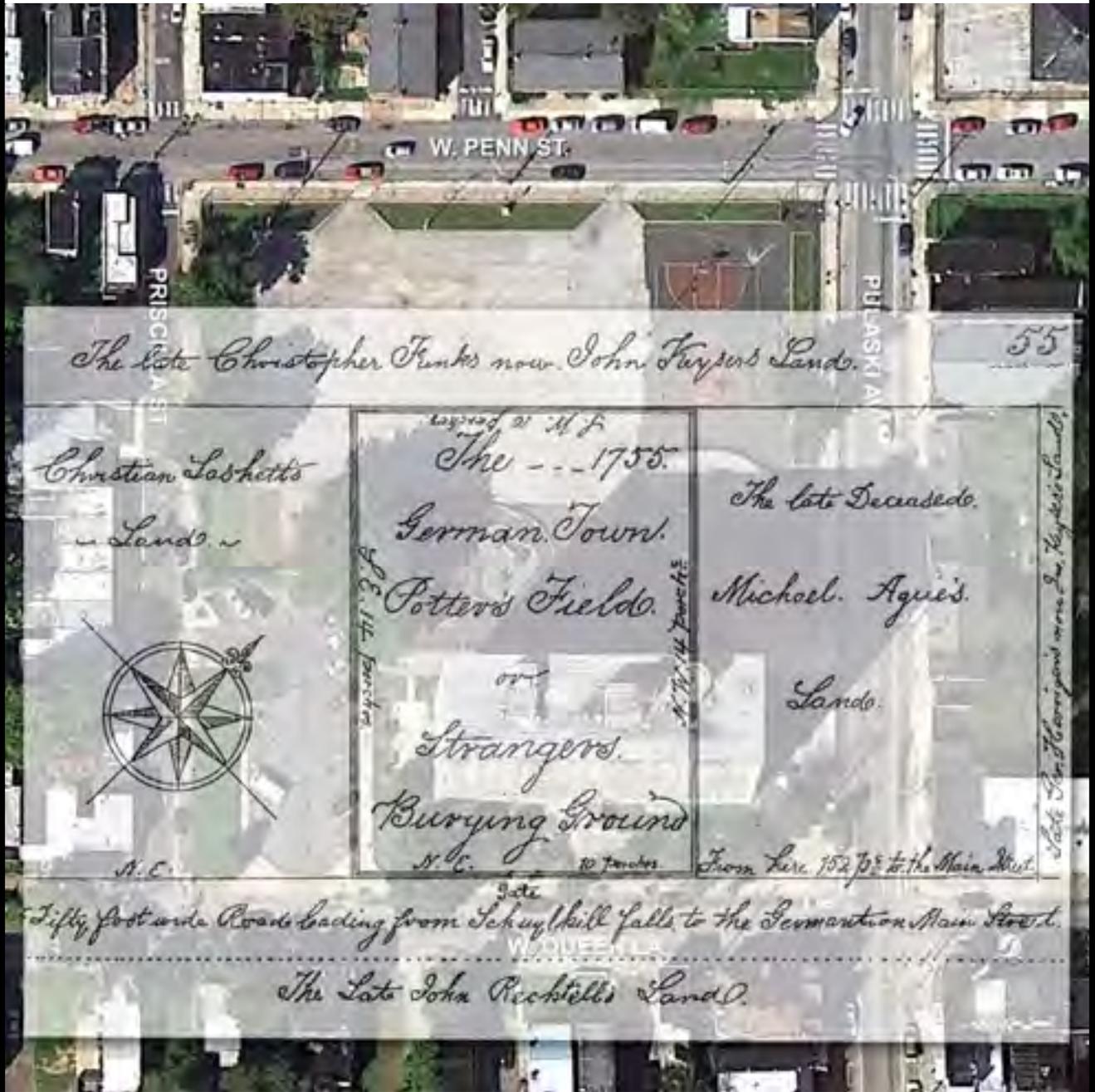
| QUADRANGLE LOCATION  | SCALE   | SOURCE                      |
|--|---|-----------------------------|
| <br> | <br>Prepared by CHRS, Inc. | USGS 1997<br>GERMANTOWN, PA |
| <b>PROJECT LOCATION MAP</b>  |   | <b>FIGURE 1</b>             |

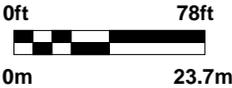


|   | SCALE   | SOURCE   |
|---|---|--|
|  | <p data-bbox="706 1703 922 1728">0ft                      78ft</p>  <p data-bbox="706 1766 922 1791">0m                      23.7m</p> <p data-bbox="695 1850 927 1875">Prepared by CHRS, Inc.</p> | <p data-bbox="1182 1717 1393 1770">GOOGLE EARTH<br/>2011</p> |

**PROJECT AREA CIRCA 2011**

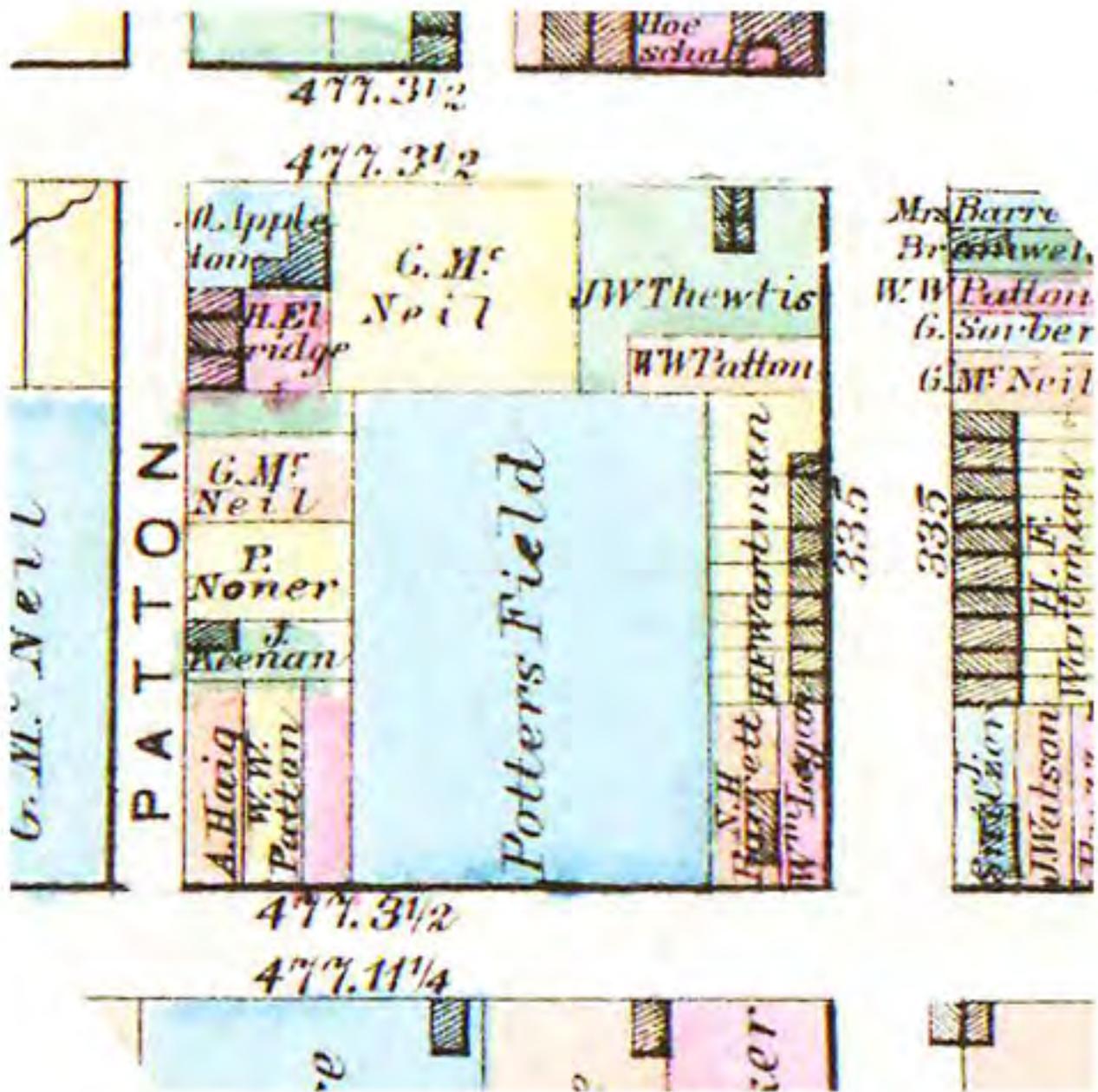
**FIGURE 2**



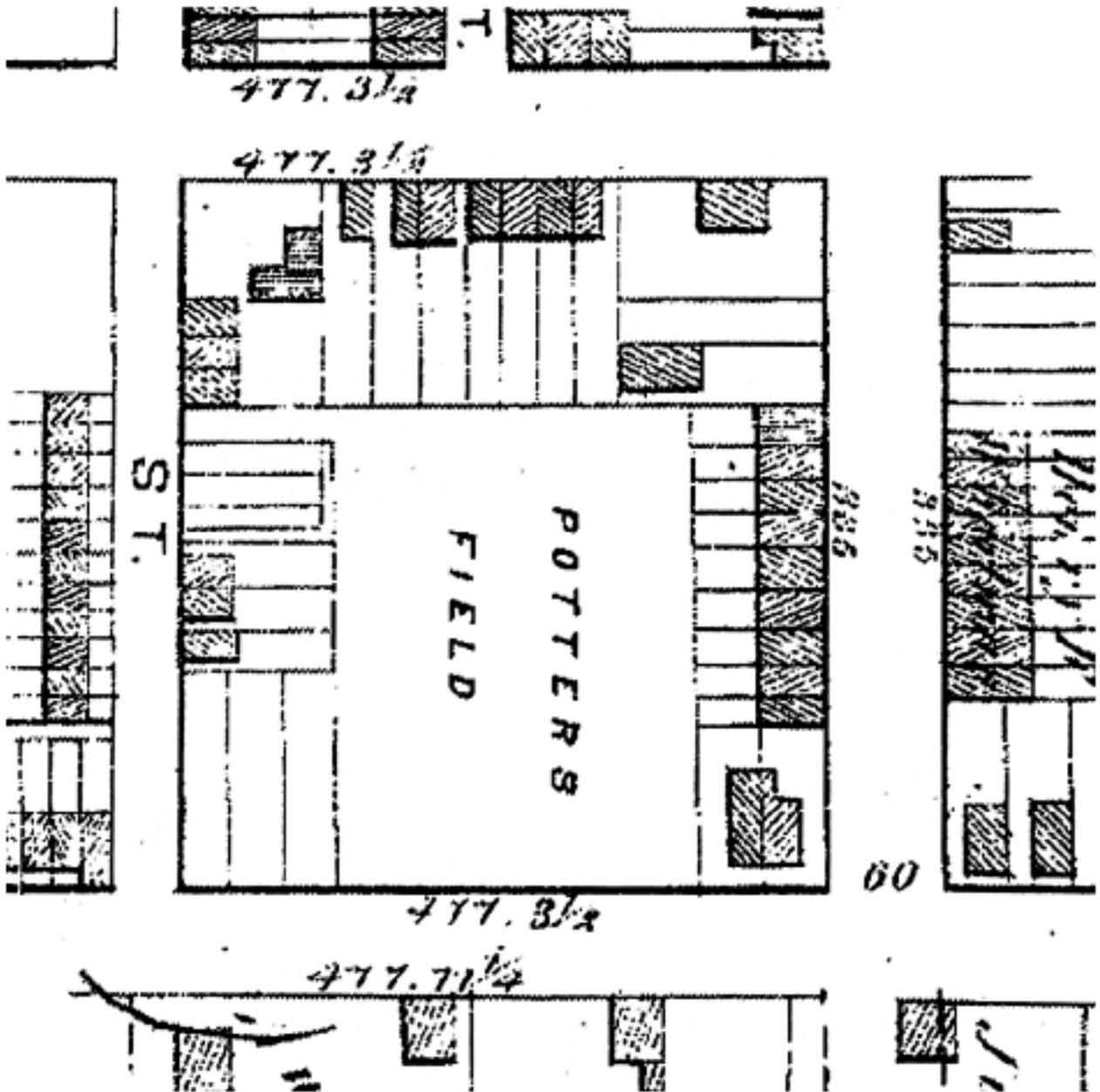
|   | SCALE   | SOURCE                 |
|---|---|------------------------|
|  |  <p>Prepared by CHRS, Inc.</p> | <p>LEHMAN<br/>1755</p> |

PROJECT AREA CIRCA 1755

FIGURE 3



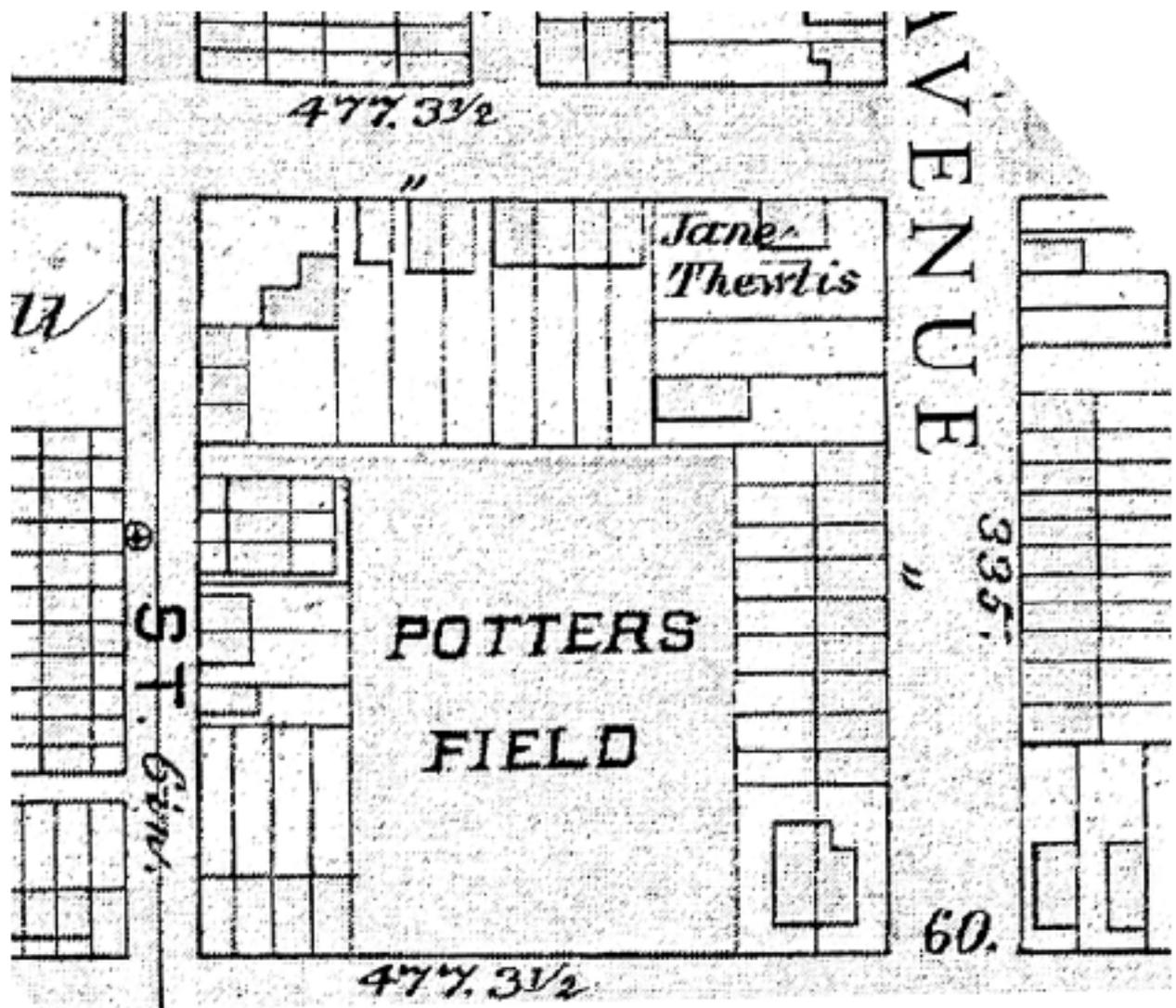
|   | SCALE   | SOURCE                  |
|---|---|-------------------------|
|  | <p>0ft 78ft</p>  <p>0m 23.7m</p> <p>Prepared by CHRS, Inc.</p> | <p>HOPKINS<br/>1871</p> |
| <p>PROJECT AREA CIRCA 1871</p>  |   | <p>FIGURE 4</p>         |



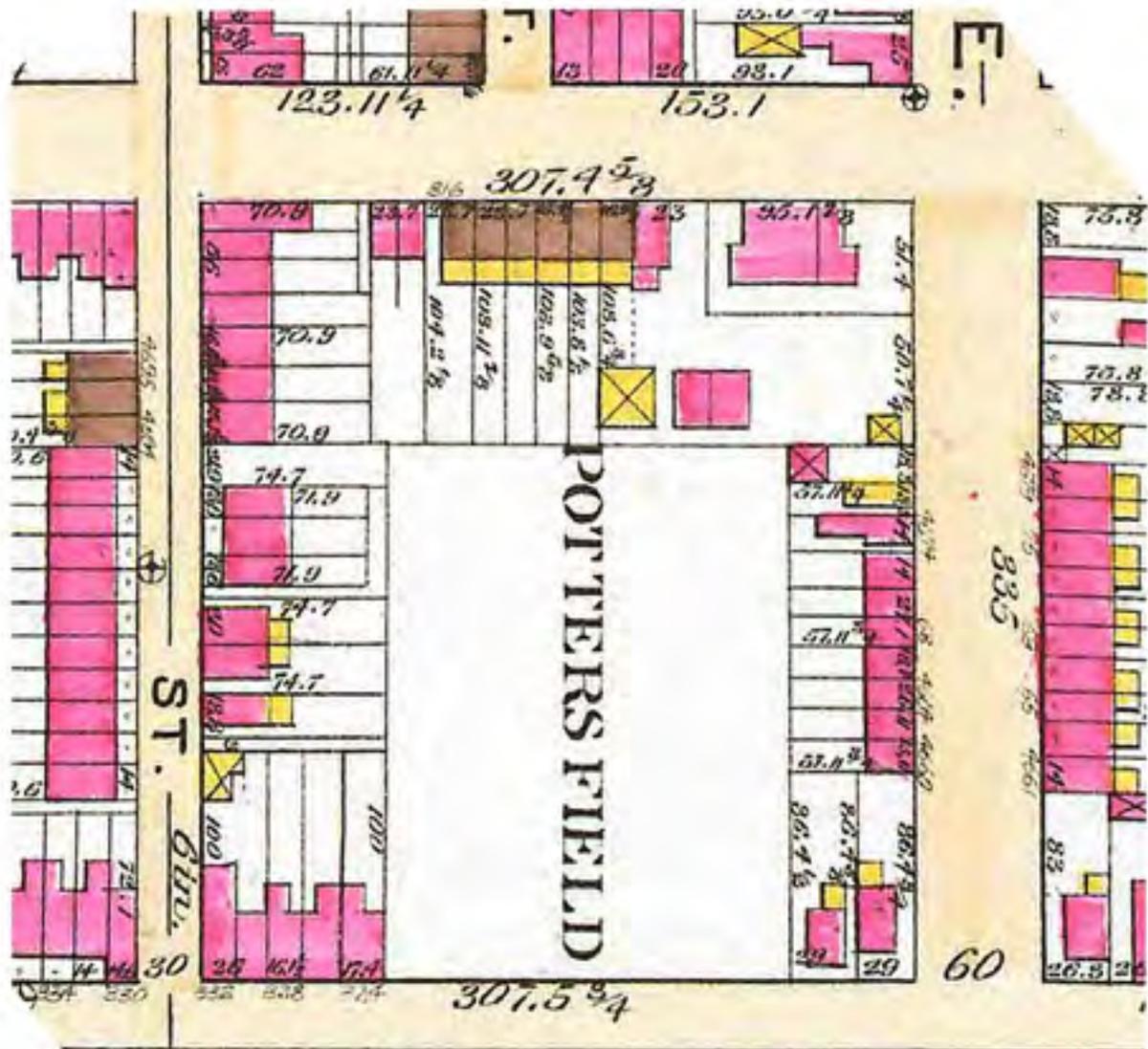
|   | SCALE  | SOURCE  |
|---|--|---|
|  | <p data-bbox="706 1703 917 1728">0ft 78ft</p>  <p data-bbox="706 1770 917 1795">0m 23.7m</p> <p data-bbox="695 1850 927 1875">Prepared by CHRIS, Inc.</p> | <p data-bbox="1226 1745 1349 1797">HOPKINS<br/>1876</p> |

PROJECT AREA CIRCA 1876

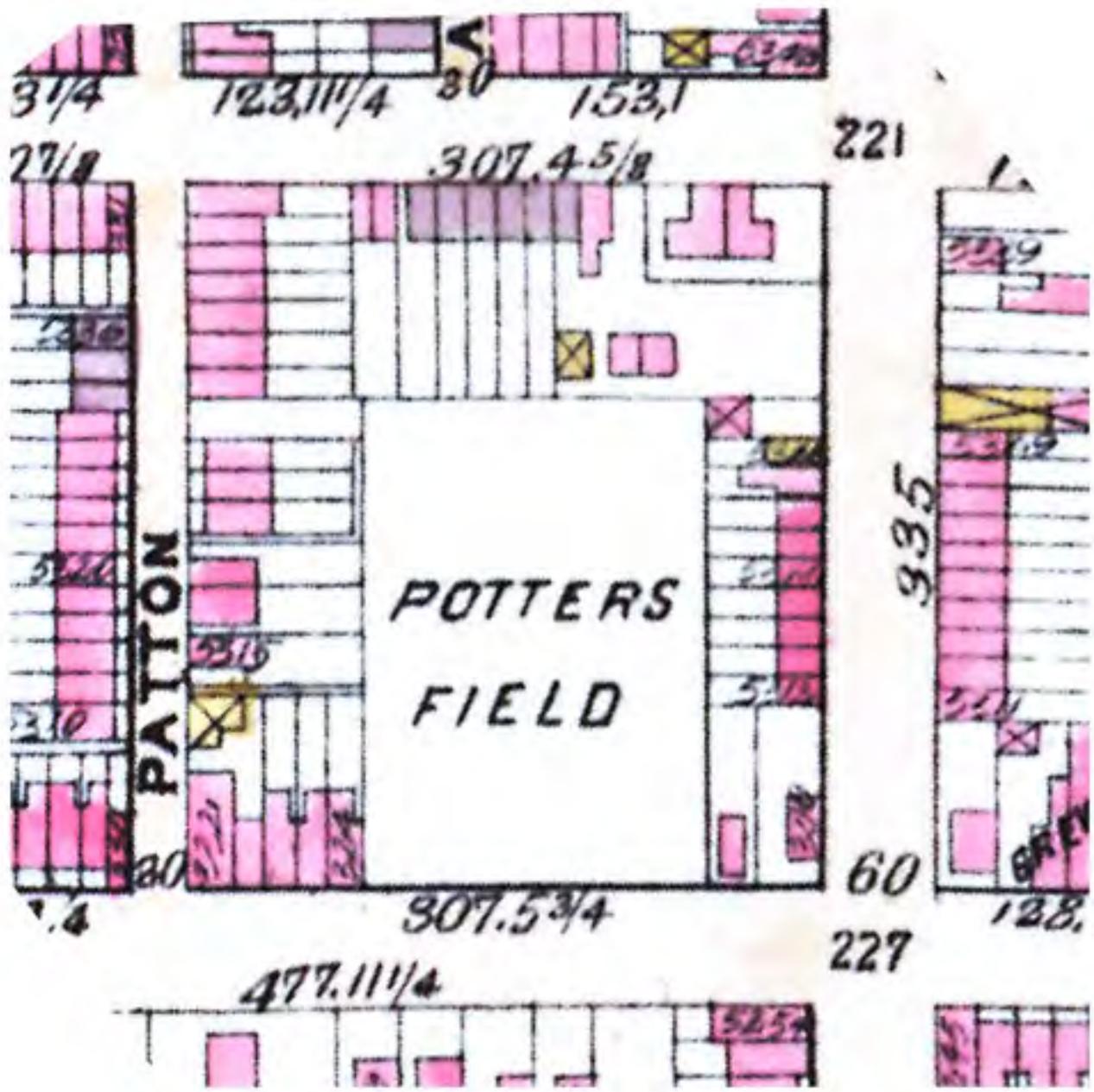
FIGURE 5



|   | SCALE   | SOURCE  |
|---|---|---|
|  | <p data-bbox="706 1703 922 1728">0ft 78ft</p>  <p data-bbox="706 1766 938 1791">0m 23.7m</p> <p data-bbox="691 1850 943 1875">Prepared by CHRS, Inc.</p> | <p data-bbox="1224 1745 1349 1797">HOPKINS<br/>1885</p> |
| PROJECT AREA CIRCA 1885   |   | FIGURE 6  |



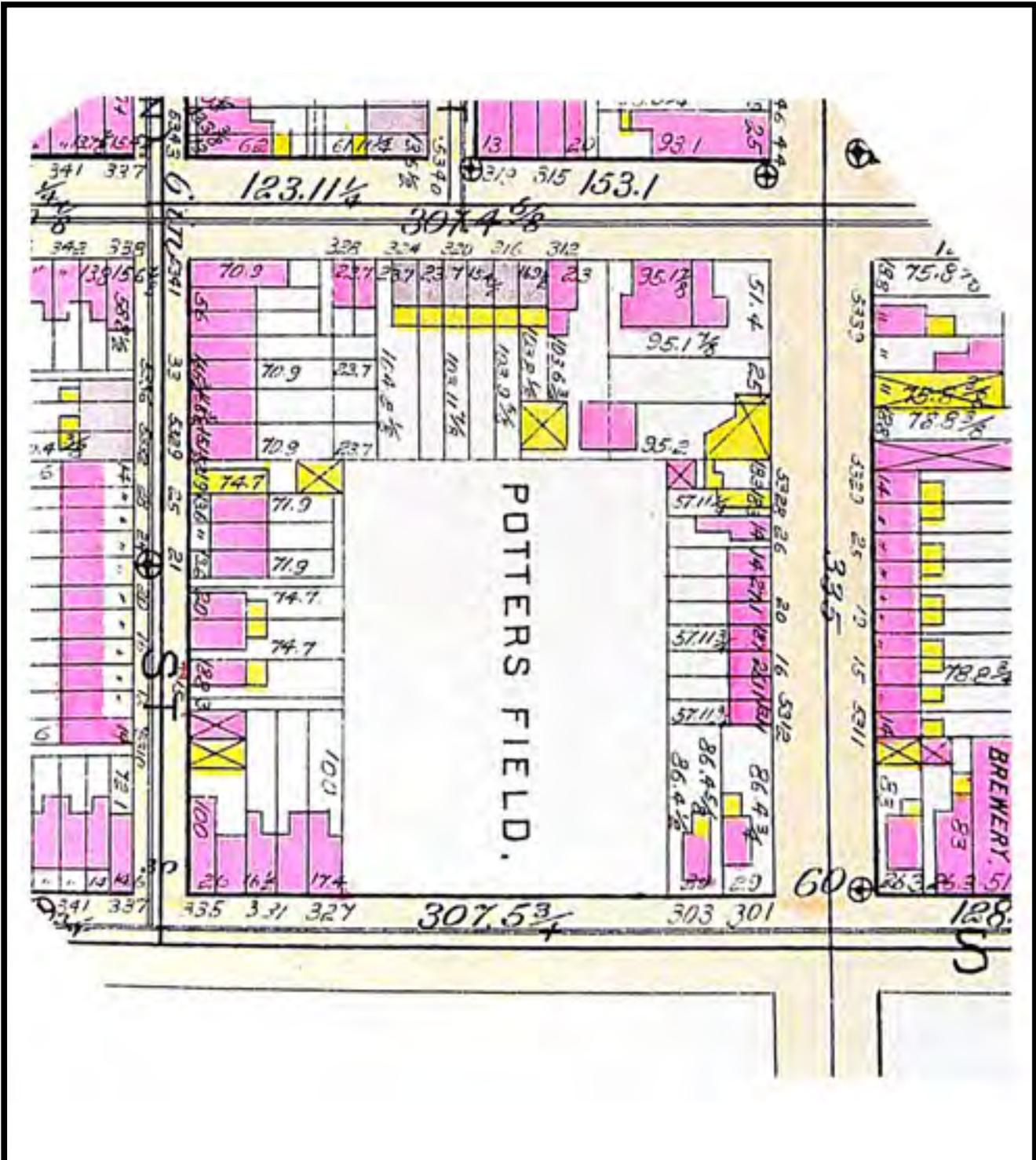
|   | SCALE   | SOURCE  |
|---|---|---|
|  | <p data-bbox="706 1703 917 1728">0ft 78ft</p>  <p data-bbox="706 1766 917 1791">0m 23.7m</p> <p data-bbox="690 1850 933 1875">Prepared by CHRS, Inc.</p> | <p data-bbox="1117 1745 1458 1797">BROMLEY AND BROMLEY<br/>1889</p> |
| <p data-bbox="451 1913 889 1948">PROJECT AREA CIRCA 1889</p>                        |   | <p data-bbox="1252 1913 1401 1948">FIGURE 7</p>                     |



|   | SCALE   | SOURCE  |
|---|---|---|
|  | <p data-bbox="706 1703 917 1724">0ft 78ft</p>  <p data-bbox="706 1766 917 1787">0m 23.7m</p> <p data-bbox="690 1850 933 1871">Prepared by CHRS, Inc.</p> | <p data-bbox="1117 1745 1458 1797">BROMLEY AND BROMLEY<br/>1895</p> |

PROJECT AREA CIRCA 1895

FIGURE 8



|   | SCALE   | SOURCE                              |
|---|---|-------------------------------------|
|  | <p>0ft 78ft</p>  <p>0m 23.7m</p> <p>Prepared by CHRS, Inc.</p> | <p>BROMLEY AND BROMLEY<br/>1899</p> |

PROJECT AREA CIRCA 1899

FIGURE 9



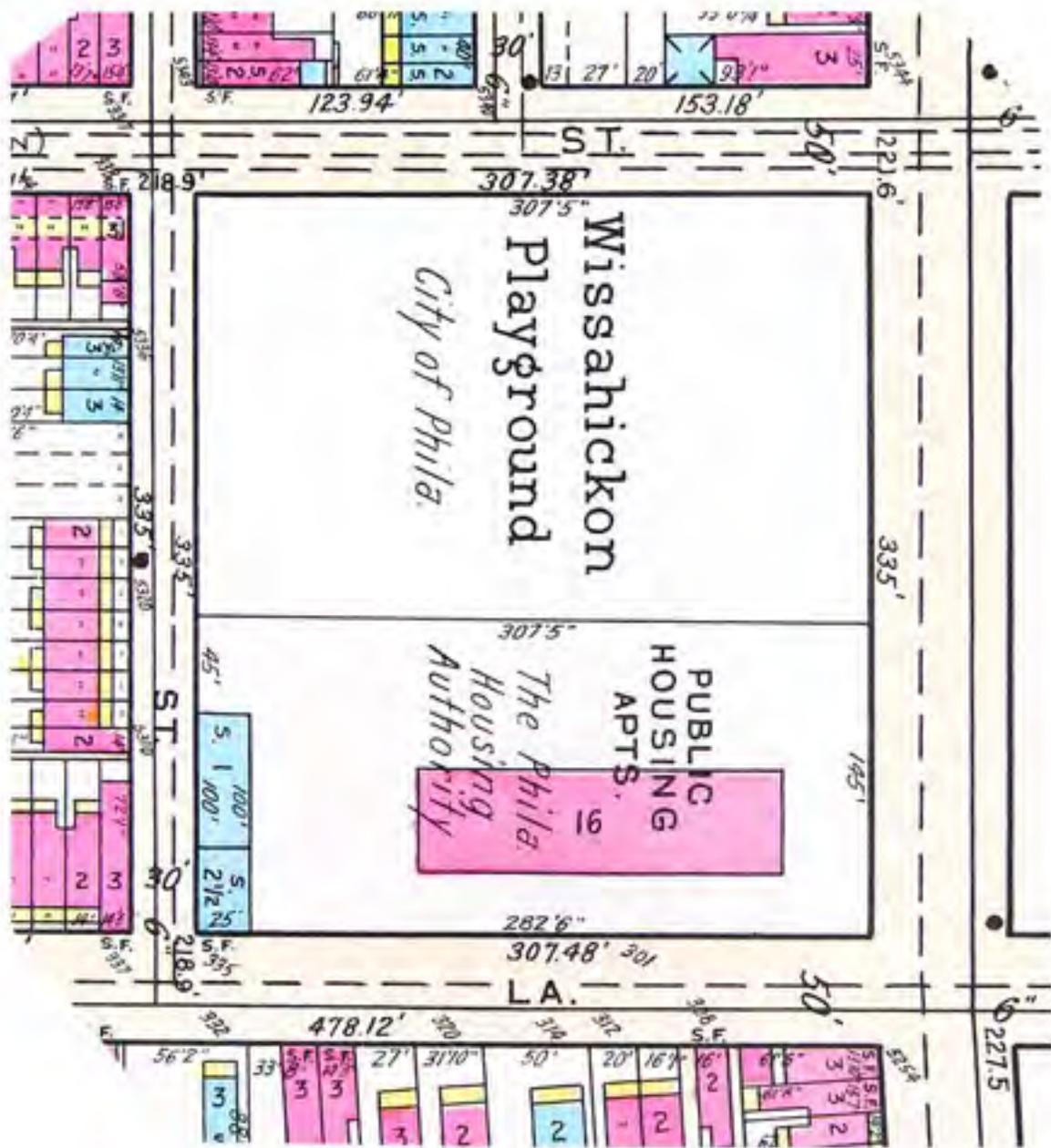




**“DEVIL’S POCKET” DWELLING**

|   | SCALE                                  | SOURCE                           |
|---|--|----------------------------------|
|  | NOT TO SCALE<br>Prepared by CHRS, Inc. | AERO SERVICE CORPORATION<br>1930 |
| PROJECT AREA CIRCA 1930   |  | FIGURE 12                        |





SCALE

SOURCE



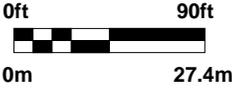
FRANKLIN SURVEY  
COMPANY  
1955

Prepared by CHRS, Inc.

