Appendix G: Cultural Resources Evaluation and Assessment of Effects Technical Report

for the

I-95 Access Improvements
from Caton Avenue to Fort McHenry Tunnel
Baltimore City, Maryland

Prepared for:

Maryland Transportation Authority

dot DEPARTMENT OF TRANSPORTATION BALTIMORE CITY

and

U.S. Department of Transportation Federal Highway Administration

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ACRONYMS AND ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
APE	Area of Potential Effect
DOE	Determination of Eligibility
Baltimore City DOT	Baltimore City Department of Transportation
EA	Environmental Assessment
EB	eastbound
FHWA	Federal Highway Administration
LOS	Level of Service
MDTA	Maryland Transportation Authority
MHT	Maryland Historical Trust
MIHP	Maryland Inventory of Historic Properties
NEPA	National Environmental Policy Act
NB	northbound
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
SB	southbound
WB	westbound

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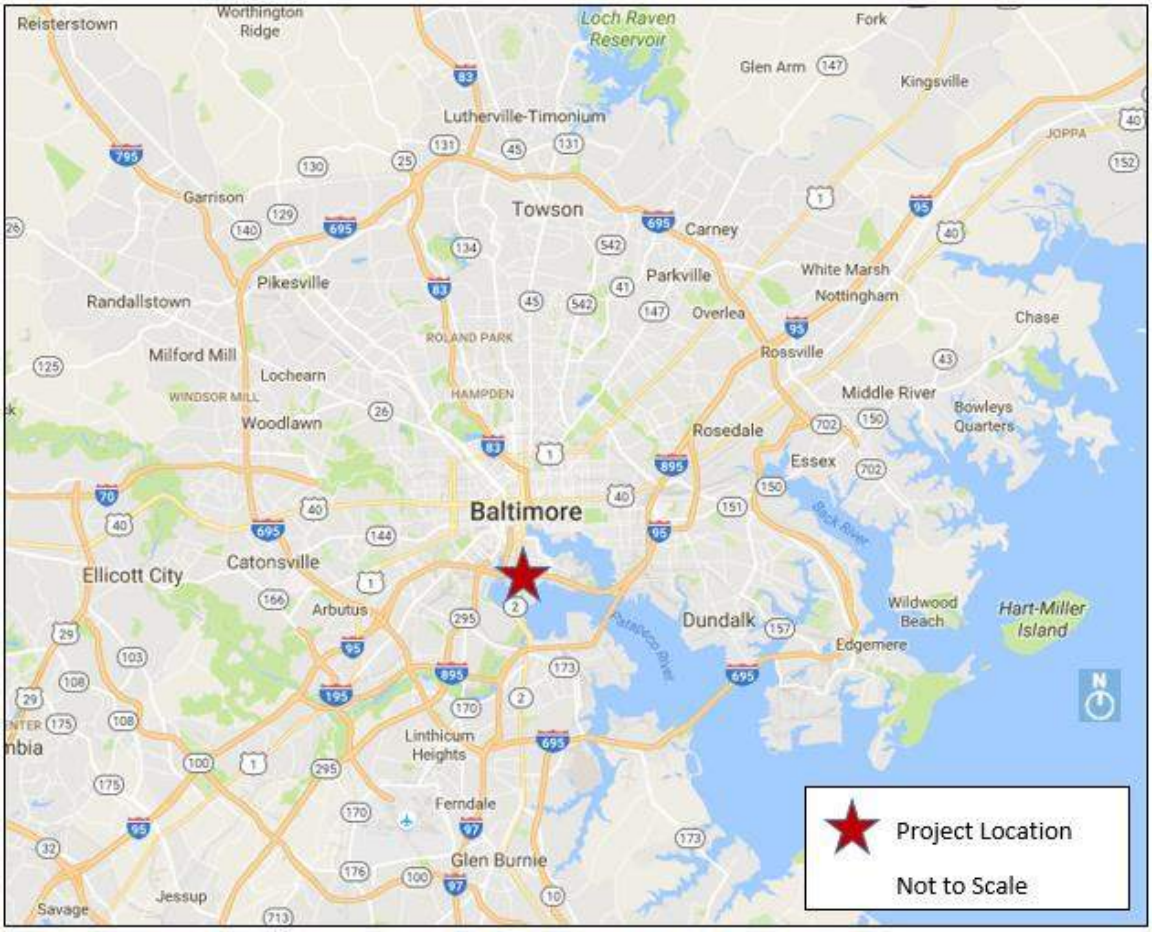
1 INTRODUCTION