PROJECT AREA CIRCA 1955

FIGURE 14



|   | SCALE  | SOURCE  |
|---|--|---|
|  |  <p>0ft 90ft<br/>0m 27.4m</p> <p>Prepared by CHRS, Inc.</p> | <p>BROMLEY AND BROMLEY<br/>1923</p> <p>STEINHART AND BECHTEL<br/>2012</p> |

**RESULTS OF THE GPR SCAN COMPARED WITH 1923 MAP**

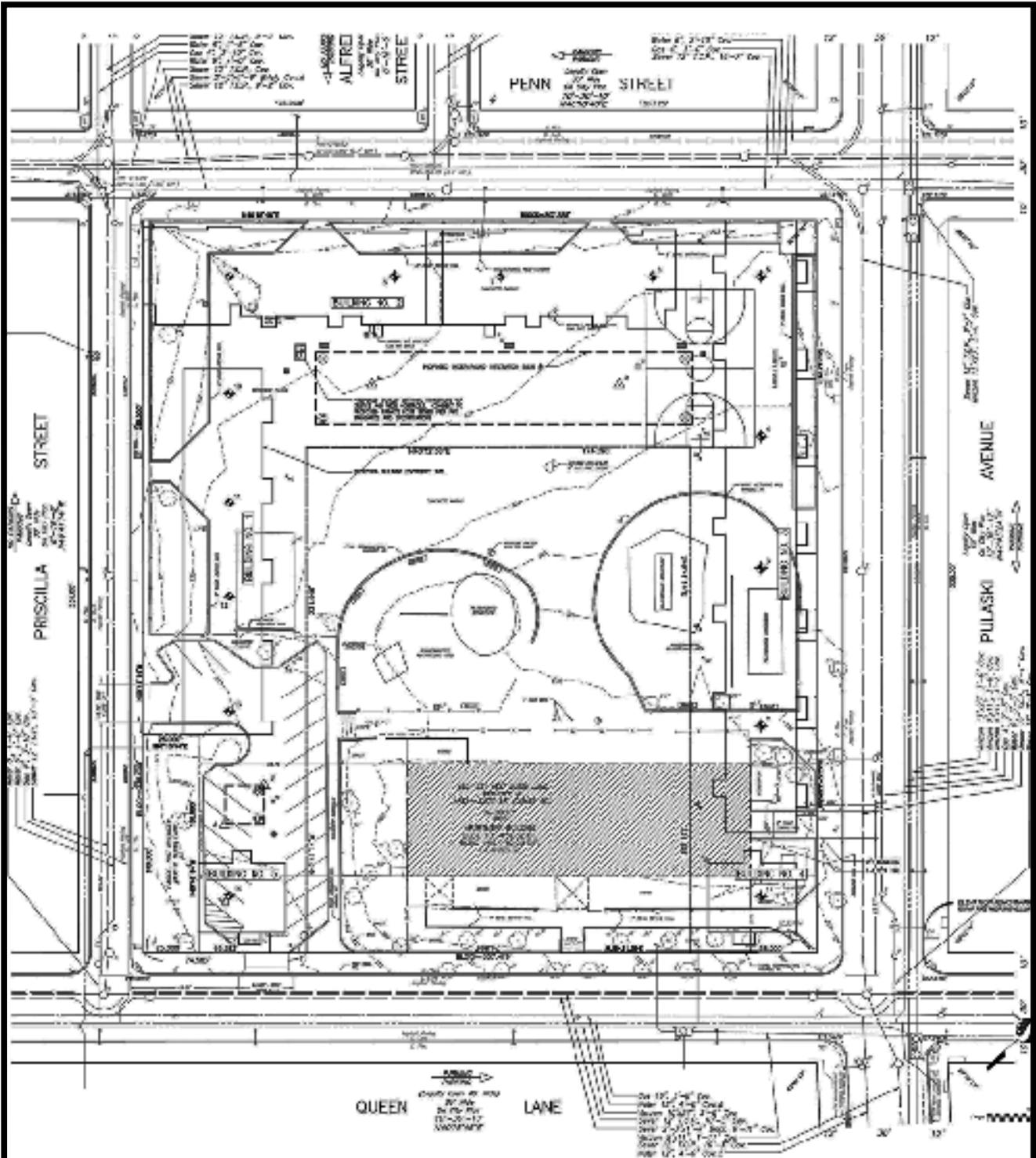
**FIGURE 15**

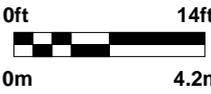


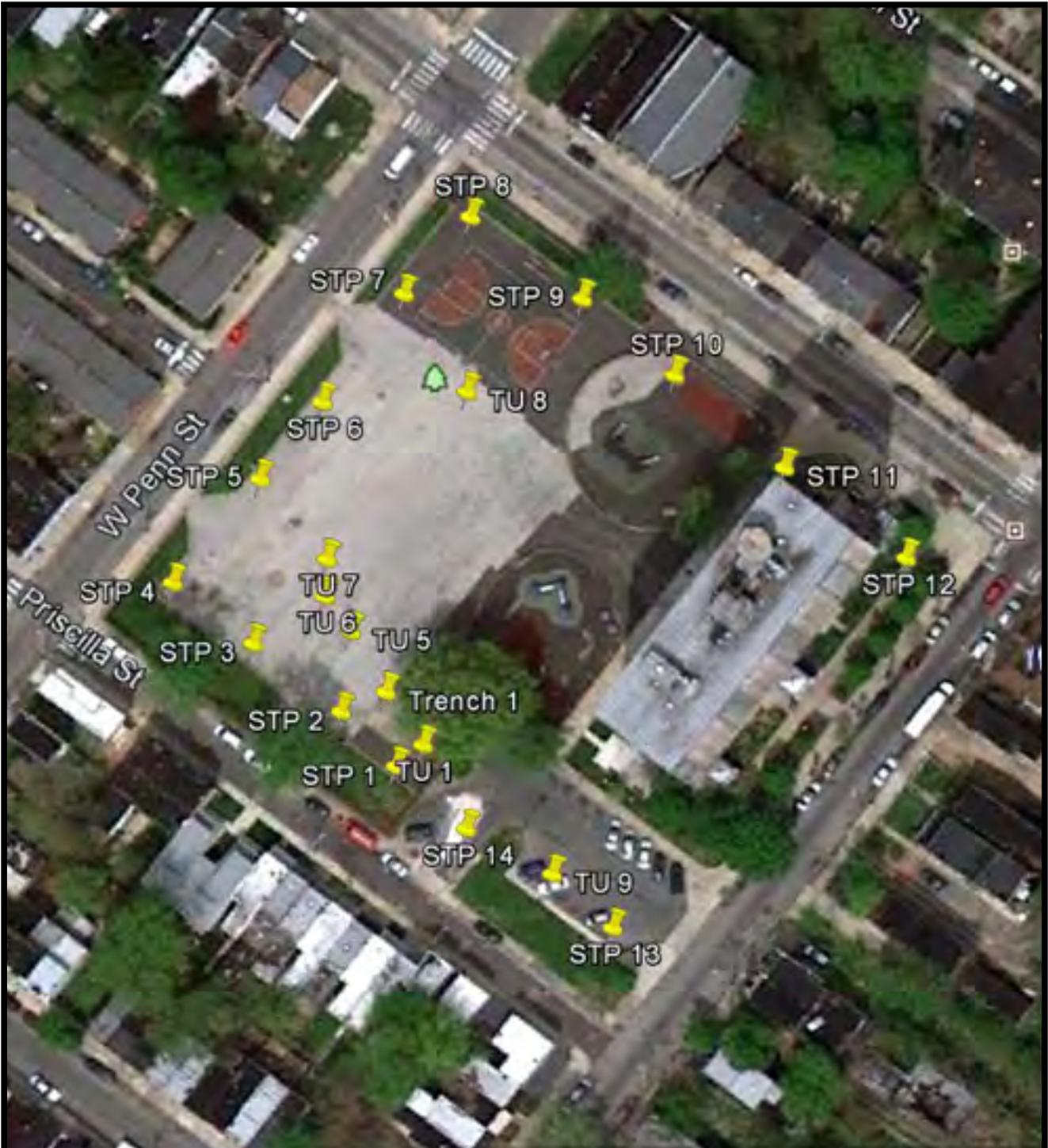
|   | SCALE   | SOURCE  |
|---|---|---|
|  | <p data-bbox="706 1705 917 1732">0ft 85ft</p>  <p data-bbox="706 1768 917 1795">0m 25.9m</p> <p data-bbox="690 1852 933 1879">Prepared by CHRS, Inc.</p> | <p data-bbox="1112 1711 1453 1768">STEINHART AND BECHTEL<br/>2012</p> |

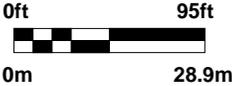
**RESULTS OF THE GPR SCAN SHOWING TEST LOCATIONS**

**FIGURE 16**



|   |   |   |
|---|---|---|
|   | <b>SCALE</b>  | <b>SOURCE</b>   |
|  |  <p>0ft                      14ft<br/>0m                        4.2m</p> <p>Prepared by CHRS, Inc.</p> | <p><b>STANTEC CONSULTING<br/>SERVICE, INC.<br/>2013</b></p> |
| <b>BORING AND PERC TEST LOCATION PLAN</b>   |   | <b>FIGURE 17</b>  |

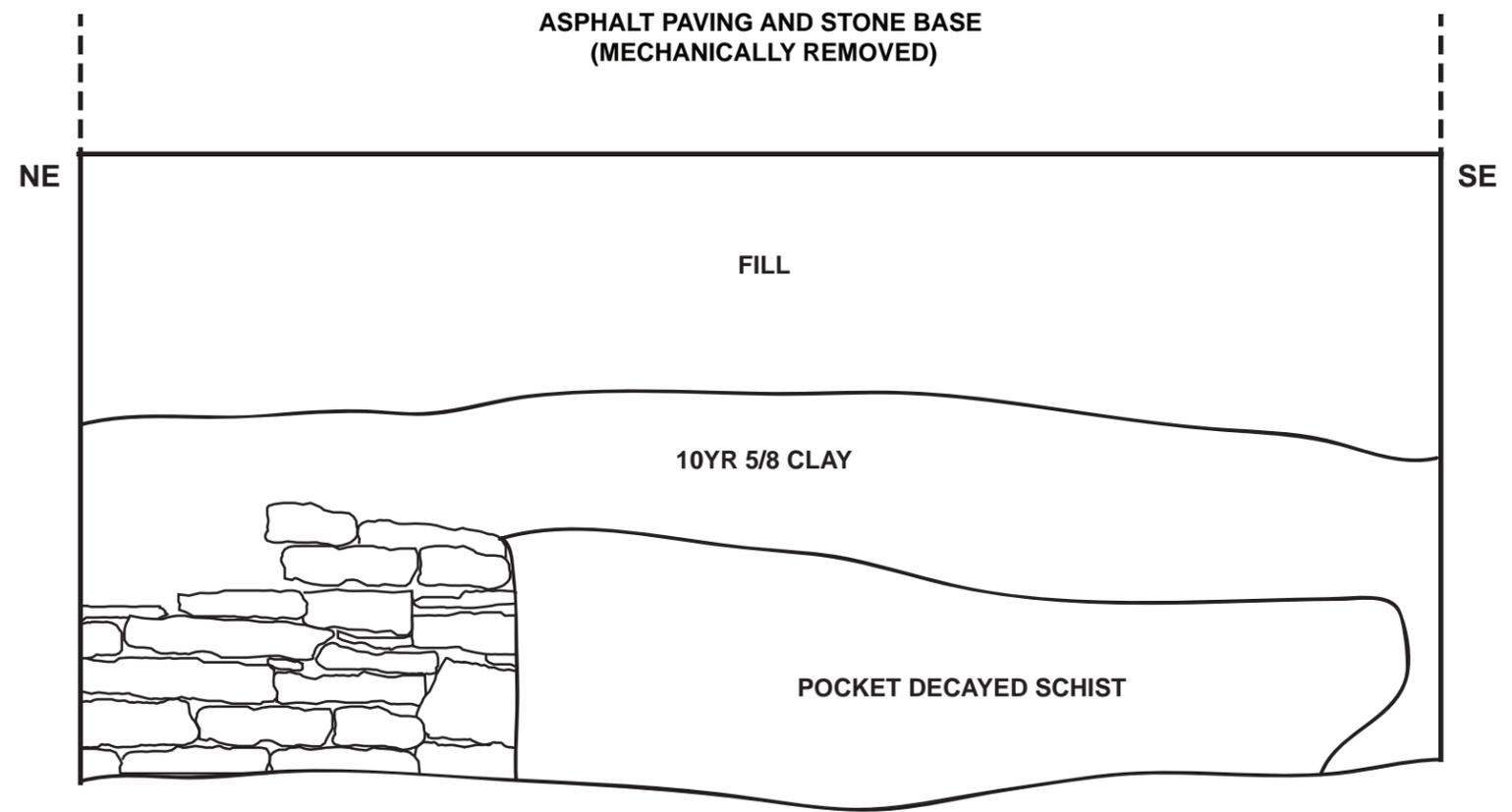


|   | SCALE  | SOURCE                       |
|---|--|------------------------------|
|  |  <p>0ft 95ft<br/>0m 28.9m</p> <p>Prepared by CHRS, Inc.</p> | <p>GOOGLE EARTH<br/>2011</p> |

ARCHAEOLOGICAL TEST LOCATIONS

FIGURE 18

TEST UNIT 1  
EAST WALL  
CLOSE PROFILE

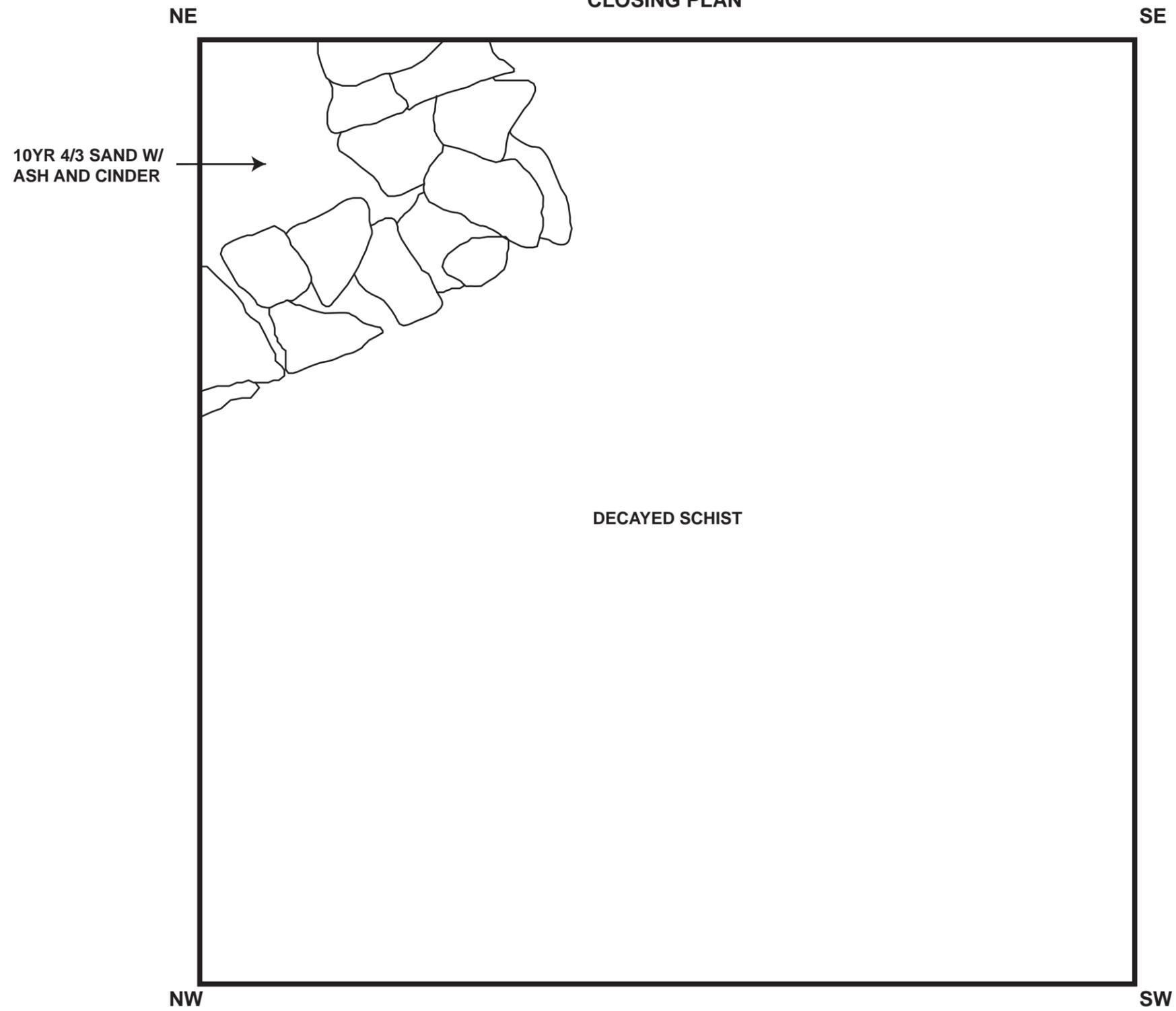


0in 7.87in  
0cm 20cm  
Prepared by CHRS, Inc.

ANOMALY C-1, TEST UNIT 1, CLOSING PROFILE, EAST WALL

FIGURE 19

TEST UNIT 1  
FEATURE 4  
CLOSING PLAN



0in 7.87in

0cm 20cm

Prepared by CHRS, Inc.

ANOMALY C-1, TEST UNIT 1, FEATURE 4 PLAN VIEW

FIGURE 20

TRENCH 1  
SOUTH WALL  
CLOSING PLAN

ASPHALT PAVING AND STONE BASE  
(MECHANICALLY REMOVED)

7.5YR 4/3 SAND LOAM

10YR 4/2 SILT CLAY LOAM

10YR 4/3 SANDY LOAM MOTTLED W/ 25% 10YR 5/4 CLAY WITH BRICK FRAGMENTS

7.5YR 5/8 SANDY CLAY

DECAYED SCHIST

EDGE OF FEATURE 2

DECAYED SCHIST

10YR 5/4 CLAY FILL WITH BRICK FRAGMENTS  
(WITHIN FEATURE 2)

0in 15.47in

0cm 40cm

Prepared by CHRS, Inc.

ANOMALY C-1, TRENCH 1, CLOSING PROFILE, SOUTH WALL

FIGURE 21

TRENCH 1  
FEATURE 2  
OPENING PLAN

NW

NE

DECAYED SCHIST

10YR 5/4 CLAY

SW

SE

0in 7.87in

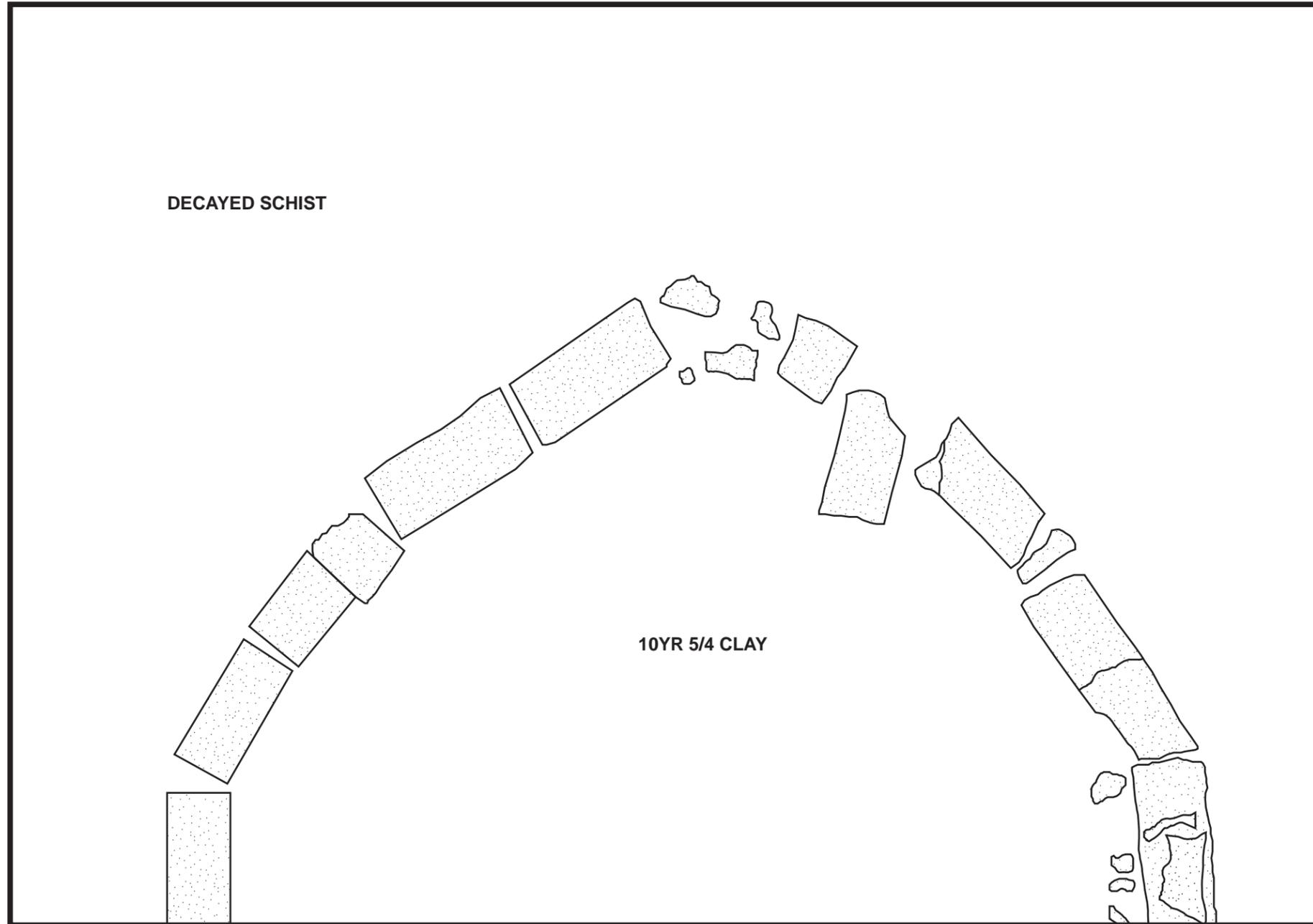
0cm 20cm

Prepared by CHRS, Inc.

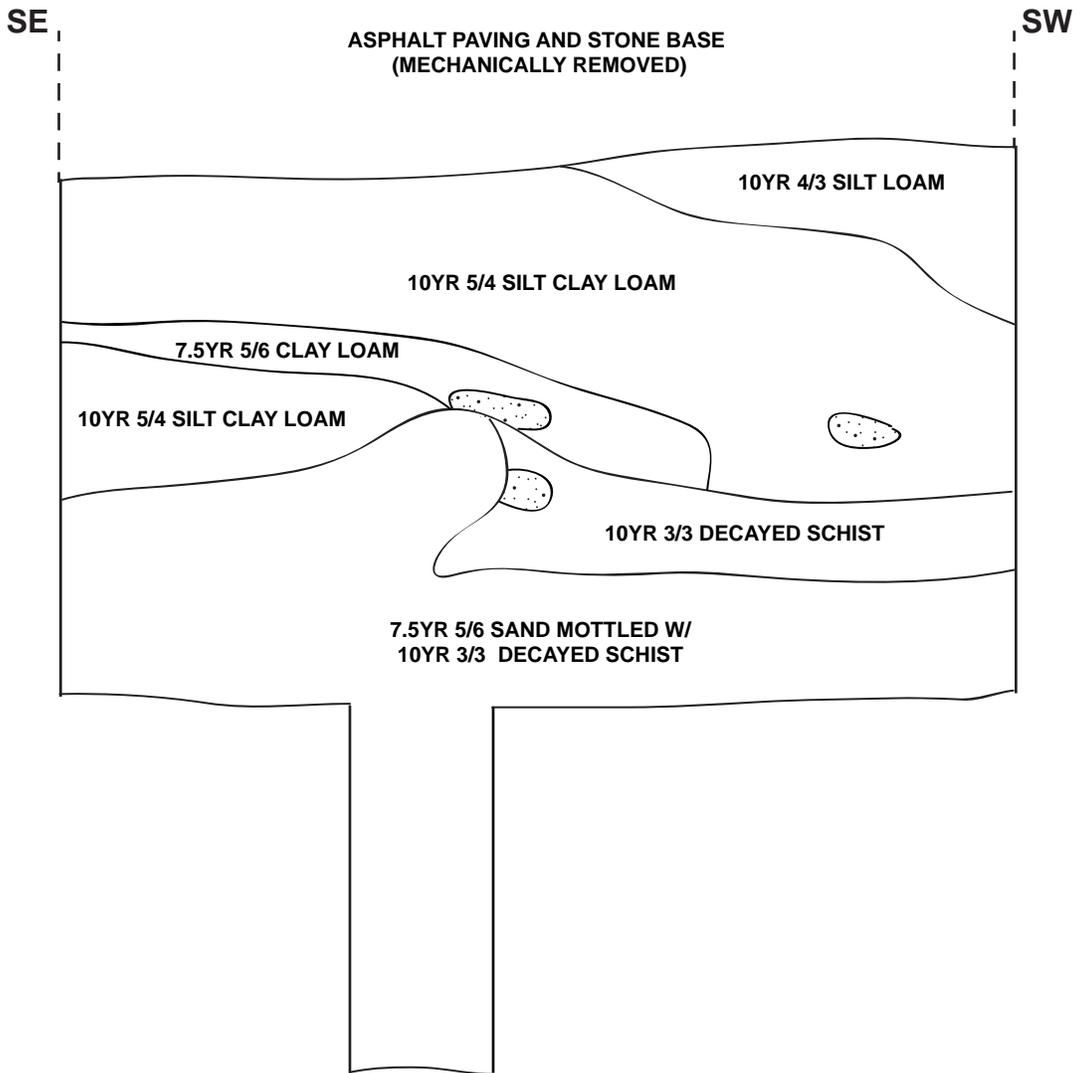
 BRICK

ANOMALY C-1, TRENCH 1, FEATURE 2 PLAN VIEW

FIGURE 22



TEST UNIT 5  
CLOSING PROFILE  
SOUTH WALL



0in 15.75in



0cm 40cm

Prepared by CHRS, Inc.

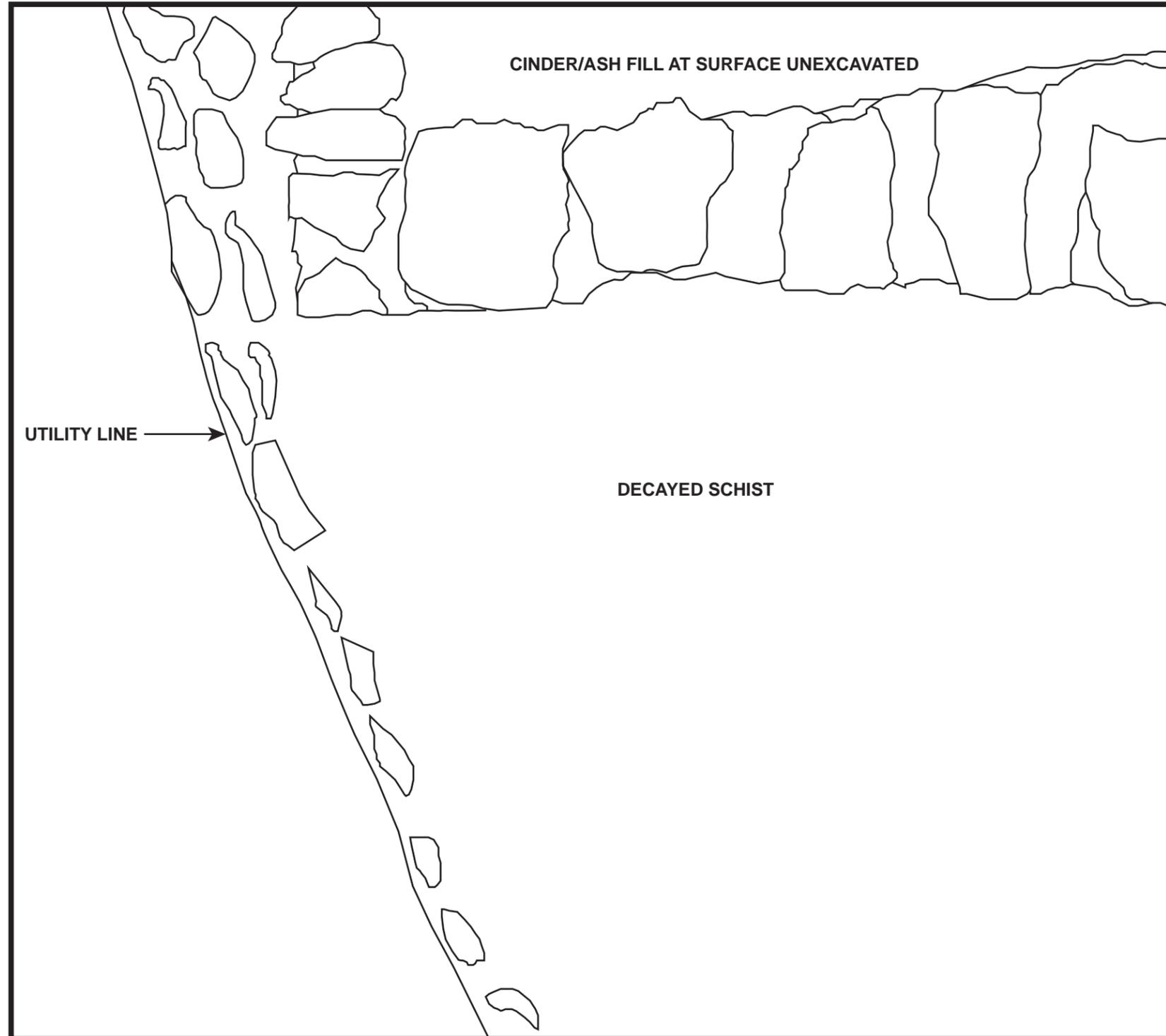
ANOMALY B, TEST UNIT 5, CLOSING PROFILE, SOUTH WALL

FIGURE 23

TEST UNIT 6  
FEATURE 3  
PLAN VIEW

NE

SE



CINDER/ASH FILL AT SURFACE UNEXCAVATED

UTILITY LINE →

DECAYED SCHIST

NW

SW

0in 7.87in

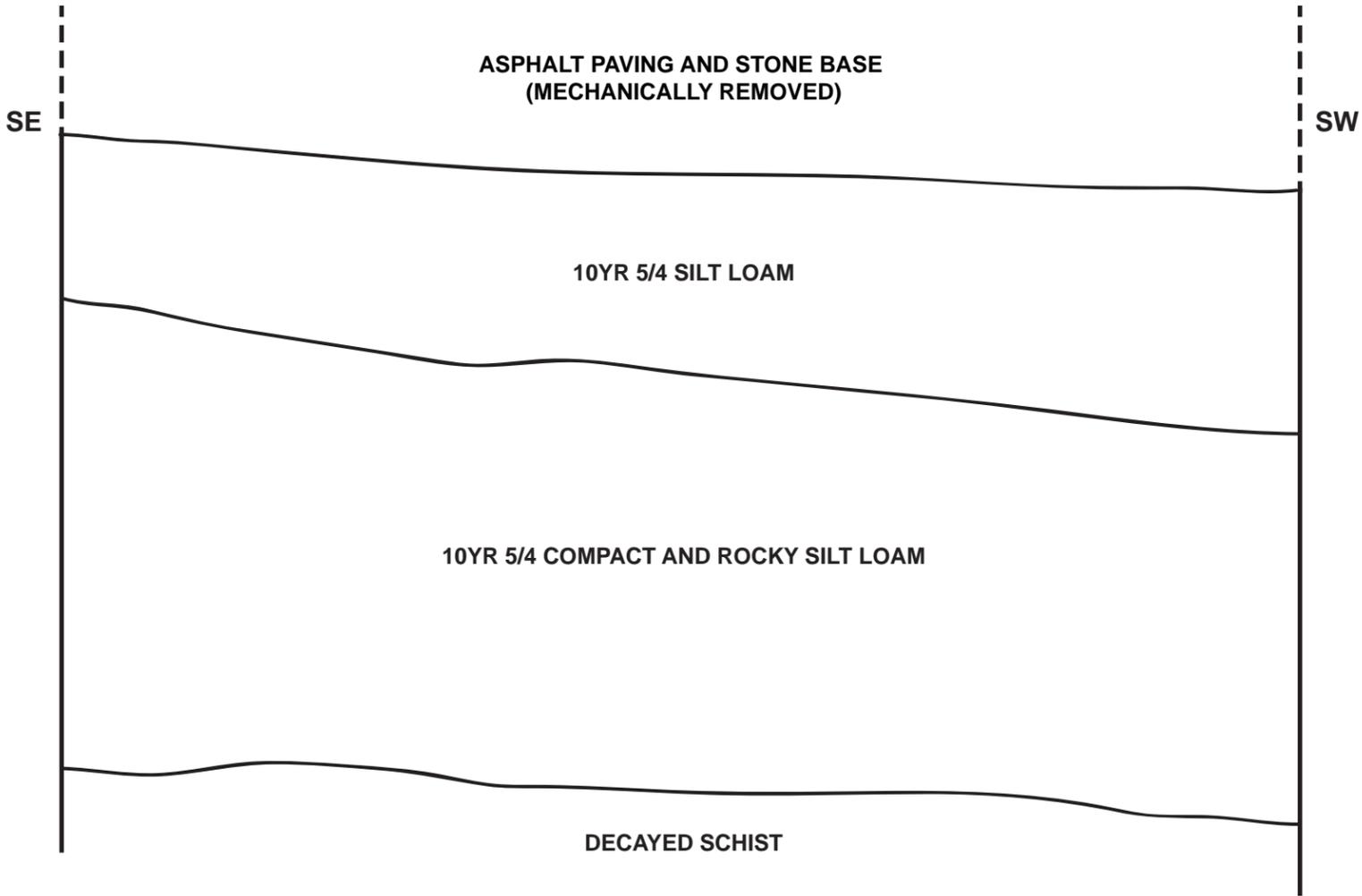
0cm 20cm

Prepared by CHRS, Inc.

ANOMALY A, TEST UNIT 6, FEATURE 3 PLAN VIEW

FIGURE 24

TEST UNIT 7  
SOUTH WALL  
CLOSING PROFILE



0in 7.87in



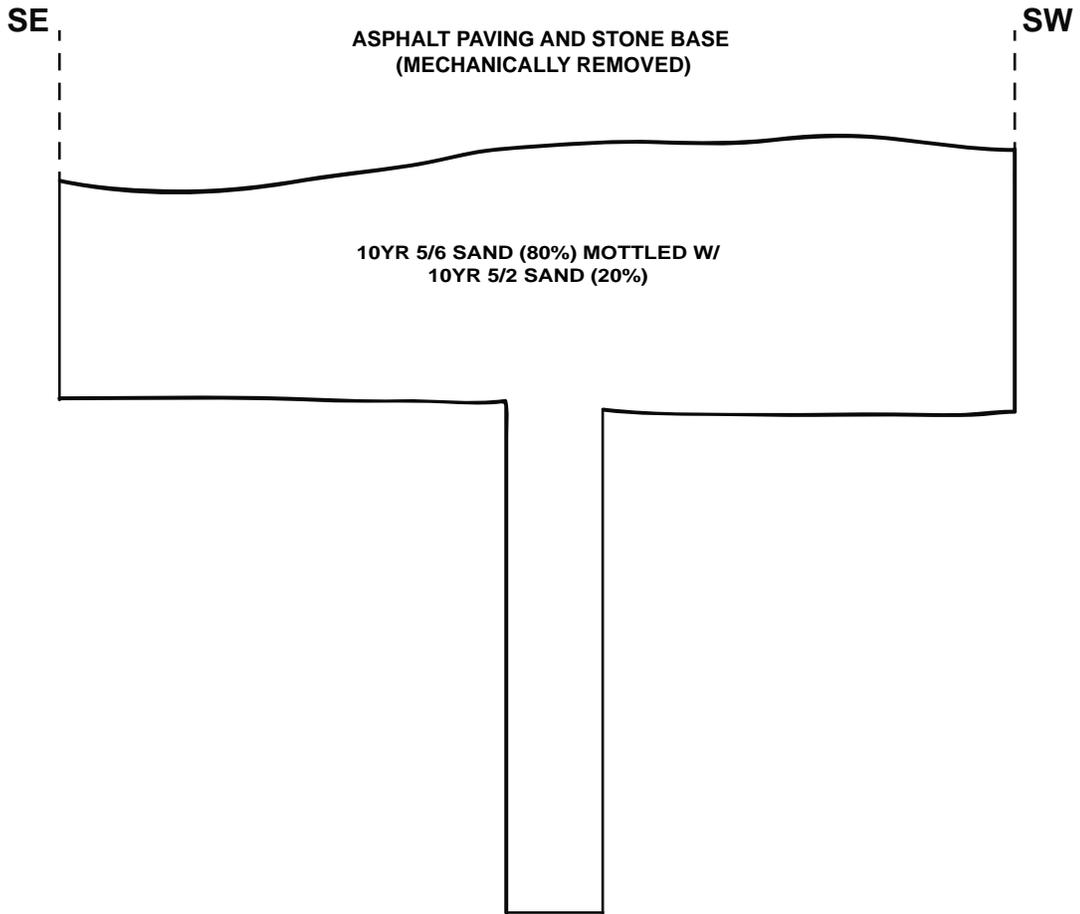
0cm 20cm

Prepared by CHRS, Inc.

TEST UNIT 7, CLOSING PROFILE, SOUTH WALL

FIGURE 25

**TEST UNIT 9  
CLOSING PROFILE  
SOUTH WALL**



0in 7.87in

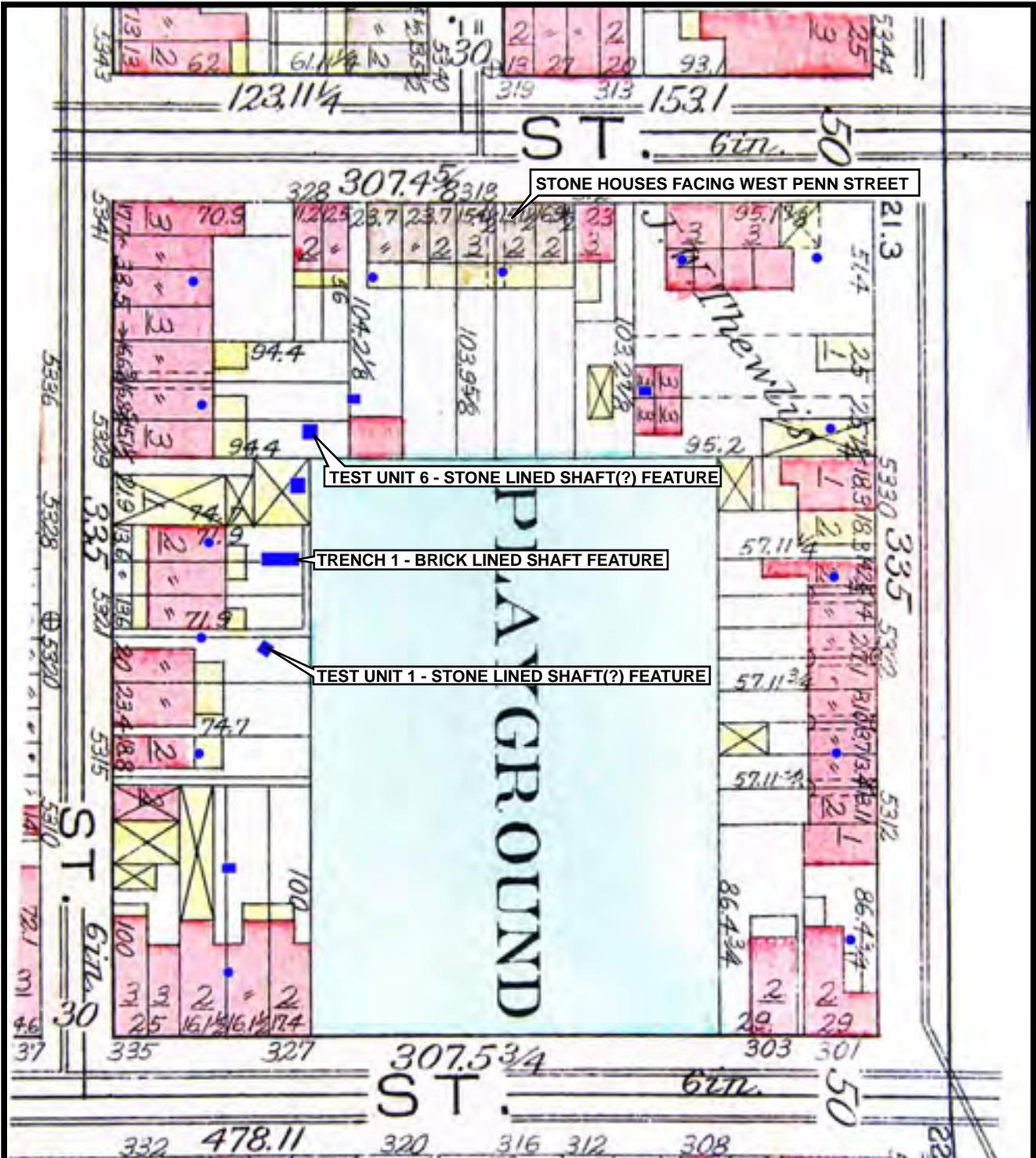


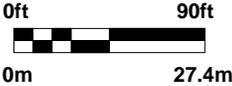
0cm 20cm

*Prepared by CHRS, Inc.*

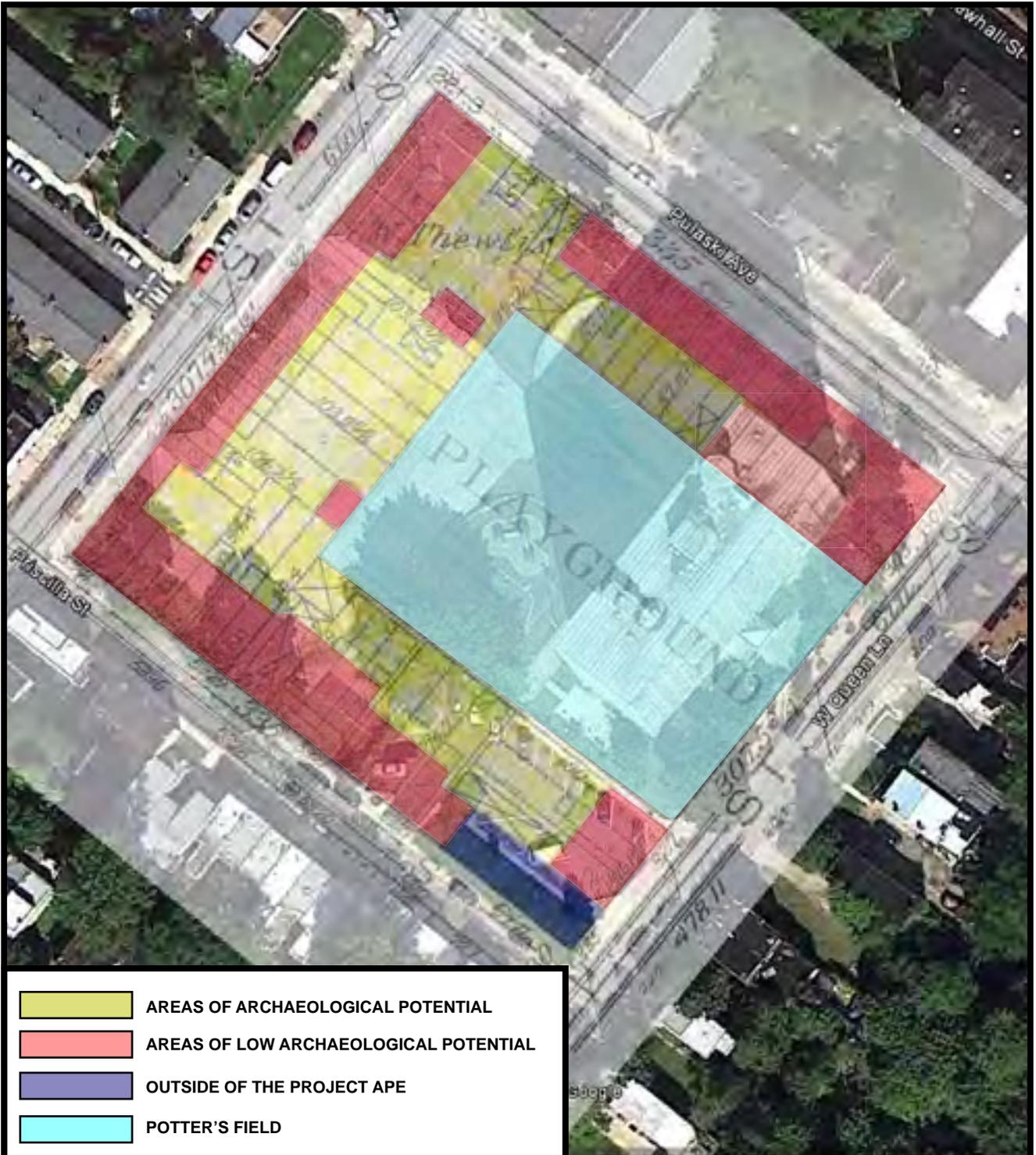
**TEST UNIT 9, CLOSING PROFILE, SOUTH WALL**

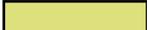
**FIGURE 26**



|   |  |                                     |
|---|--|-------------------------------------|
|   | SCALE  | SOURCE                              |
|  |  <p>0ft 90ft<br/>0m 27.4m</p> | <p>BROMLEY AND BROMLEY<br/>1923</p> |
| 1923 MAP WITH TEST LOCATIONS  |  | FIGURE 27                           |

Prepared by CHRS, Inc.

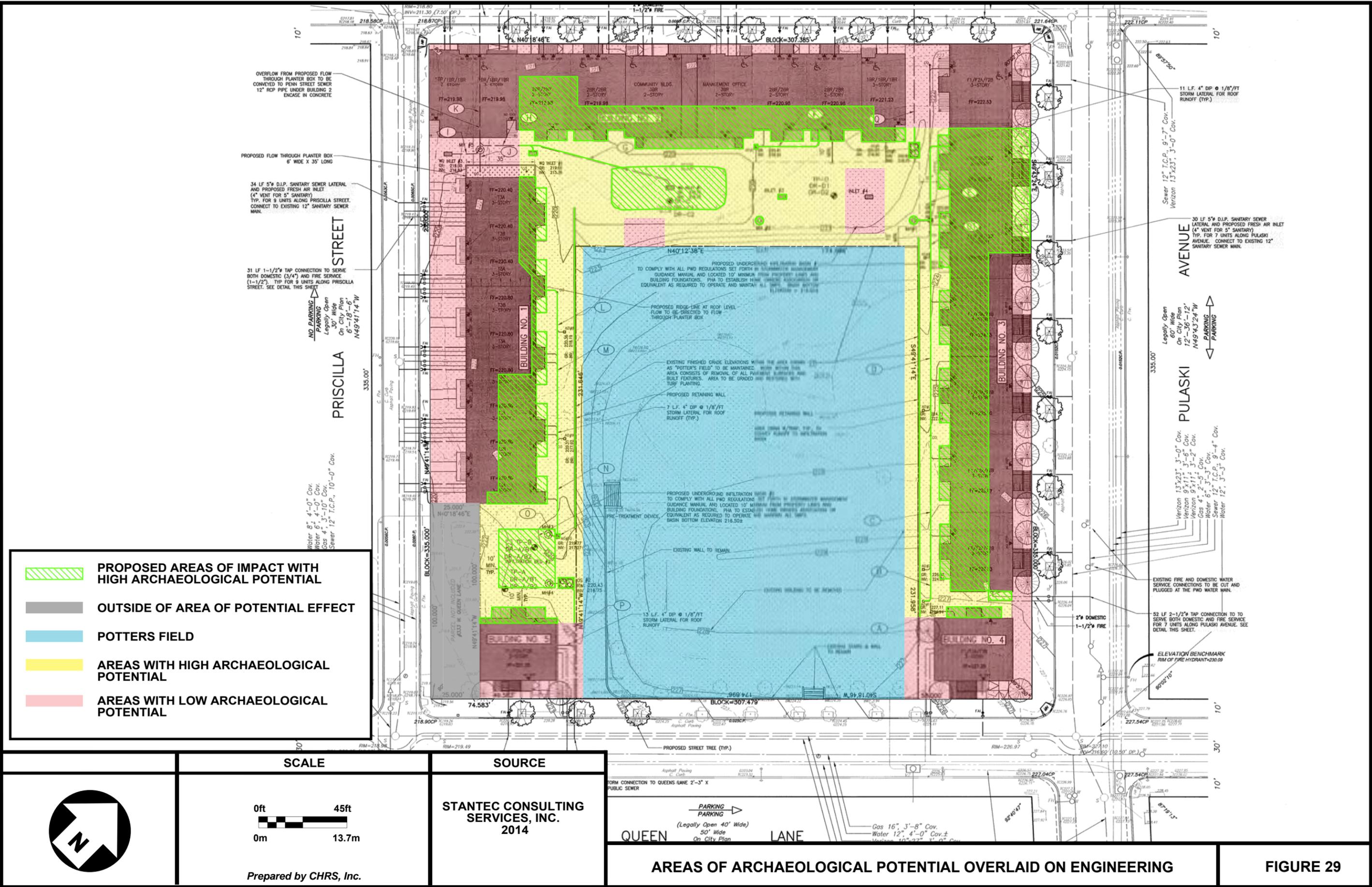


-  AREAS OF ARCHAEOLOGICAL POTENTIAL
-  AREAS OF LOW ARCHAEOLOGICAL POTENTIAL
-  OUTSIDE OF THE PROJECT APE
-  POTTER'S FIELD

| SCALE   |  | SOURCE  |
|---|--|---|
|  | 0ft <span style="margin-left: 100px;">95ft</span><br><br>0m <span style="margin-left: 100px;">28.9m</span><br><br>Prepared by CHRIS, Inc. | BROMLEY AND BROMLEY<br>1923<br><br>GOOGLE EARTH<br>2011 |

**AREAS OF ARCHAEOLOGICAL POTENTIAL**

**FIGURE 28**



**PROPOSED AREAS OF IMPACT WITH HIGH ARCHAEOLOGICAL POTENTIAL**

**OUTSIDE OF AREA OF POTENTIAL EFFECT**

**POTTERS FIELD**

**AREAS WITH HIGH ARCHAEOLOGICAL POTENTIAL**

**AREAS WITH LOW ARCHAEOLOGICAL POTENTIAL**

|  |              |  |
|--|--------------|--|
|  | <b>SCALE</b> | <b>SOURCE</b>                                    |
|  |              | <b>STANTEC CONSULTING SERVICES, INC.</b><br>2014 |

Prepared by CHRS, Inc.

**AREAS OF ARCHAEOLOGICAL POTENTIAL OVERLAID ON ENGINEERING**

**FIGURE 29**

APPENDIX C

PHOTOGRAPHS



Photograph 1: Test Unit 1 (Anomaly C1), closing profile and Feature 4, facing east.



Photograph 2: Trench 1 (Anomaly C1), closing profile and Feature 2, facing north.



Photograph 3: Feature 2 (Trench 1), facing north.



Photograph 4: Test Unit 5 (Anomaly B), closing profile, facing south.



Photograph 5: Test Unit 6 (Anomaly A), closing profile and Feature 3, facing east.



Photograph 6: Test Unit 6 (Anomaly A), closing profile and Feature 3, facing south.



Photograph 7: Test Unit 7 (percolation test), closing profile, facing north.



Photograph 8: Test Unit 8 (percolation test), closing profile, facing south.



Photograph 9: Test Unit 9 (percolation test), closing profile, facing south.



Photograph 10: Shovel Test Pit 5, brick wall and debris.



Photograph 11: Shovel Test Pit 8, stone wall and brick debris.



Photograph 12: Shovel Test Pit 11, stone wall and brick debris. Note that soil was sterile to the left of the wall.

## APPENDIX D

### BUILDING ACTIVITY BY LOT AND TEST LOCATION

**TABLE 4**  
BUILDINGS BY LOT AND DATE

Queen Lane Project  
City of Philadelphia, Pennsylvania

| Address on 1923 map | 1871   | 1876                          | 1885                          | 1889                           | 1895              | 1899              | 1906    | 1910              | 1911                   | 1923                   |
|---------------------|--------|-------------------------------|-------------------------------|--------------------------------|-------------------|-------------------|---------|-------------------|------------------------|------------------------|
| 301 Queen           |        | YES                           | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES (2)                |
| 303 Queen           | YES    | YES                           | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| Potter's Field      | Mapped | Mapped (w/ Priscilla St path) | Mapped (w/ Priscilla St path) | Mapped                         | Mapped            | Mapped            | Mapped  | Mapped            | Mapped                 | "Playground"           |
| 328 Queen           |        |                               | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 329 Queen           |        |                               | part of 328 Queen             | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 331 Queen           |        |                               | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 333 Queen           |        |                               | YES                           | part of 335 Queen              | part of 335 Queen | part of 335 Queen | YES     | part of 335 Queen | part of 335 Queen      | part of 335 Queen      |
| 335 Queen           |        |                               | YES                           | YES (3)                        | YES (3)           | YES (4)           | YES     | YES (3)           | YES (5)                | YES (5)                |
| 5315 Priscilla      | YES    | YES                           | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 5317 Priscilla      |        | YES                           | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 5319 Priscilla      |        | YES                           | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 5321 Priscilla      |        |                               | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 5323 Priscilla      |        |                               | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 5325 Priscilla.     |        |                               | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 5327 Priscilla      |        | path                          | path                          |                                |                   | YES (2)           | YES (2) | YES (2)           | YES (3)                | YES (3)                |
| 5329 Priscilla      | YES    | YES                           | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 5331 Priscilla      | YES    | YES                           | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 5333 Priscilla      | YES    | YES                           | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 5335 Priscilla      |        |                               |                               | YES                            | YES               | YES               | YES     | YES               | part of 5341 Priscilla | part of 5339 Priscilla |
| 5337 Priscilla      |        |                               |                               | YES                            | YES               | YES               | YES     | YES               | part of 5341 Priscilla | part of 5339 Priscilla |
| 5339 Priscilla      |        |                               |                               | YES                            | YES               | YES               | YES     | YES               | part of 5341 Priscilla | YES (3)                |
| 5341 Priscilla      | YES    | YES                           | YES                           | YES (now split into 4 parcels) | YES               | YES               | YES     | YES               | YES (4)                | YES                    |
| 328 Penn            |        | YES                           | YES                           | YES                            | YES               | YES               | YES     | YES               | YES                    | YES                    |
| 326 Penn.           |        | part of 328 Penn              | part of 328 Penn              | YES                            | YES               | YES               | YES     | part of 328 Penn  | YES                    | YES                    |

**TABLE 4**  
BUILDINGS BY LOT AND DATE

Queen Lane Project  
City of Philadelphia, Pennsylvania

| 324 Penn                                    |      | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES  | YES (2)                                      |
|---|------|------------------|------------------|-----------------------------|-----------------------------|-----------------------------|------------------|-----------------------------|--|--|
| Address on 1923 map                         | 1871 | 1876             | 1885             | 1889                        | 1895                        | 1899                        | 1906             | 1910                        | 1911   | 1923   |
| 322 Penn                                    |      | part of 324 Penn | part of 324 Penn | YES                         | YES                         | YES                         | YES              | YES                         | YES (2)                                      | YES (2)                                      |
| 320 Penn                                    |      | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES  | YES  |
| 318 Penn                                    |      | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES  | YES  |
| 316 Penn                                    |      | YES              | YES              | part of 314 Penn            | part of 314 Penn            | YES (2)                     | YES (2)          | part of 314 Penn            | YES  | YES  |
| 314 Penn                                    |      | YES              | YES              | YES (4), parcel is L shaped | YES (3), parcel is L shaped | YES (2)                     | YES (2)          | YES (6), parcel is L shaped | YES  | YES  |
| 312 Penn                                    |      | YES              | YES              | part of 314 Penn            | part of 314 Penn            | part of 314 Penn            | part of 314 Penn | part of 314 Penn            | YES plus 1 behind it with an unknown address | YES plus 1 behind it with an unknown address |
| Thewlis (corner Penn & Pulaski, no numbers) | YES  | YES              | YES              | YES (2)                     | YES (2)                     | YES (2)                     | YES (2)          | YES (2)                     | YES (7?)                                     | YES (7?)                                     |
| No # (facing Pulaski.)                      |      |                  |                  |                             |                             | part of 314 Penn            |                  |                             | YES (2)                                      | YES (3)                                      |
| No# (facing Pulaski)                        |      |                  |                  |                             |                             | Yes (2)<br>Part of 314 Penn | YES (2)          |                             | YES (3)                                      | YES (3)                                      |
| 5330 Pulaski.                               |      | YES              | YES              | YES                         | YES                         | YES (2)                     | YES (2)          | YES (2?)                    | YES (2)                                      | YES (2)                                      |
| 5328 Pulaski                                | YES  | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES  | YES  |
| 5326 Pulaski                                | YES  | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES (2?)                                     | YES  |
| 5324 Pulaski                                | YES  | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES  | YES  |
| 5322 Pulaski                                | YES  | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES  | YES  |
| 5320 Pulaski                                | YES  | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES  | YES  |
| 5318 Pulaski                                | YES  | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES  | YES  |
| 5316 Pulaski                                | YES  | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES (2)                                      | YES (2)                                      |
| 5314 Pulaski                                | YES  | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES  | YES  |
| 5312 Pulaski                                | YES  | YES              | YES              | YES                         | YES                         | YES                         | YES              | YES                         | YES  | YES  |

YES = Structure indicated on map

(#) = Number of structures indicated on the plot

| Test Number                      | Address on 1923 map             | 1755 | 1862 | 1871 | 1876 | 1885 | 1889 | 1899 | 1906 | 1911 | 1923 |
|----------------------------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|
| TU1 (Anomaly C-1)                | 5319 Priscilla                  |      |      |      | YES  |
| Trench (Anomaly C-1)             | 5323 & 5325 Priscilla           |      |      |      |      | YES  | YES  | YES  | YES  | YES  | YES  |
| TU5 (Anomaly B)                  | 5327 Priscilla                  |      |      |      |      |      |      | YES  | YES  | YES  | YES  |
| TU 6 (Anomaly A)                 | 5329 Priscilla                  |      |      |      | YES  | YES  |      |      |      | YES  | YES  |
| TU7                              | 324 Penn                        |      |      |      | YES  | YES  |      |      |      |      | YES  |
| TU8                              | 5334 Pulaski                    |      |      |      | YES  |
| TU9                              | 329 & 331 Queen                 |      |      |      |      | YES  | YES  | YES  | YES  | YES  | YES  |
| STP1                             | 5319 & 5321 Priscilla           |      |      |      | YES  |
| STP2                             | 5325 Priscilla                  |      |      |      |      | YES  | YES  | YES  | YES  | YES  | YES  |
| STP3                             | 5331 Priscilla                  |      |      | YES  |
| STP4                             | 5337 Priscilla                  |      |      | YES  |
| STP5                             | 324 Penn                        |      |      |      | YES  |
| STP6                             | 316 Penn                        |      |      |      | YES  |
| STP7                             | Thewlis                         |      |      |      |      |      | YES  | YES  | YES  | YES  | YES  |
| STP8                             | Thewlis (Corner Penn & Pulaski) |      |      |      | YES  |
| STP9                             | 5332 Pulaski                    |      |      |      |      |      | YES  | YES  | YES  | YES  | YES  |
| STP10                            | 5326 Pulaski                    |      |      | YES  |
| STP11                            | 5314 & 5316 Pulaski             |      |      | YES  |
| STP12                            | 301 Queen                       |      |      |      | YES  |
| STP13                            | 329 & 331 Queen                 |      |      |      |      | YES  | YES  | YES  | YES  | YES  | YES  |
| STP14                            | 5315 Priscilla                  |      |      |      | YES  |
| YES = Structure indicated on map |                                 |      |      |      |      |      |      |      |      |      |      |

APPENDIX F

BHP REPORT SUMMARY FORM



# Archaeological Report Summary Form

|      |               |
|------|---------------|
| ER#  | 2011-0018-101 |
| DATE | 11/21/2014    |

PROJECT CHECKLIST: Please fill out a copy of this checklist and include it with your initial report submission, (including with management summaries or draft reports). This form may be downloaded and expanded as needed, but please do not eliminate any fields.