The Maryland Transportation Authority (MDTA) and the Baltimore City Department of Transportation (Baltimore City DOT), in coordination with the Federal Highway Administration (FHWA), are studying a suite of improvements to Interstate 95 (I-95) ramps and other nearby transportation facilities to support ongoing and planned redevelopment of the Port Covington peninsula in south Baltimore (Figure 1-1). These improvements are collectively known as the I-95 Access Improvements from Caton Avenue to the Fort McHenry Tunnel (I-95 Access Improvements). Four alternatives (three build alternatives and one no build alternative) were compared to each other to determine the highest performing alternative in terms of travel times, vehicle throughput, queuing, and LOS. This cultural resource assessment focuses on the Recommended Preferred Alternative. However, further information on the alternatives analysis can be found in Section 3.

Figure 1-1: Project Location



The Port Covington peninsula is surrounded on three sides by the Middle Branch of the Patapsco River, with I-95 running on structure along the northern boundary. Transportation access to the peninsula is currently provided by north-south connections via Hanover Street and east-west connections via local arterials, including Key Highway and East McComas Street.

I-95 is part of the Interstate Highway System in the City of Baltimore, and is owned, operated and maintained by MDTA. The Baltimore City DOT is responsible for other arterial and collector roadways in

the project area. FHWA has approval authority over any changes to access points on the Interstate Highway System. Approval of any proposed modification to interstate access constitutes a federal action subject to review under the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations at 36 CFR Part 800. In accordance with Section 106, this report identifies historic properties within the area of potential effects (APE), defined as cultural resources eligible for or listed in the National Register of Historic Places (NRHP), and assesses project effects to those properties.