1. **Report Title** Philadelphia Housing Authority (PHA) Queen Lane Project, City of Philadelphia, Pennsylvania, Phase I Archaeological Survey

2. **PI** Kenneth J. Basalik (  MA,  PhD) /**Firm** or Institution CHRS, Inc.

3. **Report Date** (Month/Day/Year) 11/2014

4. **Number of Pages** 158

5. **Agency Name** HUD Federal  State

6. **Project Area County/Municipality** (list all)

| County       | Municipality |
|--------------|--------------|
| Philadelphia | Philadelphia |

7. **Project Area Drainage(s)**, (list all)

| Sub-basin            | Watershed |
|----------------------|-----------|
| Lower Delaware River | 3         |

8. **Project Area Physiographic Zone(s)** (list All) (Use DCNR Map 13 compiled by W.D. Sevon, Fourth Edition, 2000.)

| Physiographic Zone |
|--------------------|
| Piedmont Upland    |

9. **Report Type** (some reports are combinations, check as many as apply to this report)

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Phase IA/Sensitivity Study | <input type="checkbox"/> Historic Structures      |
| <input checked="" type="checkbox"/> Phase I                    | <input type="checkbox"/> Geomorphology            |
| <input type="checkbox"/> Phase II                              | <input type="checkbox"/> Determination of Effects |
| <input type="checkbox"/> Phase III                             | <input type="checkbox"/> Other _____              |

10. **Total Project Area** 0.9 hectares

11. **Low Probability/Disturbed Areas** 0 hectares = 0 % of project area

12. **Phase I Methods used for total project** (check as many as apply)

- shovel tests,  controlled test units/deep tests,

surface survey,  informant interview,  other: \_\_\_\_\_

13. **Total Number of Sites Encountered/Phase I** 1

Total Sites Tested/Phase II \_\_\_\_\_

Total Sites Excavated/Phase III \_\_\_\_\_

**14. Updated PASS Information:** Please complete an updated PASS form **for each site** reported by this report. Updated forms need only include the new information and the site number and name.

**15. PASS Site Specific Information:** In addition, the following pages must also be completed **for each site**. Complete only the portions that pertain to the current report. If the report is a stand-alone Phase II, you do not need to fill in the Phase I methods, since they should have been included in the summary form for the previous report.

## 15. PASS Site Specific Information

Please complete the following **for each site** reported by this report.

**PASS NUMBER** \_\_\_\_\_

### A. Phase I Methods (how the site was located - check as many as apply)

- shovel tests,       controlled test units/deep tests,  
 surface survey,       informant interview,       other: \_\_\_\_\_

### B. Phase II Methods

- controlled surface collection  
 controlled excavation w. screening of plowzone, > 5 units  
 mechanical stripping of plowzone (\_\_\_\_\_%)  
 deep excavation units  
 remote sensing  
 other \_\_\_\_\_

square meters of site tested: \_\_\_\_\_ sq. m

% of site area tested: \_\_\_\_\_ %

### C. Phase III Methods

- controlled surface collection  
 controlled excavation w. screening of plowzone, > 5 units  
 mechanical stripping of plowzone \_\_\_\_\_%  
 deep excavation  
 block excavations  
 remote sensing  
 environmental reconstruction (soils, floral, pollen)  
 dietary reconstruction (floral, faunal)  
 intensive lithic analysis (functional)  
 intensive lithic analysis (technological)  
 raw material sourcing  
 ceramic analysis (seriation)  
 ceramic analysis (functional)  
 blood residue  
 other \_\_\_\_\_

square meters of site tested: \_\_\_\_\_ sq. m

% of site area tested: \_\_\_\_\_ %

**Recommendations** (normally completed only after Phase II):

-- NR Eligibility recommendation

 eligible,  ineligible,  undetermined

-- reasons for determination (check as many as apply; expand as needed)

 eligible: Criterion A. Explain \_\_\_\_\_ eligible: Criterion B. Explain \_\_\_\_\_ eligible: Criterion C. Explain \_\_\_\_\_ eligible: Criterion D: settlement patterning (intersite patterning) intrasite artifact patterning features radiocarbon dating organic preservation evidence of culture change through time stratified  temporally discrete clusters burials/human remains technological economics ethnicity dietary other(specify): \_\_\_\_\_ ineligible disturbed ephemeral occupation redundant information undatable other (specify): \_\_\_\_\_**E. Artifacts/Collections** will be donated to the State Museum of Pennsylvania gift agreement from private owner enclosed**- or -** transfer of responsibility from State Agency enclosed election of repository from Federal Agency enclosed artifacts washed/marked/cataloged following State  
Museum guidelines

-- collection will be submitted by \_\_\_\_\_(date)

will be donated to other approved repository ( **this option must be negotiated with the BHP and State Museum or stated as stipulation in MOA**)

curation agreement enclosed

artifacts washed/marked/cataloged following host guidelines

-- collection will be submitted by \_\_\_\_\_(date)

will be retained by land owner ( whole or  partial collection)

expanded documentation enclosed for items retained

proof enclosed that owner was notified of the option to

donate the collection to the State Museum and chose to retain the collection:

letter from owner indicating desire to retain collection

- or -

agency or representative discussed donation option with owner on \_\_\_\_\_(date)

- and -

copy of letter and certified letter receipt indicating that the owner was offered this option in writing.

APPENDIX G

PASS FORM

**PENNSYLVANIA ARCHAEOLOGICAL SITE SURVEY**  
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

**Identification and Location**

SITE NAME Queen Lane Apartments Project Site SITE NUMBER \_\_\_\_\_ UPDATE? Y / N  
PUBLISHED REFERENCES (Including compliance reports.) Philadelphia Housing Authority (PHA) Queen Lane Project, City of Philadelphia, Pennsylvania, Phase I Archaeological Survey ER# 2011-0018-101  
COUNTY Philadelphia TWP. City of Philadelphia NEAREST TOWN \_\_\_\_\_

**Site Characteristics**

SITE AREA ~10,080 SQUARE METERS BASIS:  COMPUTED ON THE GROUND OR  COMPUTED ON MAP

Basis for site boundary definition: Historic maps show structures from the same period that likely also have remains below the pavement.

STRATIFIED?  UNKNOWN  NO  
 YES :  TOP STRATUM VISIBLE OR  BURIED UNDER STERILE

SITE DISCOVERY METHOD: (check primary one only)  Previously Recorded (update)

|   |  |
|---|--|
| <input type="checkbox"/> Unknown                              | <input type="checkbox"/> Auger probing             |
| <input type="checkbox"/> Collector interview                  | <input checked="" type="checkbox"/> Shovel testing |
| <input type="checkbox"/> Collector interview with field check | <input type="checkbox"/> Systematic test units     |
| <input type="checkbox"/> Non-systematic surface survey        | <input type="checkbox"/> Extensive excavation      |
| <input type="checkbox"/> Systematic surface survey            |  |
| <input type="checkbox"/> Systematic shovel testing            |  |
| <input checked="" type="checkbox"/> Remote sensing            |  |

POTENTIAL FOR ORGANIC PRESERVATION: (check one)

- Unknown
- None
- Low potential for organic preservation
- Conditions favorable for organic preservation, none documented
- Organic material recovered, unknown quality of preservation
- Organic material recovered, poor quality of preservation
- Organic material recovered, good quality of preservation

SITE TYPE:

Prehistoric

- Unknown function surface scatter less than 20m radius
- Open habitation, prehistoric
- Rockshelter/Cave
- Quarry
- Lithic Reduction
- Village (including historic Indian)
- Shell Midden
- Earthwork
- Petroglyph/Pictograph
- Burial Mound
- Cemetery
- Other specialized aboriginal site
- Isolated fluted point locus

- Isolated find (diagnostic artifact)
- Paleontological site
- Path

Historic

- Historic and Prehistoric
- Domestic Site
- Military Site
- Industrial Site
- Shipwreck Site
- Commercial Site
- Religious Site
- Unknown/other/multiple types
- Farmstead

SITE NUMBER OR KEY NUMBER OF ANY ASSOCIATED RESOURCES: \_\_\_\_\_

CHRONOLOGY (check all that apply)

Prehistoric

- |  |  |
|--|--|
| <input type="checkbox"/> Unknown Prehistoric   | <input type="checkbox"/> Transitional Tradition  |
| <input type="checkbox"/> Paleoindian   | <input type="checkbox"/> Woodland  |
| <input type="checkbox"/> Early <input type="checkbox"/> Middle <input type="checkbox"/> Late | <input type="checkbox"/> Early <input type="checkbox"/> Middle <input type="checkbox"/> Late |
| <input type="checkbox"/> Archaic   | <input type="checkbox"/> Proto Historic  |
| <input type="checkbox"/> Early <input type="checkbox"/> Middle <input type="checkbox"/> Late |  |

Historic

- |   |   |
|---|---|
| <input type="checkbox"/> Unknown Historic   | <input checked="" type="checkbox"/> 1800-1900   |
| <input type="checkbox"/> Contact-Historic   | <input checked="" type="checkbox"/> 1800-1825 <input checked="" type="checkbox"/> 1825-1850 |
| <input type="checkbox"/> 1550-1600  | <input checked="" type="checkbox"/> 1850-1875 <input checked="" type="checkbox"/> 1875-1900 |
| <input type="checkbox"/> 1600-1650  | <input checked="" type="checkbox"/> 1900-   |
| <input type="checkbox"/> 1650-1700  | <input checked="" type="checkbox"/> 1900-1925 <input checked="" type="checkbox"/> 1925-1950 |
| <input checked="" type="checkbox"/> 1700-1800   | <input type="checkbox"/> 1950-1975 <input type="checkbox"/> 1975+                           |
| <input type="checkbox"/> 1700-1725 <input type="checkbox"/> 1725-1750                       |   |
| <input checked="" type="checkbox"/> 1750-1775 <input checked="" type="checkbox"/> 1775-1800 |   |

BASIS FOR CHRONOLOGICAL INTERPRETATION (check all that apply):

- |  |  |
|--|--|
| <input type="checkbox"/> Diagnostic lithic artifacts | <input checked="" type="checkbox"/> Historical Documentation (attach bibliography) |
| <input type="checkbox"/> Ceramic types               | <input type="checkbox"/> Radiocarbon Dates (list below)                            |

RADIOCARBON DATES \_\_\_\_\_ ± \_\_\_\_\_  
 \_\_\_\_\_ ± \_\_\_\_\_

FEATURES?  NONE FOUND  YES (identify below) If count is not known, use a "P" for present.

Prehistoric

| Quantity | Prehistoric Features |
|----------|----------------------|
|          | Present, Prehistoric |
|          | Bundle Burials       |
|          | Burial Mound         |
|          | Burials              |
|          | Burned Areas         |
|          | Cache Pits           |
|          | Circular Houses      |
|          | Cremation Burials    |
|          | Earthworks           |

| Quantity | Prehistoric Features     |
|----------|--------------------------|
|          | Extended Burials         |
|          | Fish Weir                |
|          | Flexed Burials           |
|          | Hearth/Thermal Feature   |
|          | House Pattern            |
|          | Longhouses               |
|          | Midden Areas             |
|          | Ossuary                  |
|          | Other, Prehistoric _____ |

| Quantity | Prehistoric Features                                   |
|----------|--|
|          | Path   |
|          | Petroglyph/Pictograph                                  |
|          | Postmolds  |
|          | Quarry Pit   |
|          | Semi-Subterranean Structures (e.g. Keyhole Structures) |
|          | Shell Heap   |
|          | Stockade   |
|          | Storage Pits/Trash Pits                                |

Historic (Please include any **associated** features or buildings visible outside of the site areas)

| Quantity | Historic Features |
|----------|-------------------|
|          | Present, Historic |
|          | Burial            |
|          | Canal Bed         |

| Quantity | Historic Features |
|----------|-------------------|
|          | Canal Lock        |
|          | Canal Tunnel      |
|          | Cellar            |

| Quantity | Historic Features |
|----------|-------------------|
| P        | Cemetery          |
|          | Cistern           |
|          | Dam               |

| Quantity | Historic Features        |
|----------|--------------------------|
|          | Ditch                    |
|          | Fenceline                |
|          | Flower Garden/Bed        |
|          | Fortification            |
|          | Foundation               |
|          | Ice House                |
|          | Iron Furnace             |
|          | Kiln                     |
|          | Midden                   |
|          | Millrace                 |
|          | Monument/Boundary Marker |

| Quantity | Historic Features                              |
|----------|--|
|          | Oil Well                                       |
| 3        | Other, Historic <u>Shaft, unknown function</u> |
|          | Oven   |
| 1        | Pipeline                                       |
|          | Pit  |
|          | Posthole/Postmold                              |
|          | Privy  |
|          | Quarry/Mine                                    |
|          | Railroad                                       |
|          | Road   |
|          | Root Cellar                                    |

| Quantity | Historic Features              |
|----------|--------------------------------|
|          | Shipwreck                      |
|          | Springhouse/Springbox          |
|          | Standing Building or Structure |
|          | Still                          |
|          | Vat                            |
|          | Walk/Path                      |
| 6        | Wall                           |
|          | Water Well                     |
|          | Wharf                          |

**Artifacts (Complete inventories may be attached, but please complete the summaries below)**

ARTIFACT DATA RECOVERY METHOD:

- |   |   |
|---|---|
| <input type="checkbox"/> Non-provenienced   | <input type="checkbox"/> Controlled excavation  |
| <input type="checkbox"/> Surface collection not representative of all artifacts   | <input type="checkbox"/> Representative sample of all artifacts (tools and/or debitage, etc.) |
| <input type="checkbox"/> Non-controlled excavation (i.e. artifact location not mapped and/or not all artifacts collected) | <input type="checkbox"/> Representative sample of tools only                                  |
| <input type="checkbox"/> Controlled surface collection  | <input type="checkbox"/> Estimate based on surface collections and/or excavation              |
|   | <input type="checkbox"/> Estimate based on informant interview                                |

LITHIC MATERIALS FOUND ON SITE:

| Quantity | Material       |
|----------|----------------|
|          | Argillite      |
|          | Chalcedony     |
|          | Chert/Flint    |
|          | Crystal Quartz |
|          | Diabase        |
|          | Diorite        |
|          | English Flint  |
|          | French Flint   |
|          | Granite        |

| Quantity | Material              |
|----------|-----------------------|
|          | Hematite              |
|          | Hornfels              |
|          | Ironstone             |
|          | Jasper                |
|          | Limestone/Dolomite    |
|          | Metabasalt/Greenstone |
|          | Metasandstone         |
|          | Onondaga Chert        |
|          | Quartz                |

| Quantity | Material                    |
|----------|-----------------------------|
|          | Quartzite                   |
|          | Rhyolite (Metarhyolite)     |
|          | Sandstone                   |
|          | Shale                       |
|          | Siltstone                   |
|          | Slate                       |
|          | Steatite                    |
|          | Vanport Chert (Flint Ridge) |
|          | Unidentified                |

ARTIFACT CATEGORIES (Use the comments section to list any artifacts not categorize in these tables. Include either exact quantities or relative as follows:

|   |              |
|---|--------------|
| B | Less than 25 |
| C | 25 - 50      |
| D | 51 - 100     |

|   |           |
|---|-----------|
| E | 101 - 200 |
| F | 201 - 400 |
| G | 401 - 800 |

|   |                           |
|---|---------------------------|
| H | 801 or More               |
| I | Present, Quantity Unknown |

|   |                 |
|---|-----------------|
| J | Present, Common |
|---|-----------------|

Prehistoric (Include quantity by material type if appropriate, using the LITHIC list above.

Examples:

|   |                |                        |
|---|----------------|------------------------|
| D | Stone Debitage | 52 rhyolite / 26 chert |
| 2 | Grooved Axes   | sandstone              |

| Quantity | Prehistoric Artifact Types                | Material Type |
|----------|---|---------------|
|          | Adzes                                     |               |
|          | Antler & Bone Artifacts                   |               |
|          | Bannerstones                              |               |
|          | Celts                                     |               |
|          | Ceramics (Prehistoric)                    |               |
|          | Chipped Stone Tools                       |               |
|          | Clay Pipes (Prehistoric)                  |               |
|          | Cordage                                   |               |
|          | Core                                      |               |
|          | Fire Cracked Rock                         |               |
|          | Gorgetts/Pendants/Non-Utilitarian Lithics |               |
|          | Grooved Axes                              |               |
|          | Ground & Polished Stone Tools             |               |
|          | Hammerstones                              |               |

| Quantity | Prehistoric Artifact Types     | Material Type |
|----------|--------------------------------|---------------|
|          | Hoes                           |               |
|          | Human Bone                     |               |
|          | Netsinkers                     |               |
|          | Non-Artifactual Bone or Antler |               |
|          | Non-Artifactual Floral Remains |               |
|          | Non-Artifactual Shell          |               |
|          | Pestles/Grinding/Pitted Stones |               |
|          | Shell Artifacts                |               |
|          | Steatite Bowls/Fragments       |               |
|          | Stone Debitage                 |               |
|          | Stone Pipes                    |               |
|          | Wooden Artifacts               |               |

Historic (Include Quantities by Group as appropriate from table below):

|                  |                    | Material Class |       |       |            |         |            |           |
|------------------|--------------------|----------------|-------|-------|------------|---------|------------|-----------|
|                  |                    | Ceramic        | Glass | Metal | Geological | Plastic | Biological | Composite |
| Functional Class | Architectural      |                |       |       |            |         |            |           |
|                  | Personal           |                |       |       |            |         |            |           |
|                  | Kitchen            |                |       |       |            |         |            |           |
|                  | Arms/Weapons       |                |       |       |            |         |            |           |
|                  | Activities         |                |       |       |            |         |            |           |
|                  | Industrial (Tools) |                |       |       |            |         |            |           |
|                  | Electrical         |                |       |       |            |         |            |           |
|                  | Furniture          |                |       |       |            |         |            |           |
|                  | Unidentified       |                |       |       |            |         |            |           |

DIAGNOSTIC ARTIFACTS

**Prehistoric Projectile Points** (Include counts by material types, using the LITHIC list above.)

Examples:

|   |                   |                          |
|---|-------------------|--------------------------|
| 7 | Broadspears       | 5 rhyolite / 2 argillite |
| 2 | Lehigh/Snook Kill | chert                    |

| Quantity | Prehistoric Point Types               | Material |
|----------|---------------------------------------|----------|
| -----    | Paleoindian Points                    | -----    |
|          | Pre-Clovis                            |          |
|          | Clovis                                |          |
|          | Mid-Paleo (Folsom)                    |          |
|          | Late Paleo (Plano)                    |          |
|          | Hardaway-Dalton                       |          |
|          | Fluted Point                          |          |
| -----    | Early Archaic Points                  | -----    |
|          | Palmer                                |          |
|          | Kirk Corner-notched                   |          |
|          | St. Charles                           |          |
|          | Thebes                                |          |
|          | Charleston                            |          |
| -----    | Middle Archaic Points                 | -----    |
|          | Bifurcate Points                      |          |
|          | Middle Archaic Notched/Stemmed Points |          |
|          | MacCorkle                             |          |
|          | Saint Albans                          |          |
|          | LeCroy                                |          |
|          | Otter Creek                           |          |
|          | Kanawha                               |          |
|          | Kirk Stemmed                          |          |
| -----    | Late Archaic Points                   | -----    |
|          | Piedmont Tradition                    |          |

| Quantity | Prehistoric Point Types      | Material |
|----------|------------------------------|----------|
|          | Laurentian Tradition         |          |
|          | Steubenville                 |          |
| -----    | Transitional Tradition       | -----    |
|          | Koens Crispin/Savannah River |          |
|          | Broadspears                  |          |
|          | Lehigh/Snook Kill            |          |
|          | Perkiomen                    |          |
|          | Susquehanna                  |          |
| -----    | Early Woodland Points        | -----    |
|          | Adena (Stemmed)              |          |
|          | Meadowood                    |          |
|          | Helgramite                   |          |
|          | Orient                       |          |
| -----    | Middle Woodland Points       | -----    |
|          | Raccoon Notched              |          |
|          | Snyders                      |          |
|          | Basal Notched                |          |
|          | Jacks Reef                   |          |
|          | Fox Creek                    |          |
| -----    | Late Woodland Points         | -----    |
|          | Triangles (Late Woodland)    |          |
| -----    | Proto Historic Points        | -----    |
|          | Triangles (Proto Historic)   |          |

**Prehistoric Ceramic Types** (Include counts by temper types - if not implied in name - using the LITHIC list above. Additional options include "grit", "grog" or "shell".)

| Quantity | Prehistoric Ceramics                                       | Temper |
|----------|--|--------|
| -----    | Early Woodland Ceramics                                    | -----  |
|          | Accokeek Ware  |        |
|          | Adena Plain  |        |
|          | Grit Tempered Flat Bottom                                  |        |
|          | Half-Moon Cordmarked                                       |        |
|          | Interior-Exterior Cordmarked Small Temper-Conical/Globular |        |

| Quantity | Prehistoric Ceramics   | Temper |
|----------|--|--------|
|          | Marcy Creek  |        |
|          | Steatite Tempered  |        |
|          | Vinette I (Interior-Exterior Cordmarked Large Temper-Conical/Globular) |        |
| -----    | Middle Woodland/Middle to Late Woodland Ohio Valley Ceramics           | -----  |
|          | Abbott Zoned   |        |

| Quantity | Prehistoric Ceramics                               | Temper |
|----------|--|--------|
|          | Grit Tempered Exterior Cordmarked-Conical/Globular |        |
|          | Grit Tempered Net Impressed-Conical/Globular       |        |
|          | Point Peninsula Series                             |        |
|          | Shell Tempered Net Impressed-Conical/Globular      |        |
|          | Watson Cord Marked                                 |        |
| -----    | Late Woodland Ceramics                             | -----  |
|          | Blue Rock Valanced                                 |        |
|          | Chance Series                                      |        |
|          | Chautauqua Cordmarked                              |        |
|          | Clemson Island/Princess Point Series               |        |
|          | Early Ontario Iroquois                             |        |
|          | Erie Series  |        |
|          | Funk Incised                                       |        |
|          | Keyser Cordmarked                                  |        |
|          | Lancaster Incised                                  |        |
|          | Mahoning Cord Marked                               |        |
|          | McFate Incised                                     |        |
|          | McFate/Quiggle Undifferentiated                    |        |
|          | Meade Island Series                                |        |
|          | Minguannan Series                                  |        |
|          | Monongahela (Undifferentiated)                     |        |
|          | Monongahela Cordmarked-Late Woodland               |        |
|          | Monongahela Incised                                |        |

| Quantity | Prehistoric Ceramics                   | Temper |
|----------|--|--------|
|          | Monongahela Plain                      |        |
|          | Monongahela Somerset Phase             |        |
|          | Oak Hill Series                        |        |
|          | Overpeck                               |        |
|          | Owasco Series                          |        |
|          | Page Cordmarked                        |        |
|          | Potomac Creek Cord Impressed           |        |
|          | Proto-Susquehannock                    |        |
|          | Quiggle Incised                        |        |
|          | Richmond Incised                       |        |
|          | Schultz Incised                        |        |
|          | Shenks Ferry (Undifferentiated)        |        |
|          | Shenks Ferry Cordmarked                |        |
|          | Shenks Ferry Incised (Blue Rock Phase) |        |
|          | Shenks Ferry Incised (Stewart Phase)   |        |
|          | Shepard Cordmarked                     |        |
|          | Strickler Cordmarked                   |        |
|          | Susquehannock (Undifferentiated)       |        |
|          | Townsend                               |        |
|          | Tribal Series                          |        |
|          | Washington Boro Incised                |        |
|          | Whittlesey                             |        |
|          | Wyoming Valley Series                  |        |

**Historic Diagnostics** (For comparable site data, using general diagnostic categories. **More specific identification related to decoration, form, or markings should be included in the comments or site inventory**).

| Quantity               | Historic Artifact  |
|------------------------|--|
| <b><i>Ceramics</i></b> |  |
|                        | Whieldon   |
|                        | Creamware  |
|                        | Pearlware (All Decoration Types)   |
|                        | Transitional Whiteware   |
|                        | Ironstone  |
|                        | Chinese Porcelain  |
|                        | English Porcelain  |
|                        | American Stoneware (Blue and Gray)   |
|                        | European Stoneware (white salt-glazed, English Brown, Rhenish, Fulham, Nottingham) |

| Quantity            | Historic Artifact                        |
|---------------------|--|
|                     | Redware (All types)                      |
|                     | Basalt                                   |
|                     | European Redware (Jackfield, dry-bodied) |
|                     | Tin-Glazed Earthenware                   |
|                     | Yellowware (Rockingham)                  |
|                     | Clay pipes                               |
| <b><i>Glass</i></b> |  |
|                     | Blown Bottle Base                        |
|                     | Machine-Made Bottle Base (Owen's Scar)   |
|                     | Snapcase Bottle                          |
|                     | Pressed Glass                            |

| Quantity                         | Historic Artifact |
|----------------------------------|-------------------|
| <b><i>Metal</i></b>              |                   |
|                                  | Wrought Nails     |
|                                  | Cut Nails         |
|                                  | Wire Nails        |
| <b><i>Arms &amp; Weapons</i></b> |                   |
|                                  | French Gunflint   |
|                                  | English Gunflint  |
|                                  | Gun parts         |
|                                  | Ammunition        |
| <b><i>Miscellaneous</i></b>      |                   |
|                                  | Coin              |
|                                  | Button            |
|                                  | Bead              |
|                                  | Toy               |

**Physical Data and Site Condition** Instructions available. Please fill out as much as is known, especially those items that are measured or observed on site.

On site SOIL ASSOCIATION Urban Land-Chester Complex SOIL MAPPING UNIT UdB  
 Most common other mapped SOIL UNIT(S) within 500 meters \_\_\_\_\_ (may list two)  
 MAP ELEVATION 227 feet SLOPE PERCENTAGE 0%-8% SLOPE DIRECTION northeast  
 SLOPE BASIS  MEASURED ON SITE  ESTIMATED FROM SOIL SURVEY OR MAP  
 BEDROCK Mica Schist Most predominant other BEDROCK(S) within 5 km \_\_\_\_\_ (may list two)  
 PHYSIOGRAPHIC PROVINCE Piedmont Upland Section (If within 10 km of a Physiographic Province boundary, name the neighboring PHYSIOGRAPHIC PROVINCE \_\_\_\_\_)  
 TOPOGRAPHIC SETTING (check the one that best describes the setting):  
 Island  Lower Hillslope  Hill/Ridge Toe  
 Beach  Middle Hillslope  Upland Flat  
 Floodplain  Upper Hillslope  Hilltop  
 Rise in Floodplain  Stream Bench (along low order stream)  Ridge Top  
 Terrace (Pleistocene along river)  Saddle  
 IMMEDIATE VEGETATION Some small grass areas PERCENTAGE OF SITE STILL INTACT Unknown  
 PRIMARY DISTURBANCE Construction POSSIBILITY OF DESTRUCTION High

**Water Drainage Area Information** Instructions available. Please fill out as much as is known, especially those items that are measured or observed on site. Distance to water is particularly critical.

SUBBASIN Lower Delaware River WATERSHED 3 MAJOR STREAM Schuylkill River  
 MINOR STREAM Wissahickon Creek  
 NEAREST WATER: Distance 0.92 M Elevation 50 ft Direction South Order \_\_\_\_\_ Type \_\_\_\_\_  
 2<sup>ND</sup> NEAREST WATER: Distance 1.9 M Elevation 8 ft Direction South Order \_\_\_\_\_ Type \_\_\_\_\_  
 NEAREST PERENNIAL STREAM CONFLUENCE:  
 Distance 1.9 M Elevation 8ft Direction South Order below confluence \_\_\_\_\_  
 RELATIONSHIP OF FIRST AND SECOND WATER (check one)  
 Do not represent a stream confluence.  
 Site is located upstream from the confluence and between the 2 water sources.  
 Site is located upstream from the confluence, but not between the 2 water sources.  
 Site is located downstream from the confluence.  
 None of the above apply.

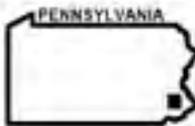
**COMMENTS** The Queen Lane Project Site includes both historic residential and burial components. The residential component to the site is located along Pulaski Avenue, Priscilla Street and Penn Street. The cemetery component is the Germantown Potter's Field, which faced Queen Lane and is present on maps from 1755. The existing 16-story apartment building is sitting on a portion of the Potter's Field and it is unknown what percentage of the cemetery has been disturbed since the construction of the apartments in the early 1950s. No archaeological testing took place within the known boundaries of the Potter's Field, as current construction plans avoid disturbing the area known as the Germantown Potter's Field.

**ATTACHMENTS:**

- 7.5 MIN USGS map with **site boundaries** indicated and quad name identified
- Photographs or drawings of diagnostic artifacts with scale. Identify lithic material per artifact using description or key.
- Site plans.
- General site photographs or excavation photographs or drawings may also be included.



 QUEEN LANE PROJECT SITE

| QUADRANGLE LOCATION  | SCALE   | SOURCE                      |
|--|---|-----------------------------|
| <br> | <br>Prepared by CHRS, Inc. | USGS 1997<br>GERMANTOWN, PA |
| <b>QUEEN LANE PROJECT SITE</b>   |   |                             |

**ADMINISTRATIVE INFORMATION (CONFIDENTIAL ITEMS HIGHLIGHTED)**

7.5 QUAD NAME Germantown EDITION      UP      ACROSS     

(Measure in centimeters from the bottom printed edge upward, and the right printed edge across)

**-OR-**

U.T.M. COORDINATES: ZONE 18 NORTHING 4430711.54 EASTING 485012.69

OWNER Philadelphia Housing Authority ADDRESS 12 South 23<sup>rd</sup> Street Philadelphia, PA 19103

TAX PARCEL ID      TAX MAP DATE     

PRIVATE LANDOWNER     PUBLIC LANDOWNER -  FEDERAL     STATE     LOCAL

COLLECTION LOCATIONS     

INFORMANTS     

RECORDING REASON

- |  |   |
|--|---|
| <input type="checkbox"/> Informant Interview/Amateur Survey            | <input type="checkbox"/> Non-PHMC institution affiliated research             |
| <input checked="" type="checkbox"/> State or Federal Compliance Survey | <input type="checkbox"/> PHMC Research  |
| <input type="checkbox"/> PHMC Grant                                    | <input type="checkbox"/> Other (Explain in 'Comments' section at end of form) |

CRITERIA FOR NATIONAL REGISTER INCLUSION Unknown

SUBMITTED BY CHRS, Inc. ADDRESS 451 N. Cannon Ave, Suite 100B

CITY Lansdale STATE PA DATE 19446

PHONE NUMBER 215-699-8006 EMAIL ADDRESS kbasalik@chrsinc.com

S.P.A. CHAPTER AFFILIATION     

INSTITUTIONAL AFFILIATION     

ADMINISTRATIVE COMMENTS     

**Remember!** Ask the landowner's permission before you collect artifacts on private property. It is a violation of state law to collect artifacts on state lands and a violation of federal law to collect artifacts on federal lands.

Completed forms should be sent to:  
Bureau for Historic Preservation  
Commonwealth Keystone Bldg, 2<sup>nd</sup> Floor  
400 North Street  
Harrisburg, PA 17120-0093

# APPENDIX H

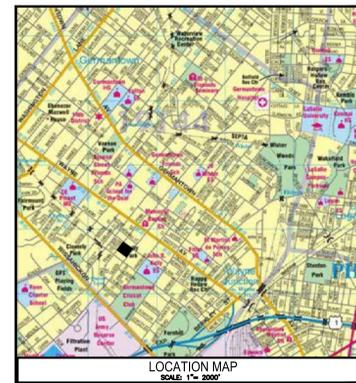
## PROJECT ENGINEERING

Copyright Reserved  
The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Contractor shall be responsible for the protection of all existing utilities and structures. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

Legend

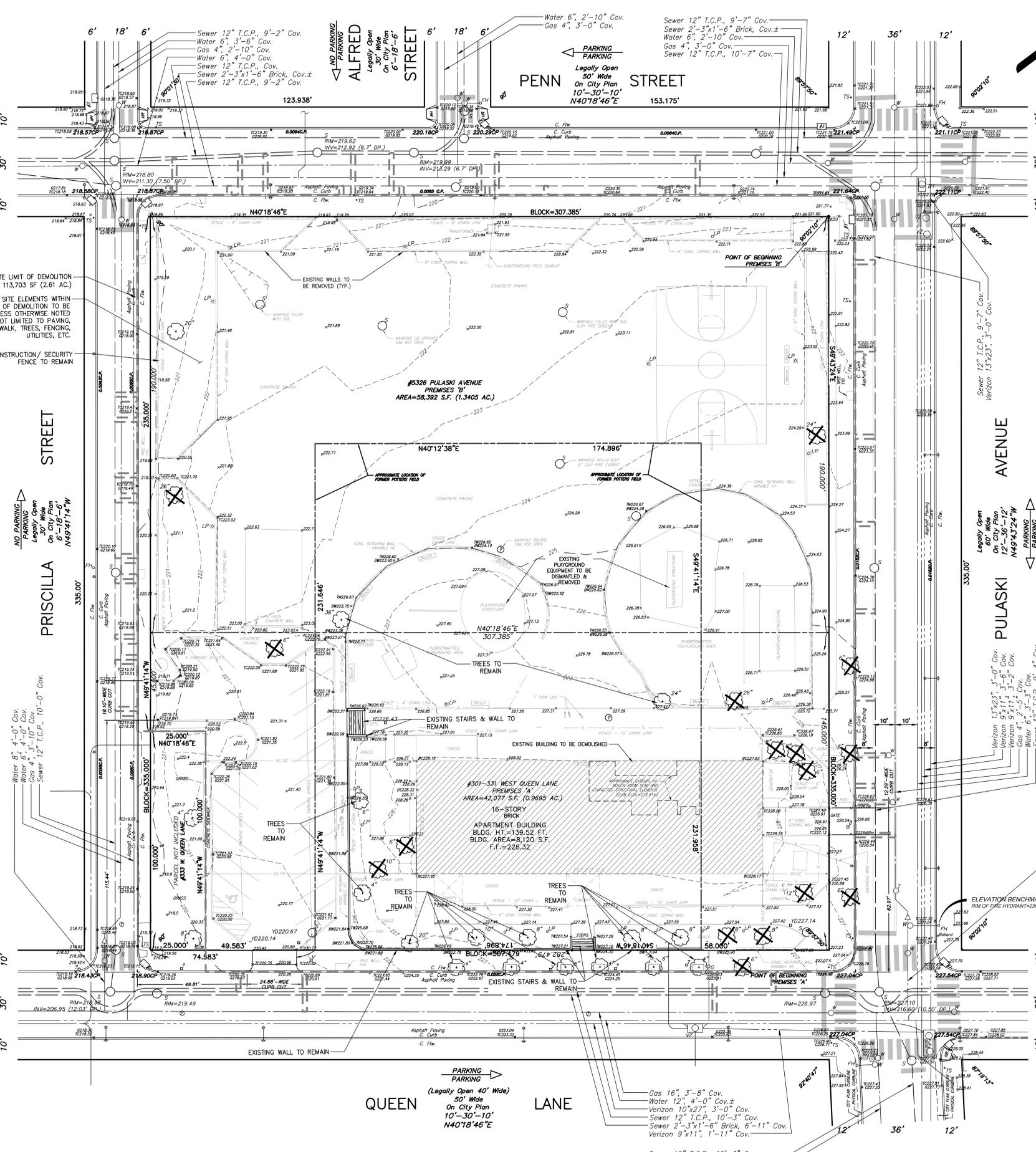
| Abbreviations               | Notes            |
|-----------------------------|------------------|
| C. Curb                     | concrete curb    |
| C. Flw.                     | concrete roadway |
| BC                          | building corner  |
| TC                          | top of curb      |
| G                           | gutter           |
| Topographic contour         |                  |
| fence                       | X                |
| traffic sign                | TS               |
| w/ trunk size in inches     | 18"              |
| handicapped ramp            | oLP              |
| light pole                  | oLP              |
| water lateral valve         | oW               |
| water valve                 | oW               |
| fire hydrant                | oFH              |
| electrolysis test station   | oL               |
| open mouth city inlet       | oL               |
| yard drain                  | oYD              |
| sewer manhole               | oSM              |
| sewer lateral vent          | oSLV             |
| unknown manhole             | oUM              |
| unknown valve box           | oUVB             |
| utility pole w/ light       | oUL              |
| Verizon manhole             | oVM              |
| lamp post                   | oLP              |
| Existing Tree to be Removed | X                |



**GENERAL NOTES:**

- THIS PLAN IS TO BE USED FOR TITLE OR COVEYANCE PURPOSES ONLY.
- PLAN MADE AS PER INSTRUCTIONS OF APPLICANT.
- ATTENTION IS CALLED TO THE ZONING REQUIREMENTS IN THE PHILADELPHIA CODE AS AMENDED. PROPERTIES ARE ZONED AS: 3303 Private Ave. - R18 - Single Family/Duplex Two Family/Multi-Family Residential REC - Recreational District.
- 301 West Queen Lane: R18 - Single Family/Duplex Two Family/Multi-Family Residential Code 14-1634
- ALL DIMENSIONS SHOWN ON PLAN ARE PHILADELPHIA DISTRICT STANDARDS. THE LEGAL STANDARDS OF MEASURE WITHIN THE CITY OF PHILADELPHIA, EXCEPT BUILDING DIMENSIONS WHICH ARE IN UNITED STATES STANDARD MEASURE.
- PHILADELPHIA DISTRICT STANDARD DISTANCES TO BE USED FOR TITLE PURPOSES ONLY.
- RECORDED LEGAL DESCRIPTIONS NOT SUPPLIED. PROPERTY DESCRIPTIONS BASED ON FREELY NATIONAL TITLE INSURANCE COMPANY MAPS, DATED JANUARY 17, 2007 OR COMMUNITY PANEL 40375 00965
- REGISTERED OWNERS: as per PRP
- OWNER: Philadelphia Housing Authority Account # 301-29 W. Queen Lane 9867616 Philadelphia Housing Authority 5328 Pulaski Avenue 785403400
- ADDRESSES FOR ANY NEWLY CREATED PARCELS ARE TO BE ASSIGNED BY THE BOARD OF REVISION OF TAXES (BRT).
- UPON THE FILING AND RECORDING OF A DEEDS WITH THE DEPARTMENT OF RECORDS OF THE CITY OF PHILADELPHIA, PROVIDED IN ACCORDANCE WITH THIS PLAN, THE LINE(S) SHOWN AS PROPOSED SHALL BECOME ACTUAL AND DECLARED.
- A ZONING PERMIT IS REQUIRED FOR ANY PROPOSED CHANGES TO LOT LINES INCLUDING THE CONSOLIDATION OF EXISTING PARCELS.
- ALL PREMISES SHOWN HEREON HAVE STREET FRONTAGE.
- UTILITIES ENTER THE PREMISES FROM PUBLIC STREET OR RIGHTS-OF-WAY.
- THE LOCATION OF PRIVATE ON-SITE UTILITIES LIMITED BY THE DEPTH OF UTILITIES AND ACCESS TO ON-SITE UTILITIES.
- THERE ARE NO UNDERGROUND STRUCTURES, UTILITIES OR SUBSURFACE LOCATIONS LOCATED OR SHOWN ON THIS SURVEY.
- UTILITY NOTES: THE LOCATION OF UNDERGROUND UTILITIES IS TAKEN FROM PUBLIC RECORDS AND FIELD LOCATION OF VENTS, VALVES, MANHOLES, INLETS ETC.
- THE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE.
- ELEVATIONS SHOWN ON PLAN ARE IN PHILADELPHIA CITY DATUM. CURB ELEVATIONS AND GRADES ARE FROM PHILADELPHIA CITY PLAN NO. 16
- THE INFORMATION SHOWN ON THIS PLAN IS FOR THE ULTIMATE USER NAMED HEREON AND IS NOT VALID TO ANY OTHER PARTIES.
- ANY ELECTRONIC REPRODUCTION OF THIS SURVEY AND PLAN IS TO BE FOR THE USE OF THE CLIENT ONLY. STANTEC IS NOT RESPONSIBLE FOR ANY DISCREPANCIES WHICH MAY ARISE BY THE ELECTRONIC REPRODUCTION OF THE ORIGINAL FILE AND ANY FUTURE PARTIES UTILIZING SAID COPY OR HEREBY RELEASE STANTEC FROM ANY AND ALL CLAIMS FOR DAMAGES AS A RESULT OF SAID DISCREPANCIES.
- COPYRIGHT 2014 - ALL RIGHTS RESERVED - STANTEC. NO PART OF THIS PLAN MAY BE REPRODUCED, STORED IN AN INFORMATION STORAGE AND RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRICAL, MECHANICAL, PHOTOCOPYING, RECORDING OR OTHERWISE WITHOUT THE WRITTEN PERMISSION OF STANTEC.
- EXISTING BUILDING INFORMATION TAKEN FROM AS-BUILT PLAN TITLED "FOUNDATION" BY ROTH AND FLEISHER ARCHITECTS, APPROVED JANUARY 20, 1963.

- DEMOLITION NOTES:**
- CONTRACTOR SHALL CARRY OUT DEMOLITION IN SUCH WAY AS TO PROTECT SITE ELEMENTS TO REMAIN. SITE ELEMENTS DAMAGED BY THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
  - SITE CLEARING SHALL INCLUDE THE REMOVAL AND PROPER DISPOSAL IN ACCORDANCE WITH THE LAW, OF ALL MATERIALS, TREES AND PAVERS ENCOUNTERED WITHIN THE DEMOLITION AREA. WHETHER SHOWN OR NOT ALL DEMOLITION DEBRIS SHALL BE DEPOSED OF AT AN APPROVED LANDFILL IN ACCORDANCE WITH ALL APPLICABLE GOVERNMENTAL LAWS AND REGULATIONS. THE PROPER DISPOSAL SHALL INCLUDE ALL FEES ASSOCIATED WITH SUCH DISPOSAL. BURNING OF DEMOLITION DEBRIS IS NOT PERMITTED.
  - THE REMOVAL OF TREES SHALL INCLUDE REMOVAL OF STUMPS, DISPOSAL OF THE TRUNKS SHALL BE AT THE DISCRETION OF THE CONTRACTOR.
  - DEMOLITION AND REMOVAL OF DEMOLITION DEBRIS SHALL BE CONDUCTED IN SUCH MANNER AS TO PREVENT THE SEDIMENTATION OF THE EXISTING DRAINAGE SYSTEM. ALL AREA GRADING LOCATED IMMEDIATELY DOWNSTREAM OF THE PROJECT SHALL BE PROTECTED UNTIL COMPLETION OF THE CONSTRUCTION, GRADING, AND CONSTRUCTION OPERATIONS.
  - CONTRACTOR TO MAINTAIN UTILITY SERVICES TO ALL NEIGHBORING PROPERTIES DURING CONSTRUCTION OPERATIONS.
  - PERMANENT DISCONNECTION OF ANY WATER AND SEWER UTILITIES THAT ARE TO BE REMOVED SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CITY OF PHILADELPHIA WATER DEPARTMENT STANDARDS AND SPECIFICATIONS. REMOVAL AND SOOTY/RY RESTORATION TO BE CONDUCTED IN ACCORDANCE WITH THE CITY OF PHILADELPHIA DEPARTMENT OF STREETS STANDARD DETAILS AND SPECIFICATIONS.
  - ALL LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN DEVELOPED FROM EXISTING UTILITY RECORDS AND/OR ABOVE GROUND EXAMINATION OF THE SITE. COMPLETENESS AND ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES OR STRUCTURES CANNOT BE GUARANTEED. CONTRACTOR SHALL VERIFY EXISTING LOCATION OF UNDERGROUND UTILITIES AND FACILITIES BEFORE START OF WORK, AS PER PA ACT 121.
  - EXISTING SIDEWALKS ALONG THE FRONTAGE OF THE PROPERTY SHALL BE DEMOLISHED PERMITS SHALL BE OBTAINED FOR REPLACEMENT AS SHOWN ON THE GRADING PLAN.
  - ALL DEMOLITION TO BE COMPLETED IN ACCORDANCE WITH UTILITY COMPANY CITY REGULATIONS, WHICH APPLY HERETO.
  - IF ANY MATERIALS SUSPECTED OF CONTAINING ASBESTOS OR OTHER HAZARDOUS MATERIALS (HYDRAULIC FLUID, ETC.) ARE ENCOUNTERED, DO NOT DISTURB THE MATERIALS. IMMEDIATELY NOTIFY THE OWNER.



APPROXIMATE LIMIT OF DEMOLITION  
113,703 SF (2.61 AC.)

ALL EXISTING SITE ELEMENTS WITHIN ON-SITE LIMITS OF DEMOLITION TO BE REMOVED UNLESS OTHERWISE NOTED INCLUDING BUT NOT LIMITED TO PAVINGS, WALLS, SIDEWALK, TREES, FENCINGS, UTILITIES, ETC.

PERIMETER CONSTRUCTION/ SECURITY FENCE TO REMAIN

NO PARKING  
PARKING  
Legally Open  
30' Wide  
On City Plan  
6'-18'-6"  
N49°41'14"W

Water 8" 4'-0" Cov.  
Water 6" 4'-0" Cov.  
Water 4" 3'-0" Cov.  
Sewer 12" T.C.P., 10'-0" Cov.

Water 16" 3'-8" Cov.  
Water 12" 4'-0" Cov.±  
Verizon 10"x27", 3'-0" Cov.  
Sewer 12" T.C.P., 10'-3" Cov.  
Sewer 2'-3"x1'-6" Brick, 6'-11" Cov.  
Verizon 9"x11", 1'-11" Cov.

Sewer 12" T.C.P., 10'-3" Cov.  
Water 12", 4'-0" Cov.±

1"=20'

THE INFORMATION REPRESENTED ON THIS TOPOGRAPHIC MAP HAS BEEN GENERATED FROM FIELD-RUN SURVEY AND ITS ACCURACY IS COMMENSURATE WITH THE METHODS USED TO OBTAIN THE DATA DEPICTED THEREON. WHILE CARE HAS BEEN TAKEN IN THE PREPARATION OF THIS PLAN, THE INFORMATION CANNOT BE ELECTRONICALLY OBTAINED TO OBTAIN ACCURATE DISTANCES BETWEEN DRAFTED ELEMENTS. STATED DIMENSIONS IN U.S. STANDARD MEASURE WILL PREVAIL OVER SCALED OR QUERIED INFORMATION. THE END-USER CAN CONTACT THIS OFFICE FOR VERIFICATION OF DATA NOT OTHERWISE DEPICTED OR DIMENSIONED ON THIS PLAN.

**CALL BEFORE YOU DIG!**  
PENNSYLVANIA LAW REQUIRES THREE (3) WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND TEN (10) WORKING DAYS FOR DESIGN STAGE. UTILITY INFORMATION IDENTIFIED THROUGH THE ONE-CALL PROCESS IS VALID FOR 90 DAYS FROM THE DATE OF THE ONE CALL SERIAL NO. S 20141781791, 20141781792, 20141781800, 20141781807  
Philadelphia One-Call System, Inc.  
1-800-242-1776

**OWNER/APPLICANT:**  
PHILADELPHIA HOUSING AUTHORITY  
3100 PENROSE FERRY ROAD  
PHILADELPHIA, PA 19145  
(215) 828-4077

| Revision | By  | Appd. | YY.MM.DD       |
|----------|---|-------|----------------|
| 4        | PER STREETS DEPT COMMENTS 9/3/14          | WPS   | CJD 14.09.05   |
| 3        | ADDED UTILITY INFO & EX. PAVEMENT MARKING | WPS   | CJD 14.08.26   |
| 2        | REVISED PER PWD REVIEW LETTER             | WPS   | CJD 14.08.07   |
| 1        | PWD/PADP TECHNICAL SUBMISSION             | WPS   | CJD 14.07.15   |
| Issued   |   | By    | Appd. YY.MM.DD |

File Name: 174810882-100exc.dwg

Permit-Seal  
Dwn. Chkd. Dsgn. YY.MM.DD

Client/Project  
DALE CORP. / PHA

301 WEST QUEEN LANE  
PHILADELPHIA, PA 19144  
12TH WARD

EXISTING CONDITIONS & DEMOLITION PLAN

Project No. 174810882  
Scale 1"=20'  
Drawing No. Sheet Revision



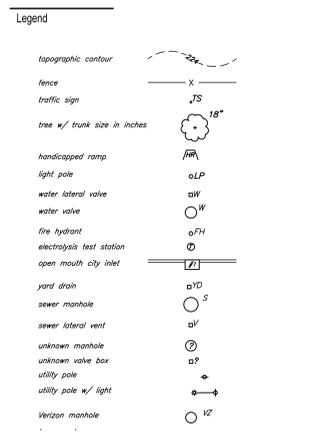




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Consultants

Legend



Notes

Notes:  
1. THIS UTILITY PLAN REPRESENTS PHASE 2 OF THIS PROJECT (CONSTRUCTION PHASE). REFER TO PHASE 1 E&S PLAN (ERSA TRACKING # 2012-QUEE-1834-01) FOR INFORMATION REGARDING THE PARTIAL DEMOLITION OF THE EXISTING SITE.  
2. ALL DIMENSIONS SHOWN ON PLAN ARE IN PHILADELPHIA DISTRICT STANDARD MEASURE UNLESS OTHERWISE NOTED.  
3. ELEVATIONS SHOWN ON PLAN ARE IN PHILADELPHIA CITY DATUM. 227.04 CP DENOTES CITY PLAN ELEVATIONS AND GRADES. CURB ELEVATIONS AND GRADES ARE FROM PHILADELPHIA CITY PLAN NO.16. ATTENTION IS CALLED TO THE PHILADELPHIA ZONING CODE AS AMENDED. PROPERTY IS ZONED REC AND R-16.  
4. SUBJECT PREMISES ARE NOT IN A FLOOD HAZARD AREA AS PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE MAPS, DATED JANUARY 17, 2007 OR COMMUNITY PANEL 420757 0095G  
5. UTILITIES ENTER THE PREMISES FROM PUBLIC STREETS OR RIGHT OF WAY.  
6. ALL EXISTING INTERIOR PROPERTY LINES WITHIN THE PROJECT AREA ARE TO BE REMOVED (SEE "LOT LINE RELOCATION PLAN" PREPARED BY STANTEC, LAST REVISED JUNE 27, 2012).  
7. PLAN MADE AS PER INSTRUCTIONS OF THE PHILADELPHIA HOUSING AUTHORITY AND DALE CORPORATION.  
8. ALL PROPOSED UTILITY SERVICES WILL BE UNDERGROUND OR WILL ENTER PROPOSED PROPERTIES FROM THE PUBLIC RIGHT-OF-WAY.  
9. THE CONTRACTOR SHALL CONFORM TO ALL THE REQUIREMENTS OF PA ACT 187 AS AMENDED.  
10. STORMWATER RUNOFF FROM ALL DIRECTLY CONNECTED IMPERVIOUS AREAS WILL BE CONVEYED TO THE PROPOSED INFILTRATION BASINS UNLESS OTHERWISE NOTED. ERS TRACKING # 2012-301W-1908-01.  
11. CURB GRADES TO BE REGULATED BY THE 9th SURVEY DISTRICT.  
12. PHA WILL BE RESPONSIBLE FOR ALL REQUIRED MAINTENANCE ASSOCIATED WITH THE STORMWATER CONVEYANCE AND MANAGEMENT IMPROVEMENTS ON THIS SITE.  
13. ALL PRIVATE COST CONTRACT FACILITIES TO BE DESIGNED AND CONSTRUCTED TO PWD STANDARDS, AND COMPLY WITH THE PHILADELPHIA PLUMBING CODE.  
14. REFER TO THE PRIVATE COST PLANS FOR DOCUMENTATION OF EXISTING AND PROPOSED PWD UTILITIES (E.I. INLETS, MANHOLES, SEWER AND WATER MAINS) TO BE CONSTRUCTED WITHIN THE BED OF PRISCILLA STREET AND PENN STREET.  
15. PERMITS MUST BE OBTAINED FROM THE DEPARTMENT OF LICENSES & INSPECTIONS FOR ALL ON-SITE WATER AND DRAINAGE WORK.  
16. ROADWAY AND FOOTWAY RESTORATION TO BE IN STRICT ACCORDANCE WITH THE STANDARD DETAILS AND SPECIFICATIONS OF THE PHILADELPHIA STREET DEPARTMENT, LATEST EDITION.  
17. ALL PRIVATE UTILITY WORK AND THEIR CONNECTIONS SHALL BE SUBJECT TO PERMITTING AND INSPECTION BY THE DEPARTMENT OF LICENSES & INSPECTIONS.  
18. THE THICKNESS OF THE ARCHES AND THE CHARACTER AND EXTENT OF THE CRADLES OR THE EXISTING SEWERS ARE UNKNOWN.  
19. THE LOCATIONS AND ELEVATIONS OF THE EXISTING SEWERS ARE APPROXIMATE. THE ELEVATIONS OF THE EXISTING SEWERS AT THE TERMINATING CONNECTION POINTS OF THE PROPOSED SEWER MUST BE FIELD CHECKED PRIOR TO CONSTRUCTING THE NEW SEWER.  
20. CONNECTION OF THE DOMESTIC WATER AND FIRE PROTECTION SYSTEMS TO THE PUBLIC MAINS ARE TO BE ACCOMPLISHED BY PWD. TRENCHING, BACKFILL AND RESTORATION TO BE THE CONTRACTOR'S RESPONSIBILITY. BUILDINGS ARE TO BE INDIVIDUALLY METERED FOR ELECTRIC AND GAS SERVICES. DOMESTIC WATER SERVICE TO BE METERED INSIDE BUILDING.  
21. ALL STORMWATER STRUCTURES (PIPES, CATCH BASINS, BEDDING, ETC.) SHALL CONFORM TO SPECIFICATIONS IN ACCORDANCE WITH THE APPROPRIATE SECTIONS OF THE PHILADELPHIA CODE.  
22. INLETS TO BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS, WHICH REFER TO THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF PHILADELPHIA WATER DEPARTMENT.

POST-CONSTRUCTION STORMWATER MAINTENANCE SCHEDULE:  
1. INLETS AND DRAINAGE FEATURES IN PRISCILLA STREET, PENN STREET, PULASKI AVENUE, AND QUEEN LANE ARE TO BE MAINTAINED BY THE PHILADELPHIA WATER DEPARTMENT AND THE PHILADELPHIA STREETS DEPARTMENT AS PER THEIR TYPICAL MAINTENANCE SCHEDULE.  
2. ON-LOT STORMWATER MANAGEMENT FACILITIES (TRENCH DRAINS, INLETS, POROUS PAVEMENT, PRE-TREATMENT DEVICES, AREA DRAINS, AND UNDERGROUND INFILTRATION SYSTEMS, ETC.) WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER PER THE APPROVED AND RECORDED "OPERATION AND MAINTENANCE AGREEMENT".

SANITARY LATERAL NOTES:  
1. A MINIMUM OF 12" OF CLEARANCE IS REQUIRED BETWEEN THE SANITARY AND STORM PIPING. THE PROPOSED ELEVATION BETWEEN SANITARY PIPING IS TO BE DETERMINED ONCE AN ALTERNATIVE HAS BEEN SELECTED FOR THE ALIGNMENT AND THE INVERT OF THE CONNECTION POINT HAS BEEN VERIFIED. IN THE EVENT THAT 12" OF CLEARANCE CAN NOT BE PROVIDED, THE SANITARY SEWER MUST BE ENCASED IN CONCRETE.  
2. THE PROPOSED STORMWATER CONVEYANCE AND SANITARY SEWER ARE TO BE SEPARATED TO THE PROPERTY LINE.

LEGEND - PROPOSED FEATURES



UTILITY

NOTE: ALL AREAS IN TABLE ARE U.S. STANDARD MEASURE LOWER SCHUYLKILL RIVER WATERSHED

|                        |              |
|------------------------|--------------|
| TOTAL DISTURBED AREA = | 101,058 S.F. |
| TOTAL ON-SITE DCIA =   | 22,609 S.F.  |

LOADING RATIO SUMMARY

|                                     |                        |                      |                      |
|-------------------------------------|------------------------|----------------------|----------------------|
| PROPOSED STORMWATER MANAGEMENT AREA | 2,720 S.F. (FOOTPRINT) | BASIN #2 (FOOTPRINT) | 870 S.F.             |
| INFILTRATION BASIN                  | (4:6 RATIO FOR DCIA)   | INFILTRATION BASIN   | (4:6 RATIO FOR DCIA) |

|        |  |             |
|--------|--|-------------|
| AREA 1 | TOTAL DCIA DIRECTED TO INFILTRATION BASIN NO. 1  | 13,831 S.F. |
| AREA 2 | TOTAL DCIA DIRECTED TO INFILTRATION BASIN NO. 2  | 4,498 S.F.  |
| AREA 3 | UNCONTROLLED DCIA AT FRONT OF BUILDING NO. 2 (PORCHES, OVERHANGS, LANDINGS)                  | 677 S.F.    |
| AREA 4 | DCIA AT FRONT OF BUILDING NO.'S 3, 4, & 5  | 1,852 S.F.  |
| AREA 5 | PROPOSED SHADE TREE TO OFFSET DCIA NEAR BUILDING NO.'S 3, 4, & 5 (18 TREES @100 SF/PER TREE) | -1,900 S.F. |
| AREA 6 | DCIA AT FRONT OF BUILDING NO. 1 TO BE DIRECTED TO POROUS PAVING                              | 655 S.F.    |
| AREA 7 | PERVIOUS LAND AREA IN SOUTHERN PORTION OF POTTERS FIELD NOT DIRECTED TO INFILTRATION BASIN   | 12,619 S.F. |

Permit/Seal

Client/Project  
DALE CORP. / PHA

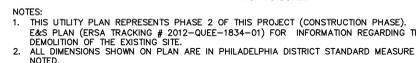
301 WEST QUEEN LANE  
PHILADELPHIA, PA 19144  
12TH WARD

Utility Plan

Project No. 174810882 Scale 1"=20'  
Drawing No. Sheet Revision  
C130 4 of 10 4

### WATER CONNECTION DETAIL

NOT TO SCALE



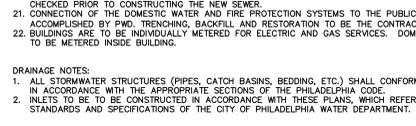
NOTES:  
1. THIS UTILITY PLAN REPRESENTS PHASE 2 OF THIS PROJECT (CONSTRUCTION PHASE). REFER TO PHASE 1 E&S PLAN (ERSA TRACKING # 2012-QUEE-1834-01) FOR INFORMATION REGARDING THE PARTIAL DEMOLITION OF THE EXISTING SITE.  
2. ALL DIMENSIONS SHOWN ON PLAN ARE IN PHILADELPHIA DISTRICT STANDARD MEASURE UNLESS OTHERWISE NOTED.  
3. ELEVATIONS SHOWN ON PLAN ARE IN PHILADELPHIA CITY DATUM. 227.04 CP DENOTES CITY PLAN ELEVATIONS AND GRADES. CURB ELEVATIONS AND GRADES ARE FROM PHILADELPHIA CITY PLAN NO.16. ATTENTION IS CALLED TO THE PHILADELPHIA ZONING CODE AS AMENDED. PROPERTY IS ZONED REC AND R-16.  
4. SUBJECT PREMISES ARE NOT IN A FLOOD HAZARD AREA AS PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE MAPS, DATED JANUARY 17, 2007 OR COMMUNITY PANEL 420757 0095G  
5. UTILITIES ENTER THE PREMISES FROM PUBLIC STREETS OR RIGHT OF WAY.  
6. ALL EXISTING INTERIOR PROPERTY LINES WITHIN THE PROJECT AREA ARE TO BE REMOVED (SEE "LOT LINE RELOCATION PLAN" PREPARED BY STANTEC, LAST REVISED JUNE 27, 2012).  
7. PLAN MADE AS PER INSTRUCTIONS OF THE PHILADELPHIA HOUSING AUTHORITY AND DALE CORPORATION.  
8. ALL PROPOSED UTILITY SERVICES WILL BE UNDERGROUND OR WILL ENTER PROPOSED PROPERTIES FROM THE PUBLIC RIGHT-OF-WAY.  
9. THE CONTRACTOR SHALL CONFORM TO ALL THE REQUIREMENTS OF PA ACT 187 AS AMENDED.  
10. STORMWATER RUNOFF FROM ALL DIRECTLY CONNECTED IMPERVIOUS AREAS WILL BE CONVEYED TO THE PROPOSED INFILTRATION BASINS UNLESS OTHERWISE NOTED. ERS TRACKING # 2012-301W-1908-01.  
11. CURB GRADES TO BE REGULATED BY THE 9th SURVEY DISTRICT.  
12. PHA WILL BE RESPONSIBLE FOR ALL REQUIRED MAINTENANCE ASSOCIATED WITH THE STORMWATER CONVEYANCE AND MANAGEMENT IMPROVEMENTS ON THIS SITE.  
13. ALL PRIVATE COST CONTRACT FACILITIES TO BE DESIGNED AND CONSTRUCTED TO PWD STANDARDS, AND COMPLY WITH THE PHILADELPHIA PLUMBING CODE.  
14. REFER TO THE PRIVATE COST PLANS FOR DOCUMENTATION OF EXISTING AND PROPOSED PWD UTILITIES (E.I. INLETS, MANHOLES, SEWER AND WATER MAINS) TO BE CONSTRUCTED WITHIN THE BED OF PRISCILLA STREET AND PENN STREET.  
15. PERMITS MUST BE OBTAINED FROM THE DEPARTMENT OF LICENSES & INSPECTIONS FOR ALL ON-SITE WATER AND DRAINAGE WORK.  
16. ROADWAY AND FOOTWAY RESTORATION TO BE IN STRICT ACCORDANCE WITH THE STANDARD DETAILS AND SPECIFICATIONS OF THE PHILADELPHIA STREET DEPARTMENT, LATEST EDITION.  
17. ALL PRIVATE UTILITY WORK AND THEIR CONNECTIONS SHALL BE SUBJECT TO PERMITTING AND INSPECTION BY THE DEPARTMENT OF LICENSES & INSPECTIONS.  
18. THE THICKNESS OF THE ARCHES AND THE CHARACTER AND EXTENT OF THE CRADLES OR THE EXISTING SEWERS ARE UNKNOWN.  
19. THE LOCATIONS AND ELEVATIONS OF THE EXISTING SEWERS ARE APPROXIMATE. THE ELEVATIONS OF THE EXISTING SEWERS AT THE TERMINATING CONNECTION POINTS OF THE PROPOSED SEWER MUST BE FIELD CHECKED PRIOR TO CONSTRUCTING THE NEW SEWER.  
20. CONNECTION OF THE DOMESTIC WATER AND FIRE PROTECTION SYSTEMS TO THE PUBLIC MAINS ARE TO BE ACCOMPLISHED BY PWD. TRENCHING, BACKFILL AND RESTORATION TO BE THE CONTRACTOR'S RESPONSIBILITY. BUILDINGS ARE TO BE INDIVIDUALLY METERED FOR ELECTRIC AND GAS SERVICES. DOMESTIC WATER SERVICE TO BE METERED INSIDE BUILDING.  
21. ALL STORMWATER STRUCTURES (PIPES, CATCH BASINS, BEDDING, ETC.) SHALL CONFORM TO SPECIFICATIONS IN ACCORDANCE WITH THE APPROPRIATE SECTIONS OF THE PHILADELPHIA CODE.  
22. INLETS TO BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS, WHICH REFER TO THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF PHILADELPHIA WATER DEPARTMENT.