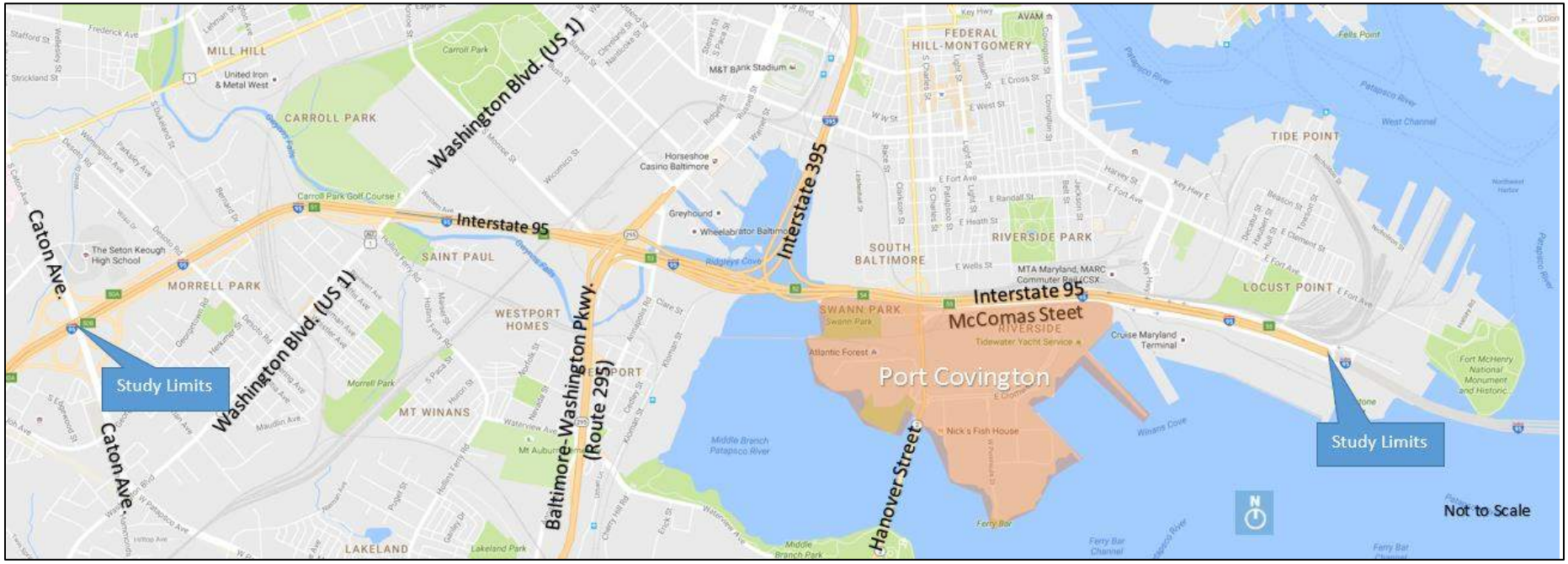
1.1 Project Study Area

As shown in Figure 1-2: Project Study Area, the study area generally follows I-95 along the northern boundary of the Port Covington peninsula between Exit 50 (Caton Avenue) and Exit 56 (Keith Avenue), and includes sections of Hanover Street, East McComas Street and Key Highway. The study area is approximately seven miles long. In this section, I-95 is generally eight lanes wide – four each in the northbound (NB) and southbound (SB)directions. Exit 54 (Hanover Street) and Exit 55 (Key Highway) currently provide access between I-95 and the Port Covington peninsula.

Exit 54 (Hanover Street) is not a full interchange, so there are currently two I-95 NB exits and two I-95 SB entrances, but only a single I-95 NB entrance and a single I-95 SB exit. Specifically, this interchange does not have an I-95 SB exit to Hanover Street, or an I-95 NB entrance from Hanover Street. The lack of ramps at this interchange limits the amount of traffic that is able to access the Port Covington area to/from north of the Fort McHenry Tunnel.

It is important to note that the I-395 to I-95 to Exit 54 (Hanover Street) link is an important existing connection for traffic traveling to and from Baltimore City and points south. Hanover Street in the study area is five lanes (two each NB and SB, with a reversible lane in the center). North of the I-95 interchange, Hanover Street transitions to two lanes (one travel lane plus parking in each direction) with landscaped center medians.

Figure 1-2: Project Study Area



On I-95 NB, Exit 55 (Key Highway) is a one-lane exit from I-95 NB to eastbound East McComas Street, which runs at grade adjacent to and below I-95 along the northern border of the Port Covington peninsula. As eastbound East McComas Street is a one way street, the exit touches down and becomes the third, left-most lane. The Key Highway exit from I-95 SB is a one lane exit to westbound East McComas Street that intersects Key Highway underneath the I-95 viaduct.

Under existing conditions, both Hanover Street and westbound East McComas Street have entrances to I-95 SB, located approximately 3,000 feet apart. As with the NB weaving section from I-395 to Hanover Street, the SB direction includes a substandard weave between I-95 and I-395. The distance between the merge from the Hanover Street entrance and the NB I-395 exit is approximately 600 feet.

East McComas Street is a one-way pair that joins together just east of Hanover Street. Both directions have two to three lanes within the study area. Eastbound East McComas Street is just south of the I-95 viaduct, while westbound East McComas Street runs underneath it.

There are currently no continuous pedestrian or bicycle facilities connecting the Port Covington peninsula to the surrounding neighborhoods because of the barriers created by the elevated I-95 roadway and existing CSX rail facilities located just north of the I-95 viaduct.

2 PURPOSE AND NEED

The purpose of the I-95 Access Improvements project is to accommodate forecasted increased transportation demand on I-95 and the surrounding transportation network by minimizing effects on mobility and safety, as well as enhancing multi-modal connections to the Port Covington peninsula.

The purpose of the proposed action is to address the following needs, which are described in the following section:

1. Ongoing and planned development in the Port Covington peninsula will result in **increased transportation demand** to Port Covington resulting in vehicular trips that are projected to be more than double today's volumes to and from the site on I-95, I-395 and Hanover Street by 2040.
2. **Existing capacity and roadway geometry** are **not adequate** to meet projected traffic demands, with operations on most ramp segments and links within the study corridor projected to degrade to unacceptable Levels of Service (LOS) by 2040.
3. Existing public infrastructure in and around the peninsula cannot efficiently support the City's approved **economic development and land use changes** at Port Covington.
4. The **limited multi-modal connections** around and across I-95 between the surrounding neighborhoods and the Port Covington peninsula are insufficient to support future planned growth on the peninsula.

3 DESCRIPTION OF RECOMMENDED PREFERRED ALTERNATIVE

The following describes the Recommended Preferred Alternative as approved by MDTA and Baltimore City DOT.