DRAINAGE NOTES:  
1. ALL STORMWATER STRUCTURES (PIPES, CATCH BASINS, BEDDING, ETC.) SHALL CONFORM TO SPECIFICATIONS IN ACCORDANCE WITH THE APPROPRIATE SECTIONS OF THE PHILADELPHIA CODE.  
2. INLETS TO BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS, WHICH REFER TO THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF PHILADELPHIA WATER DEPARTMENT.

POST-CONSTRUCTION STORMWATER MAINTENANCE SCHEDULE:  
1. INLETS AND DRAINAGE FEATURES IN PRISCILLA STREET, PENN STREET, PULASKI AVENUE, AND QUEEN LANE ARE TO BE MAINTAINED BY THE PHILADELPHIA WATER DEPARTMENT AND THE PHILADELPHIA STREETS DEPARTMENT AS PER THEIR TYPICAL MAINTENANCE SCHEDULE.  
2. ON-LOT STORMWATER MANAGEMENT FACILITIES (TRENCH DRAINS, INLETS, POROUS PAVEMENT, PRE-TREATMENT DEVICES, AREA DRAINS, AND UNDERGROUND INFILTRATION SYSTEMS, ETC.) WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER PER THE APPROVED AND RECORDED "OPERATION AND MAINTENANCE AGREEMENT".

SANITARY LATERAL NOTES:  
1. A MINIMUM OF 12" OF CLEARANCE IS REQUIRED BETWEEN THE SANITARY AND STORM PIPING. THE PROPOSED ELEVATION BETWEEN SANITARY PIPING IS TO BE DETERMINED ONCE AN ALTERNATIVE HAS BEEN SELECTED FOR THE ALIGNMENT AND THE INVERT OF THE CONNECTION POINT HAS BEEN VERIFIED. IN THE EVENT THAT 12" OF CLEARANCE CAN NOT BE PROVIDED, THE SANITARY SEWER MUST BE ENCASED IN CONCRETE.  
2. THE PROPOSED STORMWATER CONVEYANCE AND SANITARY SEWER ARE TO BE SEPARATED TO THE PROPERTY LINE.

LEGEND - PROPOSED FEATURES



UTILITY

NOTE: ALL AREAS IN TABLE ARE U.S. STANDARD MEASURE LOWER SCHUYLKILL RIVER WATERSHED

|                        |              |
|------------------------|--------------|
| TOTAL DISTURBED AREA = | 101,058 S.F. |
| TOTAL ON-SITE DCIA =   | 22,609 S.F.  |

LOADING RATIO SUMMARY

|                                     |                        |                      |                      |
|-------------------------------------|------------------------|----------------------|----------------------|
| PROPOSED STORMWATER MANAGEMENT AREA | 2,720 S.F. (FOOTPRINT) | BASIN #2 (FOOTPRINT) | 870 S.F.             |
| INFILTRATION BASIN                  | (4:6 RATIO FOR DCIA)   | INFILTRATION BASIN   | (4:6 RATIO FOR DCIA) |

|        |  |             |
|--------|--|-------------|
| AREA 1 | TOTAL DCIA DIRECTED TO INFILTRATION BASIN NO. 1  | 13,831 S.F. |
| AREA 2 | TOTAL DCIA DIRECTED TO INFILTRATION BASIN NO. 2  | 4,498 S.F.  |
| AREA 3 | UNCONTROLLED DCIA AT FRONT OF BUILDING NO. 2 (PORCHES, OVERHANGS, LANDINGS)                  | 677 S.F.    |
| AREA 4 | DCIA AT FRONT OF BUILDING NO.'S 3, 4, & 5  | 1,852 S.F.  |
| AREA 5 | PROPOSED SHADE TREE TO OFFSET DCIA NEAR BUILDING NO.'S 3, 4, & 5 (18 TREES @100 SF/PER TREE) | -1,900 S.F. |
| AREA 6 | DCIA AT FRONT OF BUILDING NO. 1 TO BE DIRECTED TO POROUS PAVING                              | 655 S.F.    |
| AREA 7 | PERVIOUS LAND AREA IN SOUTHERN PORTION OF POTTERS FIELD NOT DIRECTED TO INFILTRATION BASIN   | 12,619 S.F. |

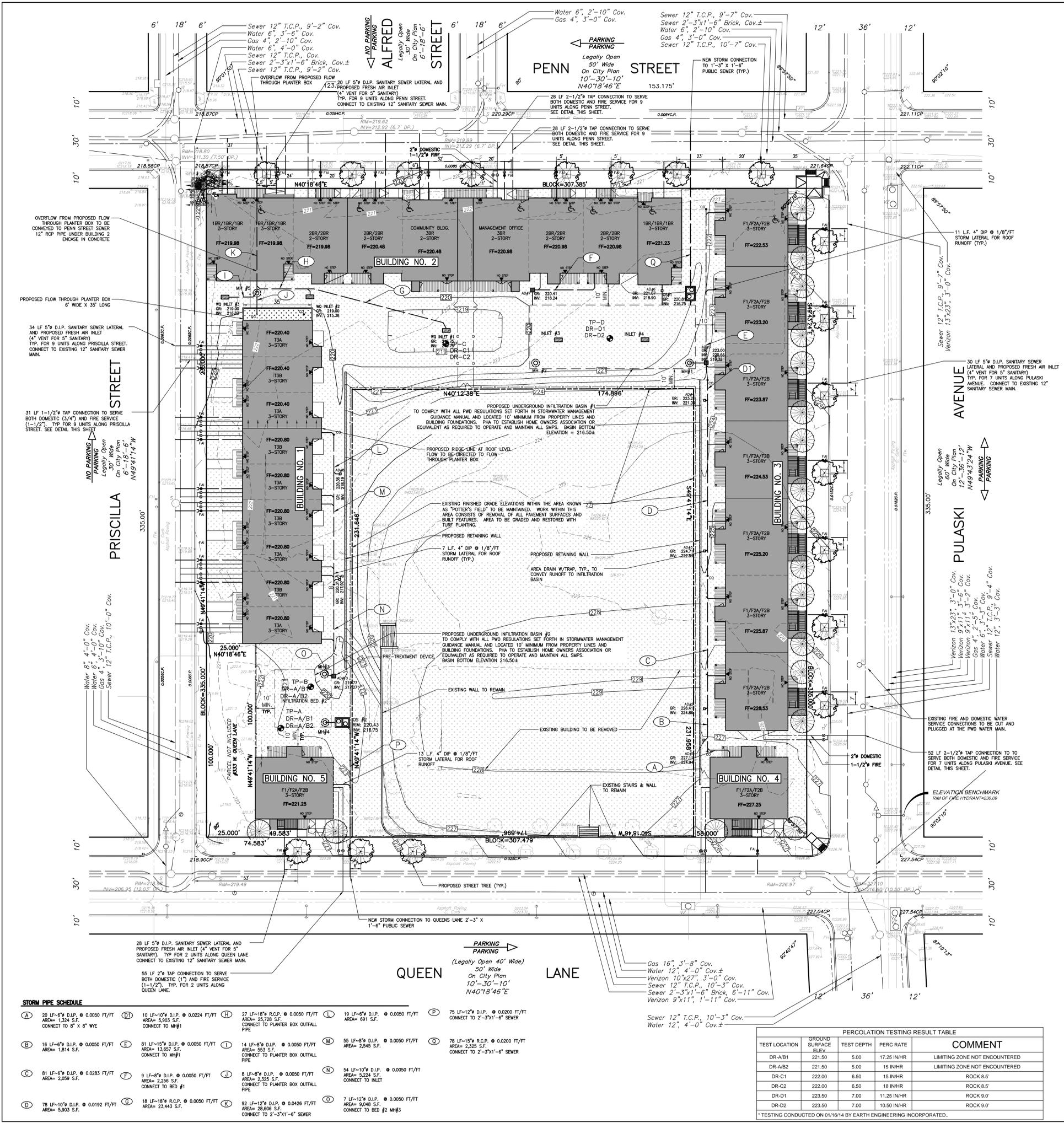
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STORM PIPE SCHEDULE

|   |  |   |  |   |   |   |  |
|---|--|---|--|---|---|---|--|
| A | 20 LF-6" D.I.P. @ 0.0050 FT/FT AREA= 1,324 S.F. CONNECT TO 6" X 4' WYE | H | 10 LF-10" D.I.P. @ 0.0224 FT/FT AREA= 5,903 S.F. CONNECT TO MH#1 | L | 27 LF-18" R.C.P. @ 0.0050 FT/FT AREA= 25,728 S.F. CONNECT TO PLANTER BOX OUTFALL PIPE | P | 19 LF-6" D.I.P. @ 0.0050 FT/FT AREA= 691 S.F.                                |
| B | 16 LF-6" D.I.P. @ 0.0050 FT/FT AREA= 1,814 S.F.                        | E | 81 LF-15" D.I.P. @ 0.0050 FT/FT AREA= 1,814 S.F. CONNECT TO MH#1 | I | 14 LF-8" D.I.P. @ 0.0050 FT/FT AREA= 553 S.F. CONNECT TO PLANTER BOX OUTFALL PIPE     | M | 55 LF-8" D.I.P. @ 0.0050 FT/FT AREA= 2,545 S.F.                              |
| C | 81 LF-6" D.I.P. @ 0.0283 FT/FT AREA= 2,099 S.F.                        | F | 9 LF-8" D.I.P. @ 0.0050 FT/FT AREA= 2,236 S.F. CONNECT TO BED #1 | J | 8 LF-8" D.I.P. @ 0.0050 FT/FT AREA= 553 S.F. CONNECT TO PLANTER BOX OUTFALL PIPE      | N | 54 LF-10" D.I.P. @ 0.0050 FT/FT AREA= 3,224 S.F. CONNECT TO INLET            |
| D | 78 LF-10" D.I.P. @ 0.0192 FT/FT AREA= 5,903 S.F.                       | G | 18 LF-18" R.C.P. @ 0.0050 FT/FT AREA= 23,443 S.F.                | K | 32 LF-12" D.I.P. @ 0.0426 FT/FT AREA= 9,048 S.F. CONNECT TO BED #2 MH#3               | O | 7 LF-12" D.I.P. @ 0.0050 FT/FT AREA= 28,606 S.F. CONNECT TO 2"-3X1'-6" SEWER |

PERCOLATION TESTING RESULT TABLE

| TEST LOCATION | GROUND SURFACE ELEV. | TEST DEPTH | PERC RATE  | COMMENT                       |
|---------------|----------------------|------------|------------|-------------------------------|
| DR-A/B1       | 221.50               | 5.00       | 17.25 INHR | LIMITING ZONE NOT ENCOUNTERED |
| DR-A/B2       | 221.50               | 5.00       | 15 INHR    | LIMITING ZONE NOT ENCOUNTERED |
| DR-C1         | 222.00               | 6.50       | 15 INHR    | ROCK 8.5                      |
| DR-C2         | 222.00               | 6.50       | 18 INHR    | ROCK 8.5                      |
| DR-D1         | 223.50               | 7.00       | 11.25 INHR | ROCK 9.0                      |
| DR-D2         | 223.50               | 7.00       | 10.50 INHR | ROCK 9.0                      |

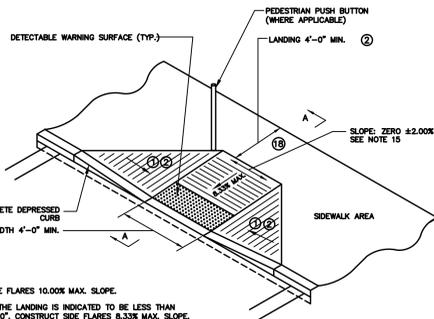
\* TESTING CONDUCTED ON 01/16/14 BY EARTH ENGINEERING INCORPORATED.





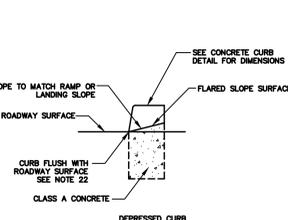
**GENERAL NOTES - ACCESSIBLE CURB RAMPS**

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PADOT PUBLICATION 406, SECTION 350, 409, 630, 676, AND 694.
2. PROVIDE EXPANSION JOINT MATERIAL 1 1/2" THICK WHERE CURB RAMP ADJOINS ANY ROAD PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER WITH ADJACENT CONCRETE SURFACE.
3. CONSTRUCT DIAGONAL CURB RAMPS WITH A 4'-0" CLEARSPACE OUTSIDE OF TRAVEL LANES AT THE BOTTOM OF THE RAMP. IF DIAGONAL CURB RAMPS ARE PROVIDED AT MARKED CROSSINGS, THE 4'-0" CLEAR SPACE IS LOCATED WITHIN THE MARKINGS AND OUTSIDE OF THE TRAVEL LANES. SEE SHEET 7 FOR CROSSWALK DETAILS.
4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
5. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING FLARED SIDE RAMPS.
6. MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS THAN THE STANDARD 6" HEIGHT.
7. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
8. IT MAY BE NECESSARY TO LIMIT THE RUN OF A PARALLEL OR PERPENDICULAR CURB RAMP IN ORDER TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB. RAMP LENGTH NOT TO EXCEED 15'-0". ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT POSSIBLE.
9. THE DETAILS DEPICT PEDESTRIAN PUSH BUTTON POLES TO ILLUSTRATE THE PREFERRED PLACEMENT OF PEDESTRIAN PUSH BUTTONS. PEDESTRIAN PUSH BUTTONS ARE TO BE INSTALLED WHERE APPLICABLE.
10. CONSTRUCT BUILT-UP CURB RAMP OF BITUMINOUS MATERIAL AS INDICATED, INCLUDING SURFACE PREPARATION AND TACK COAT, AS REQUIRED.
11. ALIGN DETECTABLE WARNING DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB.
12. PROVIDE DETECTABLE WARNING SURFACES (DWS) 24" MINIMUM (IN THE DIRECTION OF PEDESTRIAN TRAVEL) ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
13. FOR NEW CONSTRUCTION, DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP.
14. FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLIPS WITH THE FLATTEST SLOPE POSSIBLE. THE SLOPES INDICATED IN THE DETAILS SHOW THE MAX SLOPE ALLOWABLE. SLOPES THAT EXCEED THOSE INDICATED IN THE DETAILS OR CONTRACT DOCUMENTS AS APPLICABLE, WILL NOT BE ACCEPTED AND WILL BE RECONSTRUCTED.
15. THE IMMEDIATE ADJOINING SURFACE AT THE BOTTOM AND TOP OF CURB RAMPS IS NOT TO EXCEED ROADWAY PROFILE SLOPE WHEN LOCATED ADJACENT TO THE ROADWAY. IN AREAS WHERE THE ADJOINING SURFACE IS NOT ADJACENT TO THE ROADWAY, THE LONGITUDINAL SLOPE IS NOT TO EXCEED 5.00%. FOR ALL LOCATIONS DO NOT EXCEED 2.00% CROSS-SLOPE. FOR LOCATIONS THAT REQUIRE A TURNING MANEUVER, THE MAXIMUM SLOPE IS 2.00% IN ALL DIRECTIONS. THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE IS NOT TO EXCEED AN ALGEBRAIC DIFFERENCE OF 11.00%.
16. THE CONSTRUCTION STANDARDS DEPICTED ARE MOST APPROPRIATE FOR NEW CONSTRUCTION. ALL CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE NOTED OR DIRECTED.
17. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6'-0" FOR A 12:1 (1:12) SLOPE.
18. SIDEWALK WIDTH MAY BE REDUCED TO 4'-0", WHEN PASSING AREAS 5'-0" X 5'-0" ARE PROVIDED EVERY 200'.
19. THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS.
20. DEPRESSED CURB FOR CURB RAMPS MUST BE FLUSH TO ADJACENT ROADWAY. EDGE OF ROAD ELEVATIONS AT THE FLOW LINE SHALL BE ADJUSTED TO ENSURE POSITIVE DRAINAGE AND PREVENT FLOODING.



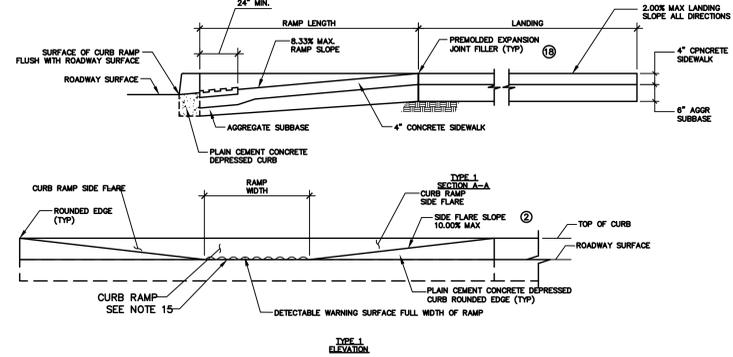
1. SIDE FLARES 10.00% MAX. SLOPE.
2. IF THE LANDING IS INDICATED TO BE LESS THAN 4'-0", CONSTRUCT SIDE FLARES 8.33% MAX. SLOPE.
3. CURB RAMPS REQUIRE A 4'-0" MINIMUM LANDING WITH A MAXIMUM SLOPE OF 2.00% IN ALL DIRECTIONS WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS.

TYPE 1 ISOMETRIC VIEW

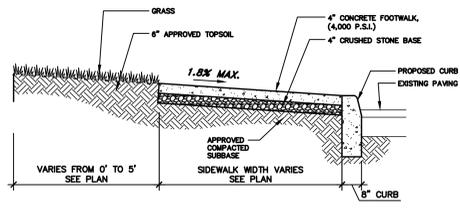


| PERCENT SLOPE | EQUIVALENT SLOPE |
|---------------|------------------|
| 10.00%        | 10:1 (1:10)      |
| 8.33%         | 12:1 (1:12)      |
| 7.14%         | 14:1 (1:14)      |
| 2.00%         | 50:1 (1:50)      |
| 1.00%         | 100:1 (1:100)    |

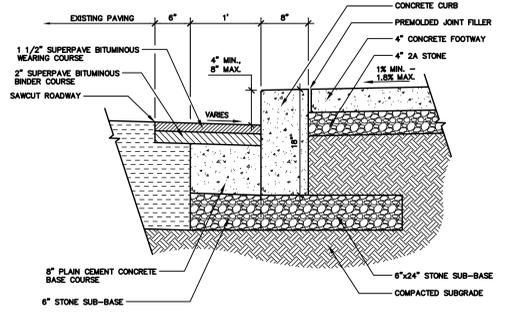
EQUIVALENT SLOPES



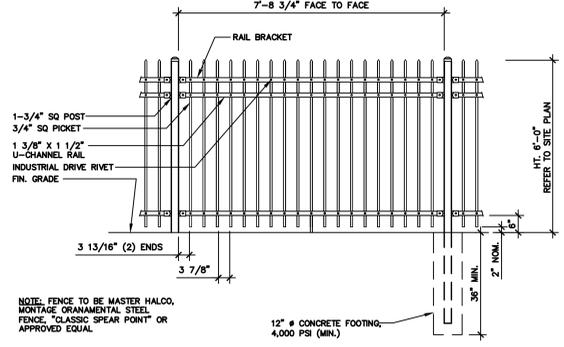
ACCESSIBLE CURB RAMP (RC-67M) NOT TO SCALE



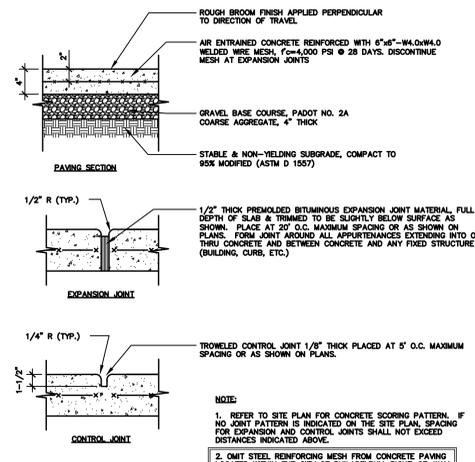
TYPICAL SIDEWALK SECTION (WITHIN R.O.W.) NOT TO SCALE



CURB, FOOTWALK, & PAVEMENT RESTORATION DETAIL - (PUBLIC STREET) NOT TO SCALE

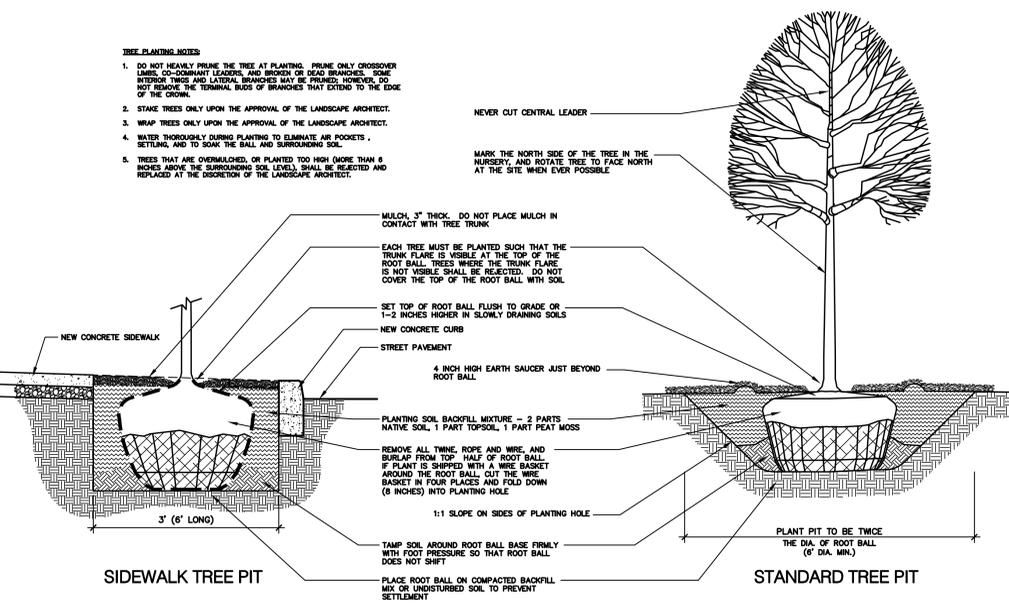


ORNAMENTAL METAL FENCE NOT TO SCALE



CONCRETE PAVING (PRIVATE AND PUBLIC WALKS) NOT TO SCALE

- TREE PLANTING NOTES**
1. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LEADS, UNDESIRABLE LEADERS AND BROKEN OR DEAD BRANCHES. SOON AFTER PLANTING, REMOVE UNDESIRABLE BRANCHES AND BRUSH. DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
  2. STAKE TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.
  3. WRAP TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.
  4. WATER THOROUGHLY DURING PLANTING TO ELIMINATE AIR POCKETS, SETTLE, AND TO SOAK THE BALL AND SURROUNDING SOIL.
  5. TREES THAT ARE OVERMULCHED, OR PLANTED TOO HIGH (MORE THAN 8 INCHES ABOVE THE SURROUNDING SOIL LEVEL), SHALL BE REJECTED AND REPLACED AT THE DISCRETION OF THE LANDSCAPE ARCHITECT.



DECIDUOUS TREE NOT TO SCALE

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Consultants  
Legend

Notes

| Revision | By  | Appd. | YY.MM.DD       |
|----------|---|-------|----------------|
| 4        | PER STREETS DEPT COMMENTS 9/3/14          | WPS   | CJO 14.09.05   |
| 3        | ADDED UTILITY INFO & EX. PAVEMENT MARKING | WPS   | CJO 14.08.26   |
| 2        | REVISED PER PWD REVIEW LETTER             | GDI   | CJO 14.08.07   |
| 1        | PWD/PADDP TECHNICAL SUBMISSION            | WPS   | CJO 14.07.15   |
| Issued   |   | By    | Appd. YY.MM.DD |

File Name: 174810882-150delt.dwg  
Dwn. Chkd. Dsgn. DBA KRS DBA 12.07.10  
Permit-Seal

Client/Project  
DALE CORP. / PHA  
301 WEST QUEEN LANE  
PHILADELPHIA, PA 19144  
12TH WARD  
Title

CONSTRUCTION DETAILS  
Project No. 174810882 Scale AS SHOWN  
Drawing No. Sheet Revision  
C500 7 of 10 4



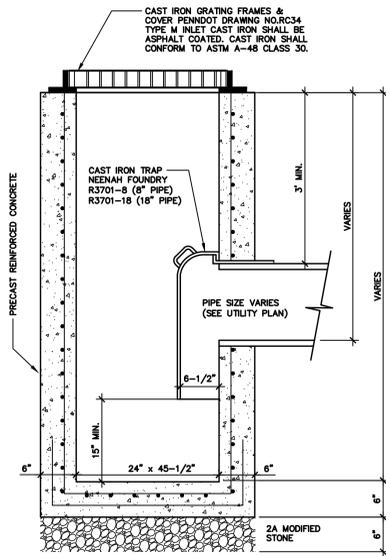
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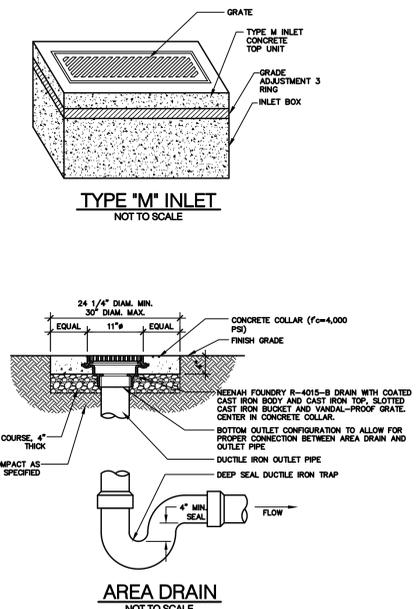
Consultants

Legend

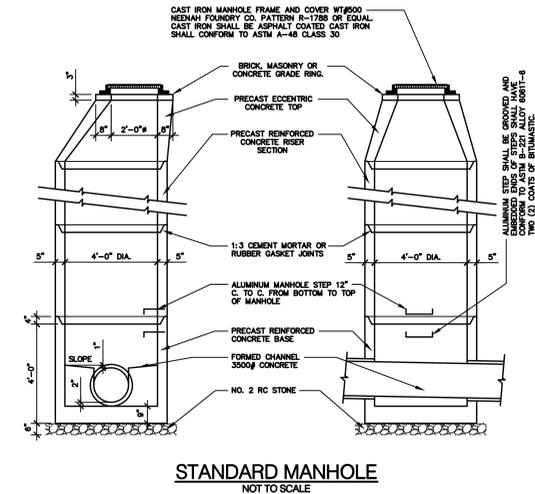
Notes



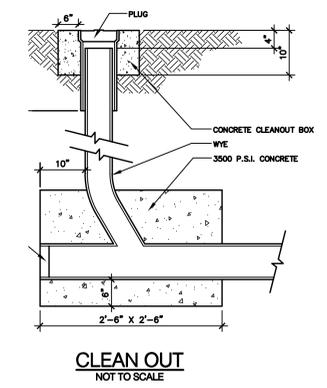
**INLET DETAIL  
TYPE 'M' w/ TRAP**  
NOT TO SCALE



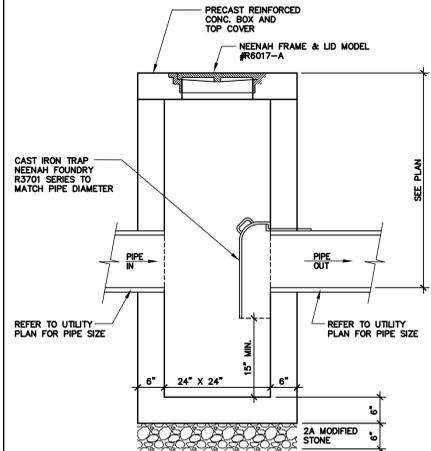
**AREA DRAIN**  
NOT TO SCALE



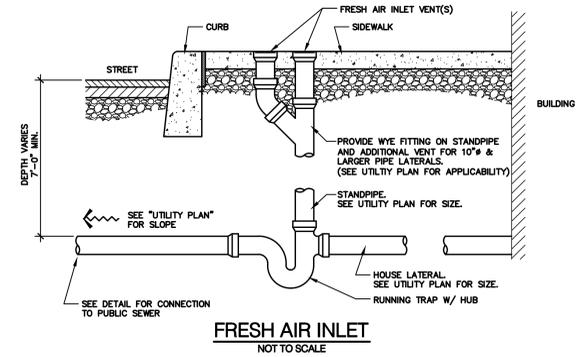
**STANDARD MANHOLE**  
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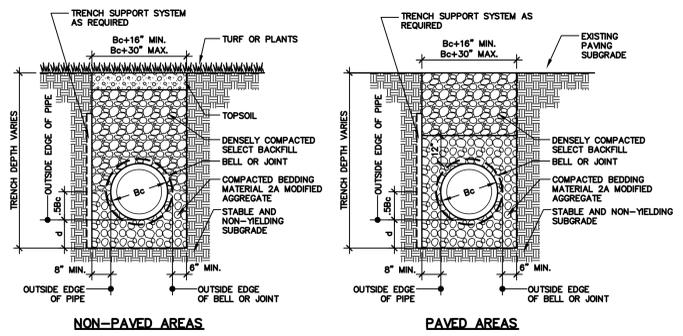
**CLEAN OUT**  
NOT TO SCALE



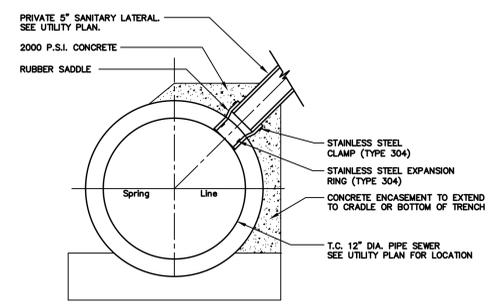
**WATER QUALITY DEVICE**  
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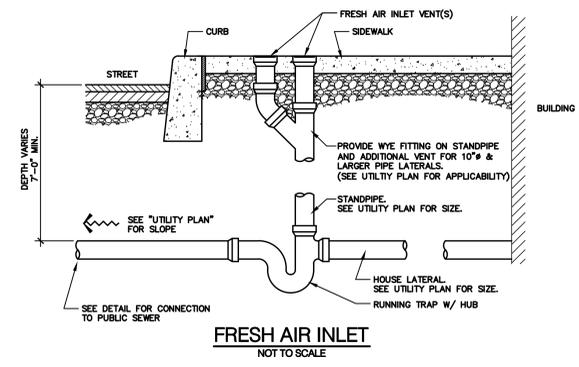
**FRESH AIR INLET**  
NOT TO SCALE



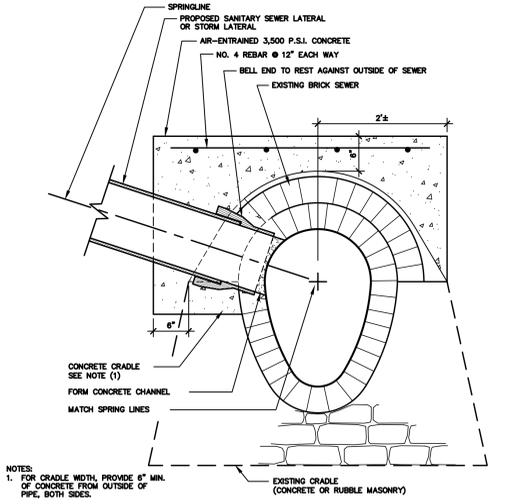
**TYPICAL TRENCH AND PIPE BEDDING**  
NOT TO SCALE



**RESILIENT SADDLE CONNECTION TO  
T.C. PIPE SEWER**  
NOT TO SCALE



**FRESH AIR INLET**  
NOT TO SCALE



**STORM AND SANITARY LATERAL CONNECTION  
TO BRICK SEWER**  
NOT TO SCALE

| Revision | By  | Appd. | YY.MM.DD       |
|----------|---|-------|----------------|
| 4        | PER STREETS DEPT COMMENTS 9/3/14          | WPS   | CJO 14.09.05   |
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| 1        | PWD/PADEP TECHNICAL SUBMISSION            | WPS   | CJO 14.07.15   |
| Issued   |   | By    | Appd. YY.MM.DD |

| File Name:            | DBA  | KRS  | DBA            |
|-----------------------|------|------|----------------|
| 174810882-150detl.dwg | Dwn. | Chk. | Dsgn. YY.MM.DD |

Permit-Seal

Client/Project

DALE CORP. / PHA

301 WEST QUEEN LANE  
PHILADELPHIA, PA 19144  
12TH WARD

Title

CONSTRUCTION DETAILS

| Project No. | Scale    |          |
|-------------|----------|----------|
| 174810882   | AS SHOWN |          |
| Drawing No. | Sheet    | Revision |

C501 8 of 10 4

Topographic contour  
fence  
traffic sign  
tree w/ trunk size in inches  
handicapped ramp  
light pole  
water lateral valve  
water valve  
fire hydrant  
electrolysis test station  
open mouth city inlet  
yard drain  
sewer manhole  
sewer lateral vent  
unknown manhole  
unknown valve box  
utility pole  
utility pole w/ light  
Verizon manhole

Abbreviations  
C. curb  
C. Flw.  
BC  
TC  
G

concrete curb  
concrete footway  
building corner  
top of curb  
gutter

Notes

**CALL BEFORE YOU DIG!**  
PENNSYLVANIA LAW REQUIRES THREE (3) WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND TEN (10) WORKING DAYS FOR DESIGN STAGE UTILITY INFORMATION IDENTIFIED THROUGH THE ONE-CALL PROCESS IS VALID FOR 90 DAYS FROM THE DATE OF THE CALL. ONE CALL SERIAL NO.'S 20141781791, 20141781792, 20141781800, 20141781807

Pennsylvania One Call System, Inc.  
**1-800-242-1776**

OWNER/APPLICANT:  
PHILADELPHIA HOUSING AUTHORITY  
3100 PENROSE FERRY ROAD  
PHILADELPHIA, PA 19145  
(215) 928-4077

Revision

| Revision | By  | Appd. | YY.MM.DD     |
|----------|---|-------|--------------|
| 4        | PER STREETS DEPT COMMENTS 9/3/14          | WPS   | CJO 14.09.05 |
| 3        | ADDED UTILITY INFO & EX. PAVEMENT MARKING | WPS   | CJO 14.08.26 |
| 2        | REVISED PER PWD REVIEW LETTER             | GDI   | CJO 14.08.07 |
| 1        | PWD/PADEP TECHNICAL SUBMISSION            | WPS   | CJO 14.07.15 |

Permit/Seal

| File Name              | DBA | KRS | DBA | 12.07.10 |
|------------------------|-----|-----|-----|----------|
| 174810882-130pcswm.dwg | DBA | KRS | DBA | 12.07.10 |

Client/Project

DALE CORP. / PHA

301 WEST QUEEN LANE  
PHILADELPHIA, PA 19144  
12TH WARD

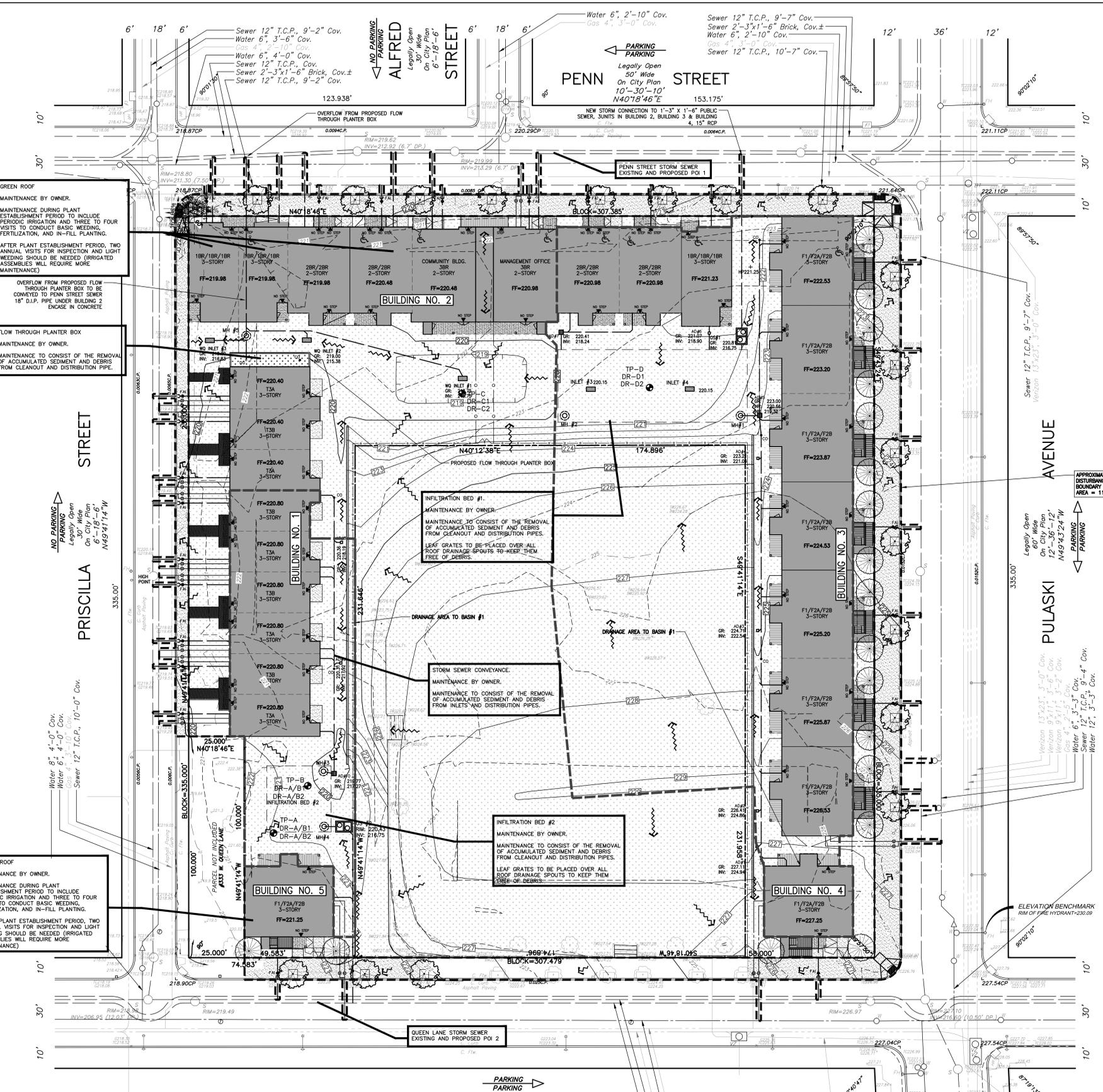
Title

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

Project No. 174810882  
Scale 1"=20'

Drawing No. Sheet Revision

C160 9 of 10 4



PERCOLATION TESTING RESULT TABLE

| TEST LOCATION | GROUND SURFACE ELEV. | TEST DEPTH | PERC RATE   | COMMENT                       |
|---------------|----------------------|------------|-------------|-------------------------------|
| DR-A/B1       | 221.50               | 5.00       | 17.25 IN/HR | LIMITING ZONE NOT ENCOUNTERED |
| DR-A/B2       | 221.50               | 5.00       | 15 IN/HR    | LIMITING ZONE NOT ENCOUNTERED |
| DR-C1         | 222.00               | 6.50       | 15 IN/HR    | ROCK 8.5'                     |
| DR-C2         | 222.00               | 6.50       | 18 IN/HR    | ROCK 8.5'                     |
| DR-D1         | 223.50               | 7.00       | 11.25 IN/HR | ROCK 9.0'                     |
| DR-D2         | 223.50               | 7.00       | 10.50 IN/HR | ROCK 9.0'                     |

\* TESTING CONDUCTED ON 01/16/14 BY EARTH ENGINEERING INCORPORATED.

TOTAL ESTIMATED EARTH DISTURBANCE:  
WITHIN PROPERTY: 101,058  
WITHIN RIGHT OF WAY: 12,695  
TOTAL: 113,753

GENERAL NOTES:  
1. PER NRCS SOILS INFORMATION, ON-SITE SOILS WITH THE AREA OF DISTURBANCE CONSIST OF URBAN LAND CHESTER COMPLEX 0 TO 8 PERCENT SLOPES. SOIL IS CONSIDERED HYDRAULIC SOIL GROUP 'B'.





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Consultants

Legend

Notes

| Revision | By  | Appd. | YY.MM.DD       |
|----------|---|-------|----------------|
| 4        | PER STREETS DEPT COMMENTS 9/3/14          | WPS   | CJO 14.09.05   |
| 3        | ADDED UTILITY INFO & EX. PAVEMENT MARKING | WPS   | CJO 14.08.26   |
| 2        | REVISED PER PWD REVIEW LETTER             | GDJ   | CJO 14.08.07   |
| 1        | PWD/PAEP TECHNICAL SUBMISSION             | WPS   | CJO 14.07.15   |
| Issued   |   | By    | Appd. YY.MM.DD |

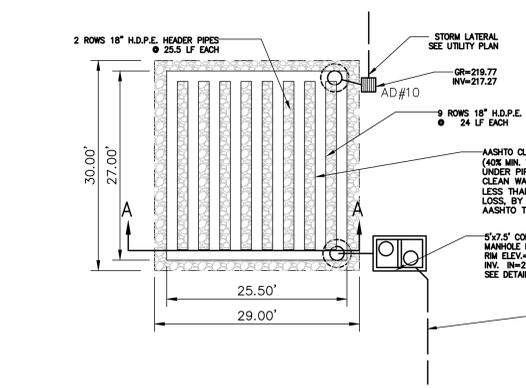
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| File Name: 174810882-150delt.dwg | DBA  | KRS   | DBA   | 12.07.10 |
| Permit/Seal                      | Dwn. | Chkd. | Dsgn. | YY.MM.DD |

Client/Project  
DALE CORP. / PHA

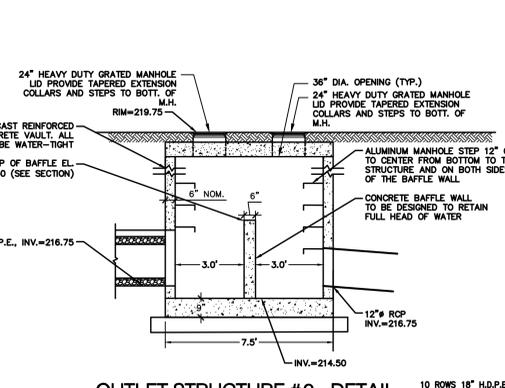
301 WEST QUEEN LANE  
PHILADELPHIA, PA 19144  
12TH WARD

Title  
POST CONSTRUCTION STORMWATER  
CONSTRUCTION DETAILS

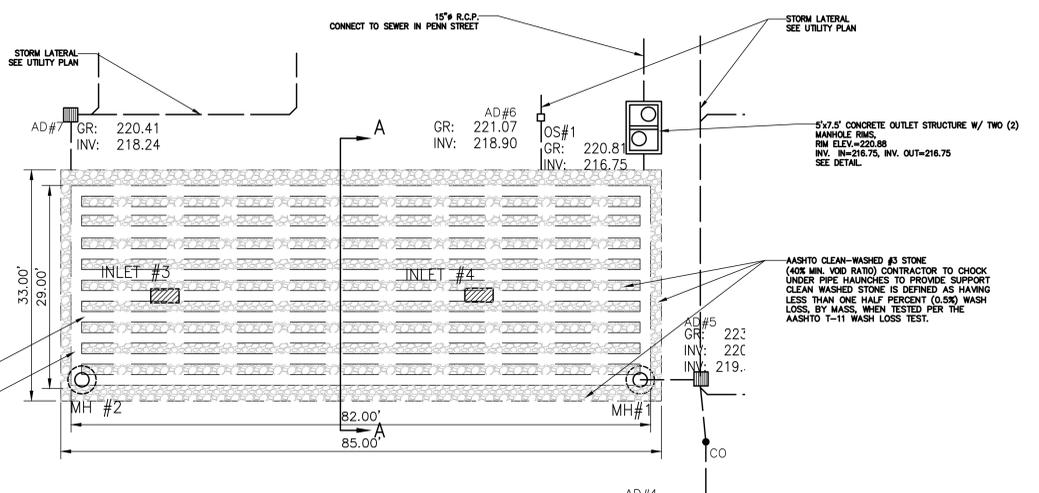
|             |       |          |
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| Project No. | Scale | AS SHOWN |
| 174810882   |       |          |
| Drawing No. | Sheet | Revision |
|             |       |          |



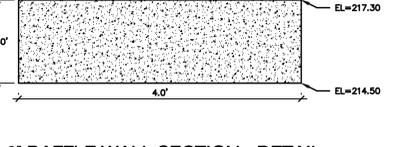
INFILTRATION BASIN DETAIL #2 (PLAN VIEW)  
NOT TO SCALE



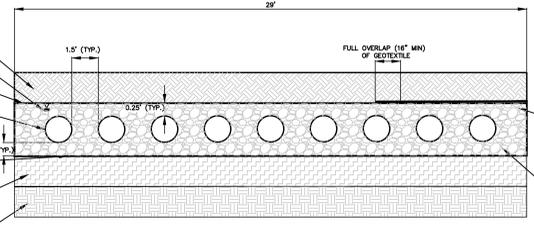
OUTLET STRUCTURE #2 - DETAIL  
NOT TO SCALE



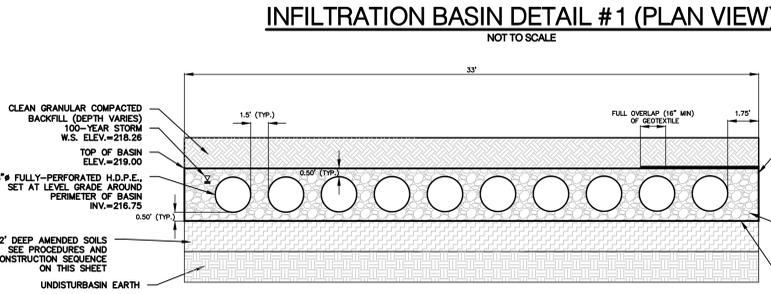
INFILTRATION BASIN DETAIL #1 (PLAN VIEW)  
NOT TO SCALE



6\"/>



INFILTRATION BASIN DETAIL #2 (SECTION A-A)  
NOT TO SCALE



INFILTRATION BASIN DETAIL #1 (SECTION A-A)  
NOT TO SCALE

INFILTRATION BASIN SEQUENCE OF CONSTRUCTION

- A LICENSED PROFESSIONAL OR DESIGNER SHALL BE PRESENT AT THE SITE DURING THE INSTALLATION OF THE INFILTRATION BASIN.
- AT LEAST THREE DAYS PRIOR TO EXCAVATING THE INFILTRATION BASIN, CONTACT THE INSPECTIONS COORDINATOR OF PWD (OFFICE 215-685-6387) TO SCHEDULE AND INSPECTION TIME.
- NOTE THAT AN INDUSTRIAL WASTE PERMIT WILL BE REQUIRED SHOULD PUMPING TO CITY-OWNED INFRASTRUCTURE BECOME NECESSARY DURING CONSTRUCTION.
- BEFORE CONSTRUCTION OF INFILTRATION BASIN, INSTALL SILT FENCE ON THE UPHILL SIDE OF INFILTRATION BASIN OR DIRECT RUNOFF AROUND THE INFILTRATION BASIN AREA WITH A DIVERSION BERM. INLET PROTECTION IS TO BE INSTALLED AT ALL TRIBUTARY INLETS AND MAINTAINED UNTIL THE TRIBUTARY AREA IS STABILIZED.
- EXCAVATE AREA FOR INFILTRATION BASIN TO PROPOSED INVERT DEPTH OF SOIL. AMENDMENT AND MANUALLY GRADE AND SCARIFY THE EXISTING SOIL SURFACE. REMOVE ANY LARGE OR SHARP ROOTS AND ROCKS. NO HEAVY EQUIPMENT SHOULD BE ALLOWED TO RUN ON THE BOTTOM OF THE INFILTRATION BASIN. BASIN BOTTOM SHOULD BE LEVEL AFTER FINAL GRADING. PLACE EXCAVATION MATERIAL IN AN AREA THAT WILL PREVENT RUNOFF FROM ENTERING THE EXCAVATED AREA OR PLACE ADDITIONAL SILT FENCE AS NEEDED.
- EXISTING SUBGRADE SHALL NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT PRIOR TO PLACEMENT OF GEOTEXTILE AND AMENDED SOIL. IF IT IS ESSENTIAL THAT THE EQUIPMENT BE USED IN THE EXCAVATED AREA, ALL EQUIPMENT MUST BE APPROVED BY THE ENGINEER. USE OF EQUIPMENT WITH NARROW TRACKS OR TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION AND SHALL NOT BE USED. SHOULD THE SUBGRADE BE COMPACTED DURING CONSTRUCTION, ADDITIONAL TESTING OF SOIL INFILTRATION RATES AND SYSTEM REDSIGN MAY BE REQUIRED.
- IF BEDROCK OR ANY UNFAVORABLE CONDITION IS ENCOUNTERED AT ANY TIME DURING EXCAVATION OF THE INFILTRATION BASIN, EXCAVATION IS TO BE DISCONTINUED IN THE AFFECTED AREA AND THE OWNER AND ENGINEER ARE TO BE NOTIFIED AT ONCE. THE PROPOSED INFILTRATION BASIN SHOULD BE RELOCATED TO A MORE SUITABLE LOCATION ON THE PROPERTY. APPROVAL BY THE CITY OF PHILADELPHIA WATER DEPARTMENT AND PADEP IS REQUIRED PRIOR TO RELOCATING INFILTRATION BASINS.
- INSTALL 2 FT OF AMENDED SOIL IN ACCORDANCE WITH SOIL AMENDMENT PROCEDURES DESCRIBED BELOW.
- PLACE GEOTEXTILE AND RECHARGE BASIN AGGREGATE IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION TO PREVENT ACCUMULATION OF DEBRIS OR SEDIMENT. PREVENT RUNOFF AND SEDIMENT FROM ENTERING THE STORAGE BED DURING THE PLACEMENT OF GEOTEXTILE AND AGGREGATE BED. IF SEDIMENT ENTERS THE STONE, THE CONTRACTOR MAY BE REQUIRED TO REMOVE THE SEDIMENT AND REPLACE THE STONE WITH CLEAN, WASHED STONE.
- UPON COMPLETION OF THE INFILTRATION BASIN, ORANGE CONSTRUCTION FENCING SHALL BE PLACED AROUND THE PERIMETER OF THE BASIN TO RESTRICT CONSTRUCTION VEHICLES FROM ENTERING UPON THE BASIN. COMPLETE SMP CONSTRUCTION CERTIFICATION FORMS FOR THE INFILTRATION BASIN.

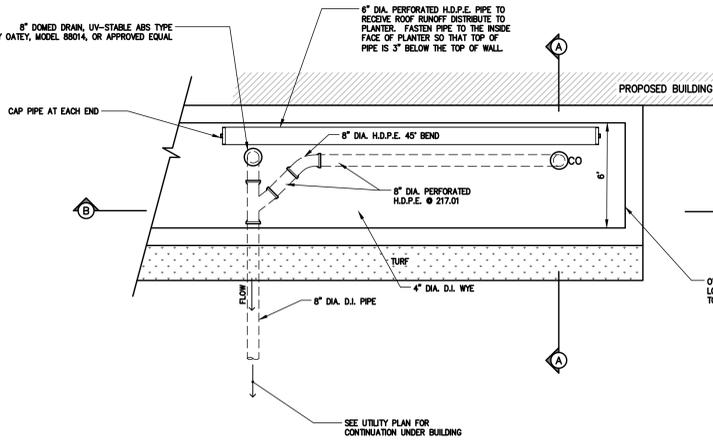
CRITICAL STAGES OF CONSTRUCTION REQUIREMENTS:

- THE PERMITTEE SHALL PROVIDE ENGINEERING CONSTRUCTION OVERSIGHT FOR THE PROPOSED STORMWATER BMPs. ADDITIONAL SOIL TESTING MAY BE REQUIRED PRIOR TO THE INSTALLATION OF STORMWATER BMPs TO ENSURE PROPER LOCATION AND FUNCTION. A LICENSED PROFESSIONAL ENGINEER KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF STORMWATER BMPs, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT. A MINIMUM OF 2 DAYS NOTICE IS REQUIRED FOR INSPECTION.
- CRITICAL STAGES WHERE OVERSIGHT IS REQUIRED ARE AS FOLLOWS:
  - DURING CONSTRUCTION OF INFILTRATION BASINS
  - DURING THE INSTALLATION OF WATER QUALITY STRUCTURES
  - DURING GREEN ROOF CONSTRUCTION

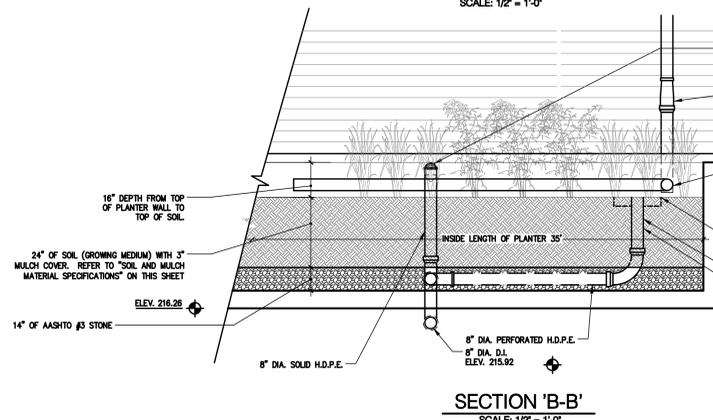
SOIL AMENDMENT PROCEDURES & SEQUENCE OF CONSTRUCTION FOR INFILTRATION SYSTEMS

- EXCAVATE TWO FEET BELOW THE PROPOSED INFILTRATION BASIN INVERT ELEVATION WITH BACKDICE POSITIONED OUTSIDE OF THE BASIN. ALL EXCAVATED MATERIAL SHALL BE PLACED OUTSIDE OF THE BASIN. ANY AND ALL STORMWATER RUNOFF AND SEDIMENT SHALL BE PREVENTED FROM ENTERING THE EXCAVATION DURING ANY STAGE OF CONSTRUCTION OF THE INFILTRATION BASIN. GRADE SURROUNDING THE BASIN SHALL DIRECT STORMWATER RUNOFF AWAY FROM THE BASIN AND SILT FENCE OR OTHER SUITABLE EROSION CONTROLS SHALL BE USED TO PREVENT ANY SEDIMENT FROM ENTERING THE EXCAVATION.
- MANUALLY GRADE AND FLATTEN SOIL SURFACE ACROSS THE BOTTOM OF THE PROPOSED INFILTRATION BASIN SUBGRADE. THE BOTTOM SURFACE SHALL BE AT A LEVEL GRADE. THE EXISTING SUBGRADE SHALL NOT BE COMPACTED OR SUBJECT TO ANY CONSTRUCTION EQUIPMENT.
- PLACE THE SPECIFIED NON-WOVEN GEOTEXTILE FABRIC ACROSS THE BOTTOM OF THE SUBGRADE. IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION, IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS, THE GEOTEXTILE FABRIC LAD DOWN SHALL BE OVERLAPPED A MINIMUM OF 18 INCHES AND A MAXIMUM OF 24 INCHES.
- THE AMENDMENT OF THE TWO-FEET OF SOIL REMOVED BELOW THE PROPOSED BOTTOM OF THE INFILTRATION BASIN SHALL RENDER A MATERIAL THAT HAS THE FOLLOWING PROPERTIES, UNLESS AN APPROVED BLENDED MATERIAL CAN BE SUPPLIED IN PLACE OF AMENDING EXISTING SITE SOILS.
  - AMENDED SOIL PROPERTIES:
    - GRAIN SIZE ANALYSIS OF PRE-BLENDED SOIL FROM AN OFF-SITE SOURCE SHALL FALL WITHIN THE FOLLOWING RANGES AND MUST BE APPROVED PRIOR TO USE:
 

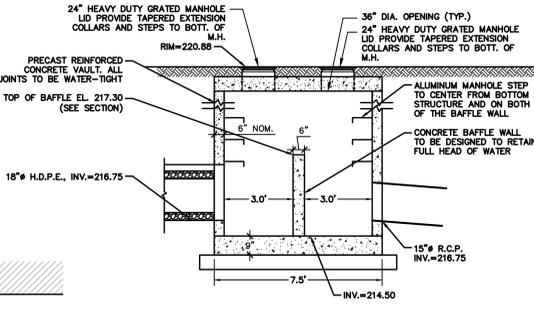
| TEST SIEVE SIZE | US SIEVE SIZE | PERCENT PASSING |
|-----------------|---------------|-----------------|
| 4.75 MM         | NO. 4         | 100             |
| 2.08 MM         | NO. 8         | 90 - 100        |
| 1.18 MM         | NO. 10        | 65 - 80         |
| 595 µm          | NO. 30        | 35 - 60         |
| 297 µm          | NO. 50        | 15 - 25         |
| 149 µm          | NO. 100       | 0 - 4           |
    - 10% BY VOLUME FINE-GRAIN ORGANIC MATERIAL, WHICH SHALL BE GROUND PEATMOSS OR AN APPROVED ALTERNATE, SHALL BE UNIFORMLY BLENDED WITH ON-SITE SOILS OR APPROVED OFF-SITE SOURCE. THE AMENDED SOIL SHALL BE UNIFORMLY BLENDED, WITHOUT ANY VISIBLE CLUMPS OF FINE-GRAIN MATERIAL.
    - PRIOR TO PLACEMENT THE AMENDED SOIL IT SHALL BE INSPECTED AND APPROVED BY THE ON-SITE CONSTRUCTION MANAGER.
- PLACE FOUR (4) SIX (6) INCH THICK LIFTS OF AMENDED SOIL ACROSS THE ENTIRE BOTTOM OF THE GEOTEXTILE COVERED SUBGRADE. PLACE THE FIRST SIX-INCH LIFT AND MANUALLY GRADE AND LEVEL THE SURFACE. THEN TAKE A SINGLE (1) PASS ACROSS THE BOTTOM OF THE BASIN WITH A VIBRATORY PLATE COMPACTOR WITH NO OVERLAP. PLACE THREE (3) MORE SIX-INCH THICK LIFTS, EACH FOLLOWED BY A SINGLE PASS WITH A VIBRATORY PLATE COMPACTOR. THE VIBRATORY PLATE COMPACTOR SHALL BE RUN PERPENDICULAR TO THE PREVIOUS PASS (E.G., FIRST LIFT, PLATE COMPACTOR PASSED EAST TO WEST; SECOND LIFT, PLATE COMPACTOR PASSED NORTH TO SOUTH). A FIFTH (5) LIFT MAY BE REQUIRED TO ACHIEVE A TOTAL DEPTH OF 24 INCHES OF AMENDED MATERIAL ACROSS THE ENTIRE SUBGRADE. IF A FIFTH (5) LIFT IS REQUIRED AND IT IS LESS THAN THREE (3) INCHES THICK IT SHALL NOT REQUIRE A PASS WITH THE VIBRATORY PLATE COMPACTOR. IF GRADE STRIKES ARE USED TO GUIDE THE PLACEMENT OF AMENDED MATERIAL TO THE PROPER DEPTH, THEY MAY NOT PERCEDE THE UNDERLYING GEOTEXTILE FABRIC.
- PERFORM ONE (1) CONFIRMATORY INFILTRATION TESTS PER 1,500 SQUARE FEET OF AMENDED SOIL PLACED, AND A MINIMUM OF TWO (2) TESTS IN EACH BASIN THAT IS GREATER THAN 500 SQUARE FEET. THE TESTS SHALL BE DOUBLE-RING INFILTRATION TESTS OR APPROVED EQUIPMENT. THE SOIL TEST MUST BE RUN FOR A MINIMUM OF 4 HOURS. IF THE TESTED INFILTRATION RATE IS DETERMINED TO BE LESS THAN 5 INCHES PER HOUR, THEN THE AMENDED SOIL SHALL BE REMOVED/FILED TO LOOSEN THE SOIL AND RETESTED. THE OWNER MUST PROVIDE CERTIFICATION IN WRITING TO PWD INDICATING THAT THE AMENDED SOIL MIX MEETS THE CRITERIA SPECIFIED ON THE PLANS AND HAS BEEN PLACED IN ACCORDANCE WITH THIS CONSTRUCTION SEQUENCE.
- MANUALLY GRADE AND FLATTEN THE SOIL SURFACE ACROSS THE BOTTOM OF THE PROPOSED INFILTRATION BASIN SUBGRADE. THE BOTTOM SURFACE SHALL BE AT A LEVEL GRADE. THE BASIN SUBGRADE SHALL NOT BE COMPACTED OR SUBJECT TO CONSTRUCTION EQUIPMENT PRIOR TO THE PLACEMENT OF GEOTEXTILE, STONE BASIN AND PIPING.
- PLACE THE SPECIFIED NON-WOVEN GEOTEXTILE FABRIC ACROSS THE BOTTOM OF THE SUBGRADE AND UP THE SIDES OF THE EXCAVATION, LEAVING SUFFICIENT MATERIAL TO LATER COVER THE TOP OF THE STONE. IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION, IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS, FABRIC SHALL BE SECURED ALONG THE SIDES TO PREVENT SAGGING DURING BACKFILLING OPERATIONS. THE GEOTEXTILE FABRIC ACROSS THE BOTTOM AND SIDES SHALL BE OVERLAPPED A MINIMUM OF 18 INCHES AND A MAXIMUM OF 24 INCHES.
- PLACE RECHARGE BASIN AGGREGATE AND PIPING IMMEDIATELY AFTER APPROVAL OF SUBGRADE AND GEOTEXTILE. INSTALL SPECIFIED BASIN AGGREGATE IN LIFTS OF 6-8 INCHES. LIGHTLY COMPACT AND LEVEL EACH LAYER WITH EQUIPMENT, KEEPING EQUIPMENT MOVEMENT OVER INFILTRATION BASIN TO THE MINIMUM NECESSARY FOR PLACING THE PIPING AND COMPACTION OF THE BASIN AGGREGATE. INSTALL AGGREGATE TO THE GRADES SPECIFIED ON THE DRAWINGS. INSTALL THE PIPING LEVEL AND AT THE GRADES SPECIFIED ON THE DRAWINGS.
- PLACE THE SPECIFIED NON-WOVEN GEOTEXTILE FABRIC ACROSS THE TOP OF THE BASIN AGGREGATE IMMEDIATELY AFTER APPROVAL, IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. FABRIC SHALL BE SECURED ALONG THE SIDES TO PREVENT SAGGING DURING BACKFILLING OPERATIONS. ADJACENT STRIPS OF FABRIC SHALL OVERLAP A MINIMUM OF 18 INCHES AND A MAXIMUM OF 24 INCHES.
- COMPLETE SURFACE GRADING ABOVE SUBSURFACE INFILTRATION SYSTEM, USING SUITABLE EQUIPMENT TO AVOID EXCESS COMPACTION.



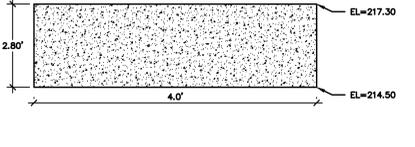
FLOW-THROUGH PLANTER BOX  
SCALE: 1/2\"/>



SECTION 'B-B'  
SCALE: 1/2\"/>



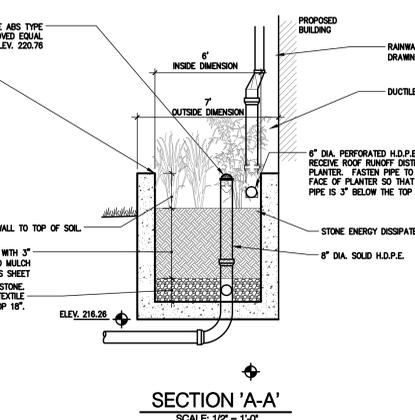
OUTLET STRUCTURE #1 - DETAIL  
NOT TO SCALE



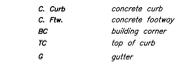
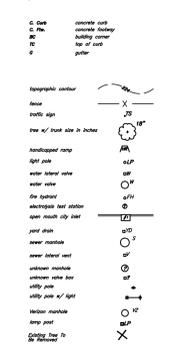
6\"/>

- PLANTER BOX SOIL AND MULCH MATERIAL SPECIFICATIONS:
- ORGANIC MULCH SHALL BE AGED, DOUBLE-SHREDED HARDWOOD BARK OR COMPOSTED LEAF MATERIAL.
  - MULCH SHALL BE FREE OF WEEDS.
  - PLANTING/FILTER MEDIUM SHALL BE A SANDY LOAM, LOAMY SAND, LOAM (USDA), OR A LOAM/SAND MIX (SHOULD CONTAIN A MINIMUM 35 TO 60% SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHOULD BE LESS THAN 20% BY VOLUME. SOILS SHOULD FALL WITHIN THE SM, ML, SC CLASSIFICATIONS OF THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0.5\"/>
- PARAMETER VALUE
- PH RANGE 5.2 TO 7.00
  - ORGANIC MATTER 1.5 TO 4.0% (BY WEIGHT)
  - MAGNESIUM 35 LBS. PER ACRE, MINIMUM
  - PHOSPHORUS (PHOSPHATE - P205) 75 LBS. PER ACRE, MINIMUM
  - POTASSIUM (POTASH - K2O) 85 LBS. PER ACRE, MINIMUM
  - SOLUBLE SALTS 500 PPM
  - CLAY 10 TO 25%
  - SILT 30 TO 55%
  - SAND 35 TO 60%

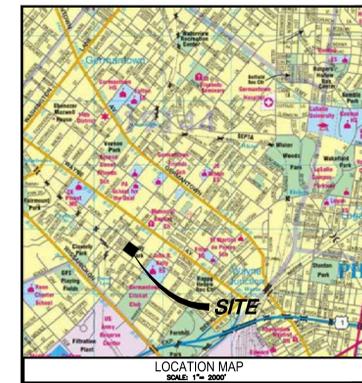
- GEOTEXTILE FILTER FABRIC SPECIFICATIONS (GEOTEX 451 GEOTEXTILE FABRIC PADOT CLASS 1 OR APPROVED EQUAL)
- GRAB TENSILE STRENGTH 120 LBS
  - MULLEN BURST STRENGTH 230 PSI
  - FLOW RATE 120 GAL/MIN/FT<sup>2</sup>
  - UV RESISTANCE AFTER 500 HRS 70%



SECTION 'A-A'  
SCALE: 1/2\"/>



- ALL DIMENSIONS SHOWN ON PLAN ARE IN PHILADELPHIA DISTRICT STANDARD MEASURE UNLESS OTHERWISE NOTED.
- ELEVATIONS SHOWN ON PLAN ARE IN PHILADELPHIA CITY DATUM. "227.04 CIP" DENOTES CITY PLAN ELEVATIONS AND GRADES. CURB ELEVATIONS AND GRADES ARE FROM PHILADELPHIA CITY PLAN NO. 16.
- ATTENTION IS CALLED TO THE PHILADELPHIA ZONING CODE AS AMENDED. PROPERTY IS ZONED "R2C AND T2-11".
- SUBJECT PROPERTIES ARE NOT IN A FLOOD HAZARD AREA AS PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE MAPS, DATED JANUARY 17, 2007 OR COUNTY PLAN: 000707 (R2C).
- UTILITIES ENTER THE PREMISES FROM PUBLIC STREETS OR RIGHT OF WAY.
- PROPERTY LINES SHOWN ARE TAKEN FROM "SITE RELOCATION PLAN" PREPARED BY STANTEC, LAST REVISED JUNE 27, 2012 AND APPROVED BY THE 9TH SURVEY DISTRICT ON JULY 3, 2012.
- PLAN MADE AS PER INSTRUCTIONS OF THE PHILADELPHIA HOUSING AUTHORITY AND DALE CORPORATION.
- ALL PROPOSED UTILITY SERVICES WILL BE UNDERGROUND OR WILL ENTER PROPOSED PROPERTIES FROM THE PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR SHALL CONFORM TO ALL THE REQUIREMENTS OF PA ACT 187 AS AMENDED.
- STORMWATER RUNOFF FROM ALL DIRECTLY CONNECTED IMPERVIOUS AREAS WILL BE CONVEYED TO THE PROPOSED INFILTRATION BASINS UNLESS OTHERWISE NOTED. ERSA TRACKING # 2012-3018-1908-01.
- CURB GRADES TO BE REGULATED BY THE 9TH SURVEY DISTRICT.
- PAH WILL BE RESPONSIBLE FOR ALL REQUIRED MAINTENANCE ASSOCIATED WITH THE STORMWATER CONVEYANCE AND MANAGEMENT IMPROVEMENTS ON THIS SITE.
- ALL PRIVATE COST CONTRACT FACILITIES TO BE DESIGNED AND CONSTRUCTED TO PWD STANDARDS, AND COMPLY WITH THE PHILADELPHIA PLUMBING CODE.



GENERAL LANDSCAPE NOTES:

- THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS SHOWN, INCLUDING ALL LABOR, MATERIALS, EQUIPMENT, INCIDENTALS AND CLEANUP.
- ALL PLANTS SHALL BE NURSERY GROWN. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH.
- INsofar as it is PRACTICABLE, PLANT MATERIALS SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT THE STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A 3 DAY PERIOD AFTER DELIVERY.
- PLANTING SOIL FOR BACKFILLING PLANTED AREAS SHALL CONSIST OF 2 PARTS BY VOLUME OF LOAMY TOPSOIL THOROUGHLY MIXED WITH ONE PART PEAT MOSS. NOTHING BUT SUITABLE TOPSOIL, FREE OF DRY SOD, STIFF CLAY, DEBRIS, OR OTHER UNSUITABLE MATERIALS, SHALL BE USED FOR PLANTING AND SEEDING.
- ALL PLANTING SHALL BE INSTALLED AT THE LOCATIONS INDICATED ON THE DRAWINGS. MINOR ADJUSTMENTS TO PLANTING LOCATIONS MAY BE NECESSARY DUE TO FIELD CONDITIONS AND FINAL GRADING. THE CONTRACTOR SHALL ENSURE THAT LANDSCAPE INSTALLATION DOES NOT INTERRUPT EXISTING OR PROPOSED DRAINAGE PATTERNS. THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER IF MAJOR ADJUSTMENTS ARE REQUIRED.
- ALL PLANTS SHALL BE PLUMED AND STRAIGHT AND INSTALLED AT SUCH A LEVEL THAT, AFTER SETTLEMENT, THE INDICATED RELATIONSHIP BETWEEN THE CROWN OF THE ROOT BALL AND THE GROUND SURFACE WILL BE ESTABLISHED. (SEE PLANTING DETAILS). ALL PLANTS SHALL BE LOCATED IN THE CENTER OF THEIR RESPECTIVE PLANTING PITS.
- TREES IN LEAF WHEN PLANTED SHALL BE TREATED WITH ANTI-DESICCANT SUCH AS "WILT-PROOF".
- ALL PLANTING BEDS ADJACENT TO LAWN, SOD OR SEEDING AREAS SHALL BE SPADE EDGED.
- ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT HERBICIDE PRIOR TO FINAL LANDSCAPE INSPECTION. GROUND COVER AREAS SHALL BE WEDED PRIOR TO APPLICATION. PRE-EMERGENT. APPLY PRE-EMERGENT AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- UNLESS THIS SPECIFICALLY WAIVED BY THE OWNER, NEW PLANTING AREAS AND NEW TURF AREAS SHALL BE ADEQUATELY WATERED AND MAINTAINED BY THE CONTRACTOR AS REQUIRED TO ESTABLISH THE NEW PLANTS AND LAWN, UNTIL OWNER'S ACCEPTANCE.
- THIS PLAN SHALL BE USED FOR LANDSCAPE PURPOSES ONLY. THE CONTRACTOR SHALL REVIEW RELATED ARCHITECTURAL/ENGINEERING PLANS TO BECOME THOROUGHLY FAMILIAR WITH SITE LAYOUT, GRADING AND UTILITIES.
- SPECIFICATIONS FOR TOPSOIL, SEEDING, MULCH, GENERAL REQUIREMENTS AND WORK EXECUTION SHALL BE PROVIDED TO THE OWNER UPON REQUEST.

| QTY                        | KEY | BOTANICAL NAME                          | COMMON NAME                  | SIZE         | ROOT        | REMARKS                  |
|----------------------------|-----|---|------------------------------|--------------|-------------|--------------------------|
| <b>TREES</b>               |     |   |                              |              |             |                          |
| 4                          | AL  | AMELANCHIER LAEVIS                      | SMOOTH SERVICEBERRY          | 7-8' HT.     | B&B         | HEAVY, MULTI-STEM        |
| 6                          | AR  | ACER RUBRUM 'RED SUNSET'                | 'RED SUNSET' RED MAPLE       | 2-2 1/2" CAL | B&B         | MATCHED, 6" BRANCH BREAK |
| 4                          | CC  | CERCIS CANADENSIS                       | EASTERN REDBUD               | 7-8' HT.     | B&B         | MATCHED                  |
| 4                          | CF  | CORNUS FLORIDA 'CHEROKEE CHIEF'         | 'CHEROKEE CHIEF' DOGWOOD     | 7-8' HT.     | B&B         |                          |
| 6                          | MV  | MAGNOLIA VIRGINIANA                     | SWEETBAY MAGNOLIA            | 7-8' HT.     | B&B         | MATCHED                  |
| 7                          | GT  | GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE' | SKYLINE HONEYLOCUST          | 2-2 1/2" CAL | B&B         | MATCHED, 6" BRANCH BREAK |
| 5                          | PA  | PLATANUS X ACERIFOLIA 'BLOODGOOD'       | 'BLOODGOOD' LONDON PLANETREE | 2-2 1/2" CAL | B&B         | MATCHED, 6" BRANCH BREAK |
| <b>SHRUBS</b>              |     |   |                              |              |             |                          |
| 28                         | IGC | ILEX GLABRA 'SHAMROCK'                  | SHAMROCK INKBERRY            | 15-18"       | #3 CAN      |                          |
| 12                         | SB  | SPIREA X BIMALDA 'ANTHONY WATERER'      | ANTHONY WATERER SPIREA       | 18-24"       | #2 CAN      | 2.5' O.C.                |
| 57                         | TM  | TAXUS X MEDIA 'DENSIFORMIS'             | DENSE YEW                    | 24-30"       | #3 CAN      |                          |
| <b>PERENNIALS/ GRASSES</b> |     |   |                              |              |             |                          |
| 10                         | PV  | PANICUM VIRGATUM                        | SWITCH GRASS                 | 1 GAL.       | 2 1/2' O.C. |                          |
| 10                         | RF  | RHODOCKA FULGIDA 'GOLDSTURN'            | BLACK-EYED SUSAN             | 1 QT.        | 18" O.C.    |                          |

**CALL BEFORE YOU DIG!**  
PENNSYLVANIA LAW REQUIRES THREE (3) WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND TEN (10) WORKING DAYS FOR DESIGN STAGE. UTILITY INFORMATION IDENTIFIED THROUGH THE ONE-CALL PROCESS IS VALID FOR 90 DAYS FROM THE DATE OF THE CALL. ONE CALL SERIAL NO.'S 20141781791, 20141781792, 20141781800, 20141781807

Pennsylvania One Call System, Inc.  
**1-800-242-1776**

OWNER/APPLICANT:  
PHILADELPHIA HOUSING AUTHORITY  
3100 PENROSE FERRY ROAD  
PHILADELPHIA, PA 19145  
(215) 928-4077

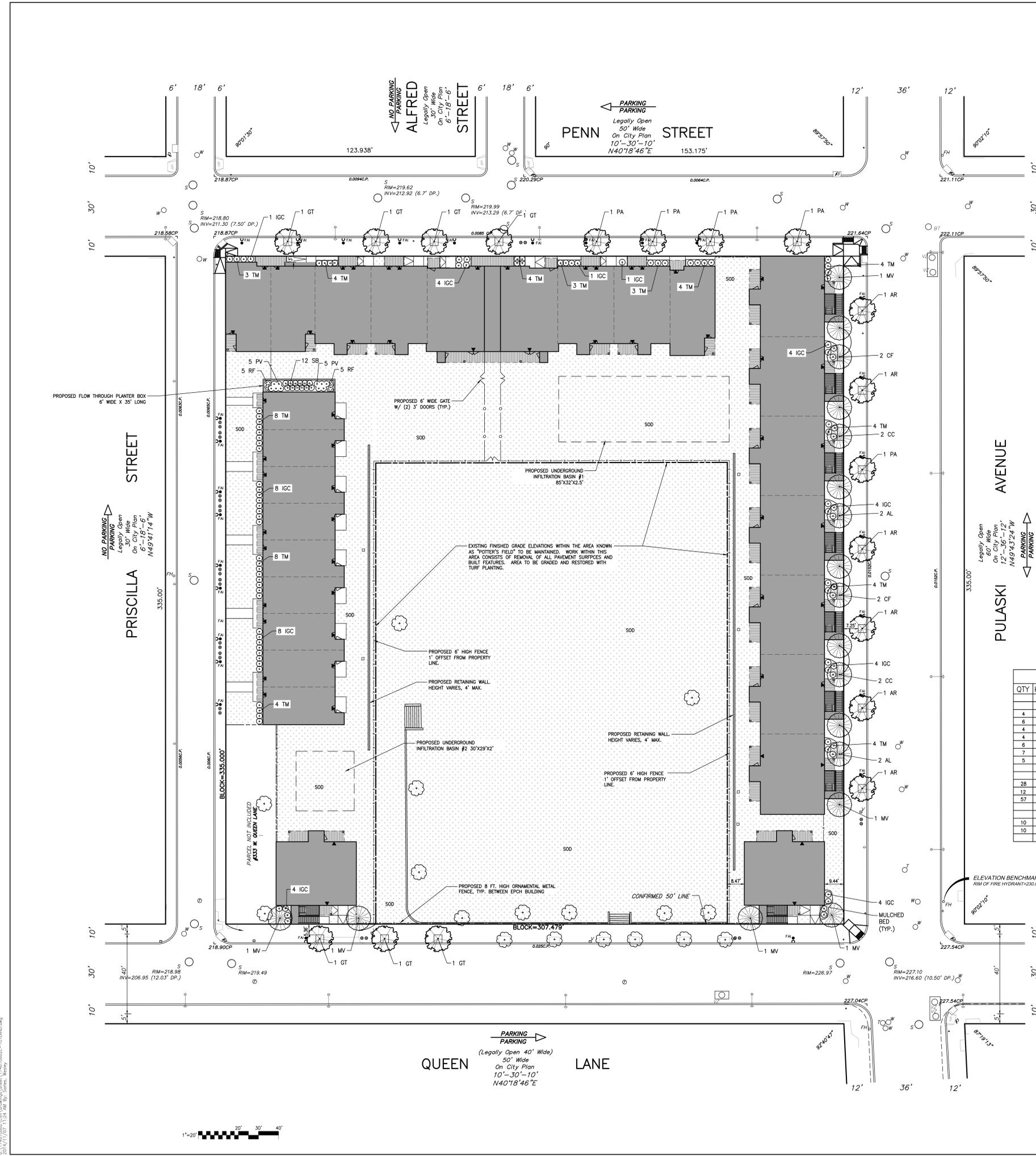
**STREET TREE LIST**

FOR LOCATIONS WITH UTILITY LINES ABOVE. SELECT FROM THE FOLLOWING LIST:

|                      |                        |
|----------------------|------------------------|
| <b>LATIN NAME</b>    | <b>COMMON NAME</b>     |
| ACER BUERSERIANUM    | TRIDENT MAPLE          |
| ACER GRiseum         | PAPERBARK MAPLE        |
| SYRINGA RETICULATA   | JAPANESE TREE LILAC    |
| MALUS 'ADIRONDACK'   | ADIRONDACK CRABAPPLE   |
| MALUS 'HARVEST GOLD' | HARVEST GOLD CRABAPPLE |

FOR LOCATIONS WITHOUT UTILITY LINES ABOVE. SELECT FROM THE FOLLOWING LIST:

|                                  |                         |
|----------------------------------|-------------------------|
| <b>LATIN NAME</b>                | <b>COMMON NAME</b>      |
| TILIA TOMENTOSA 'GREEN MOUNTAIN' | SILVER LINDEN CULTIVAR  |
| OSTRYA VIRGINIANA                | HOP HORNBREAM           |
| ULMUS PARVIFLORA 'ALLEE'         | LACEBARK 'ELM' CULTIVAR |
| CELTIS OCCIDENTALIS              | HICKBERRY               |
| ZELKOVA SERRATA 'GREEN VASE'     | GREEN VASE ZELKOVA      |



| Revision | By  | Appd. | YY.MM.DD     |
|----------|---|-------|--------------|
| 4        | PER STREETS DEPT COMMENTS 9/3/14          | WPS   | CJO 14.09.05 |
| 3        | ADDED UTILITY INFO & EX. PAVEMENT MARKING | WPS   | CJO 14.08.26 |
| 2        | REVISED PER PWD REVIEW LETTER             | WPS   | CJO 14.08.07 |
| 1        | PWD/PADEP TECHNICAL SUBMISSION            | WPS   | CJO 14.07.15 |

| File Name:            | DBA | KRS | DBA | 12.07.10 |
|-----------------------|-----|-----|-----|----------|
| 174810882-101land.dwg |     |     |     |          |

| Permit/Seal | Dwn. | Chkd. | Desgn. | YY.MM.DD |
|-------------|------|-------|--------|----------|
|             |      |       |        |          |

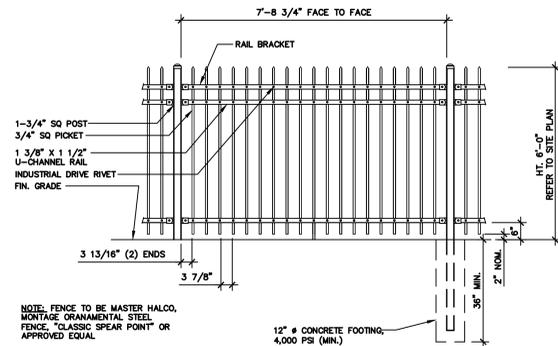
Client/Project  
DALE CORP. / PHA

301 WEST QUEEN LANE  
PHILADELPHIA, PA 19144  
12TH WARD

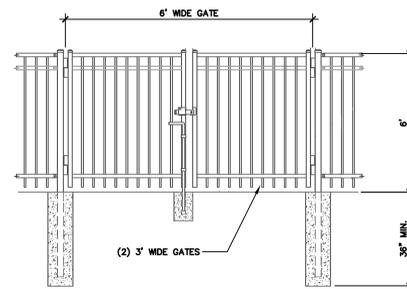
Title  
LANDSCAPING PLAN

| Project No. | Scale  |
|-------------|--------|
| 174810882   | 1"=20' |

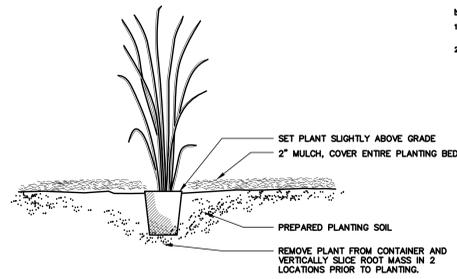
| Drawing No. | Sheet  | Revision |
|-------------|--------|----------|
| L101        | 1 of 2 | 0        |



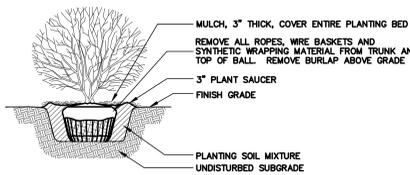
**ORNAMENTAL METAL FENCE**  
 NOT TO SCALE



**ORNAMENTAL METAL FENCE GATE**  
 NOT TO SCALE

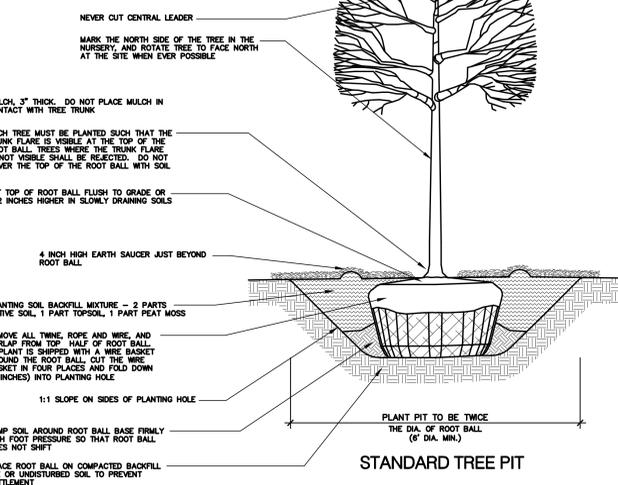


**3 ORNAMENTAL GRASS / PERENNIAL**  
 C-151 SCALE: NOT TO SCALE

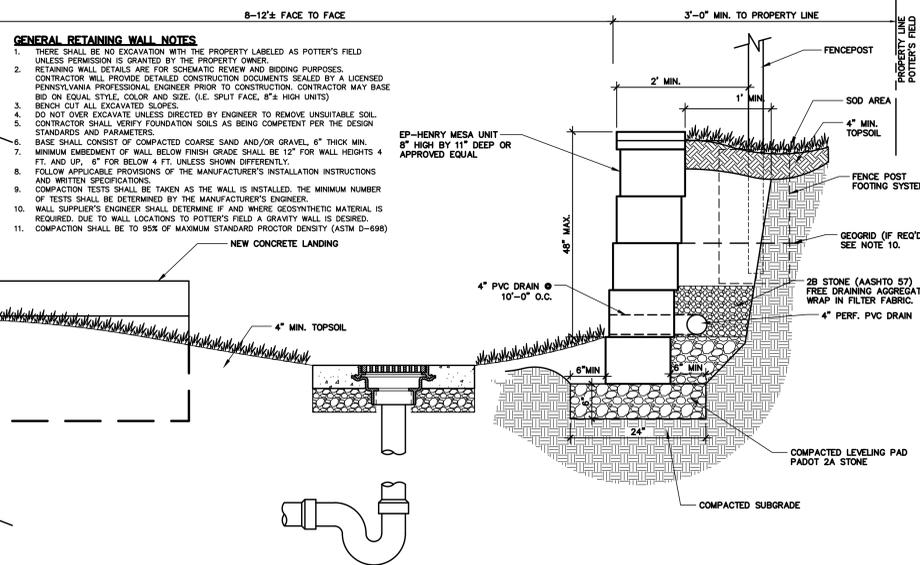


**2 SHRUB**  
 C151 SCALE: NOT TO SCALE

- TREE PLANTING NOTES**
- DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR BRANCHES AND LATERAL BRANCHES MAY BE PRUNED, HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
  - STAKE TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.
  - WRAP TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.
  - WATER THOROUGHLY DURING PLANTING TO ELIMINATE AIR POCKETS, SETTLE, AND TO SOAK THE BALL AND SURROUNDING SOIL.
  - TREES THAT ARE OVERMULCHED, OR PLANTED TOO HIGH (MORE THAN 6 INCHES ABOVE THE SURROUNDING SOIL LEVEL), SHALL BE REJECTED AND REPLACED AT THE DISCRETION OF THE LANDSCAPE ARCHITECT.



**1 DECIDUOUS TREE**  
 C151 SCALE: NOT TO SCALE



**SEGMENTAL BLOCK WALL AT REAR OF BUILDING**  
 NOT TO SCALE

- Notes**
- ALL DIMENSIONS SHOWN ON PLAN ARE IN PHILADELPHIA DISTRICT STANDARD MEASURE UNLESS OTHERWISE NOTED.
  - ELEVATIONS SHOWN ON PLAN ARE IN PHILADELPHIA CITY DATUM. "227.04 CDT" DENOTES CITY PLAN ELEVATIONS AND GRADES. CURB ELEVATIONS AND GRADES ARE FROM PHILADELPHIA CITY PLAN No.16.
  - ATTENTION IS CALLED TO THE PHILADELPHIA ZONING CODE AS AMENDED. PROPERTY IS ZONED "R2C AND T2-11".
  - SUBJECT PROPERTIES ARE NOT IN A FLOOD HAZARD AREA AS PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE MAPS, DATED JANUARY 17, 2007 OR COMMUNITY PLAN # 2010-01005.
  - UTILITIES ENTER THE PREMISES FROM PUBLIC STREETS OR RIGHT OF WAY.
  - PROPERTY LINES SHOWN ARE TAKEN FROM "LOT LINE RELOCATION PLAN" PREPARED BY STANTEC, LAST REVISED JUNE 27, 2012 AND APPROVED BY THE 9TH SURVEY DISTRICT ON JULY 3, 2012.
  - PLAN MADE AS PER INSTRUCTIONS OF THE PHILADELPHIA HOUSING AUTHORITY AND DALE CORPORATION.
  - ALL PROPOSED UTILITY SERVICES WILL BE UNDERGROUND OR WILL ENTER PROPOSED PROPERTIES FROM THE PUBLIC RIGHT-OF-WAY.
  - THE CONTRACTOR SHALL CONFORM TO ALL THE REQUIREMENTS OF PA ACT 187 AS AMENDED.
  - STORMWATER RUNOFF FROM ALL DIRECTLY CONNECTED IMPERVIOUS AREAS WILL BE CONVEYED TO THE PROPOSED INFILTRATION BASINS UNLESS OTHERWISE NOTED. ERSA TRACKING # 2012-3018-1004-01.
  - CURB GRADES TO BE REGULATED BY THE 9TH SURVEY DISTRICT.
  - PHI WILL BE RESPONSIBLE FOR ALL REQUIRED MAINTENANCE ASSOCIATED WITH THE STORMWATER CONVEYANCE AND MANAGEMENT IMPROVEMENTS ON THIS SITE.
  - ALL PRIVATE COST CONTRACT FACILITIES TO BE DESIGNED AND CONSTRUCTED TO PWD STANDARDS, AND COMPLY WITH THE PHILADELPHIA PLUMBING CODE.

| Revision | By  | Appd. | YY.MM.DD     |
|----------|---|-------|--------------|
| 4        | PER STREETS DEPT COMMENTS 9/3/14          | WPS   | CJO 14.09.05 |
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| Issued   |   | Appd. | YY.MM.DD     |

| File Name:            | DBA  | KRS   | DBA   | 12.07.10 |
|-----------------------|------|-------|-------|----------|
| 174810882-1010and.dwg | Dwn. | Chkd. | Dsgn. | YY.MM.DD |

Permit-Seal

Client/Project  
 DALE CORP. / PHA

301 WEST QUEEN LANE  
 PHILADELPHIA, PA 19144  
 12TH WARD

Title  
 LANDSCAPING DETAILS

| Project No. | Scale  |          |
|-------------|--------|----------|
| 174810882   | N.T.S. |          |
| Drawing No. | Sheet  | Revision |