Element A: I-95 NB Off Ramps

- New Ramps
    - **Spur from Russell Street Ramp** – The existing auxiliary lane between the Caton Avenue On Ramp and the Russell Street Off Ramp would be widened to two lanes. The Russell Street Off Ramp would also be widened to two lanes until it overpasses MD 295, at which point the two lanes would split. One lane would continue along the existing ramp alignment to Russell Street NB. The second would continue east, over the Middle Branch, as a new ramp spur parallel to the existing ramps adjacent to I-95 NB, and merge with the new spur ramp from I-395 SB, connecting to McComas Street at an at-grade intersection with Brown Street, a street proposed in the approved Master Plan, located approximately 1,100 feet west of the intersection of Hanover Street and McComas Street. The alignment of the merged ramps would pass through the north side of existing Swann Park to avoid the parcel located at 2000 Race Street.
- **Spur from I-395 SB Ramp** – A new ramp spur, splitting off from the existing I-395 SB Ramp to I-95 NB where it overpasses I-95, is proposed. It would run southeast, merge with the new spur ramp from Russell Street and connect to McComas Street at an at-grade intersection on the western side of Port Covington.**I-95 NB to Hanover Street SB Ramp** – The existing ramp would be removed. Vehicles traveling from I-395 SB to MD 2 SB would be accommodated by the new ramp Spur from I-395 SB.
- **I-95 NB to East McComas Street Ramp** – The existing ramp would remain in a similar location, but would be realigned to accommodate the new I-95 NB On Ramp (Element B), modifications to East McComas Street (Element F), and the removal of the existing Hanover Street ramp from I-95 NB. The realigned ramp would extend the existing auxiliary lane that terminates at the Hanover Street exit to a two lane exit gore located approximately 1,600 feet from the existing I-395 SB On Ramp gore. The new two-lane exit ramp would run under I-95 NB, braid through the existing piers, and daylight perpendicular to an at-grade signalized intersection with East McComas Street near the existing intersection of East McComas and Cromwell Streets.

Element B: I-95 NB On Ramps

- **Key Highway to I-95 NB Ramp** – No modifications to the existing ramp are proposed.
- **East McComas Street to I-95 NB Ramp** – A new ramp is proposed from East McComas Street at a location approximately 700 feet east of its intersection with Hanover Street. The new ramp would braid with the realigned I-95 NB to East McComas Street Ramp (Element A) and modifications to the realigned one-way section of East McComas Street WB (Element F).

Element C: I-95 Southbound Off Ramps

- **I-95 SB to Key Highway Ramp** – No modifications to the existing ramp are proposed.
- **I-95 SB to East McComas Street WB Ramp** – A new ramp, with a gore located approximately 400 feet west of the Key Highway overpass is proposed. It would provide access to the one-way section of East McComas Street WB located directly beneath I-95 SB. The new ramp would braid with the realigned East McComas Street WB to I-95 SB Ramp (Element D). The improvements would require the relocation of two CSX storage tracks.

Element D: I-95 Southbound On Ramps

- **East McComas Street WB to I-95 SB** – The existing ramp would continue to provide access from the one-way section of East McComas Street WB to I-95 SB, but would be realigned to minimize construction cost and duration. It would braid with the new ramp from I-95 SB to East McComas Street WB (Element C).
- **Hanover Street NB to I-95 SB** – No modifications to the existing ramp are proposed.

Element E: Hanover Street

- **From Wells Street to East McComas Street** – No modifications to this section of Hanover Street are proposed.

Element F: East McComas Street & Key Highway

- **East McComas Street west of Key Highway** – The existing two-way section of East McComas Street and the one-way section of East McComas Street EB would be converted to a two-way boulevard from the western side of the Port Covington peninsula to Key Highway. The boulevard would accommodate vehicular and multi-modal connections between South Baltimore, I-95, and the Port Covington development. The median would be designed to accommodate a future light rail spur from Westport anticipated to terminate prior to the existing intersection of East McComas and Cromwell Streets. The existing one-way section of East McComas Street WB beneath I-95 SB would remain in its current location, but be modified to accommodate the addition of an exclusive right-turn lane at the approach to the Key Highway intersection, the addition of the I-95 SB to East McComas Street WB ramp (Element C), and the tie-in to the proposed two-way East McComas Street boulevard.
- **Key Highway** – The existing roadway would be widened from a 4-lane section (2 NB & 2 SB) to a 5-lane section (3 NB & 2 SB) between the McHenry Row and East McComas Street intersections Additionally, a 450 foot long southbound right-turn lane would be added at the East McComas Street intersection. The CSX bridge over Key Highway, just north of the East McComas Street intersection, would be reconstructed to accommodate the new width of Key Highway.

Element G: Pedestrians and Bicycles

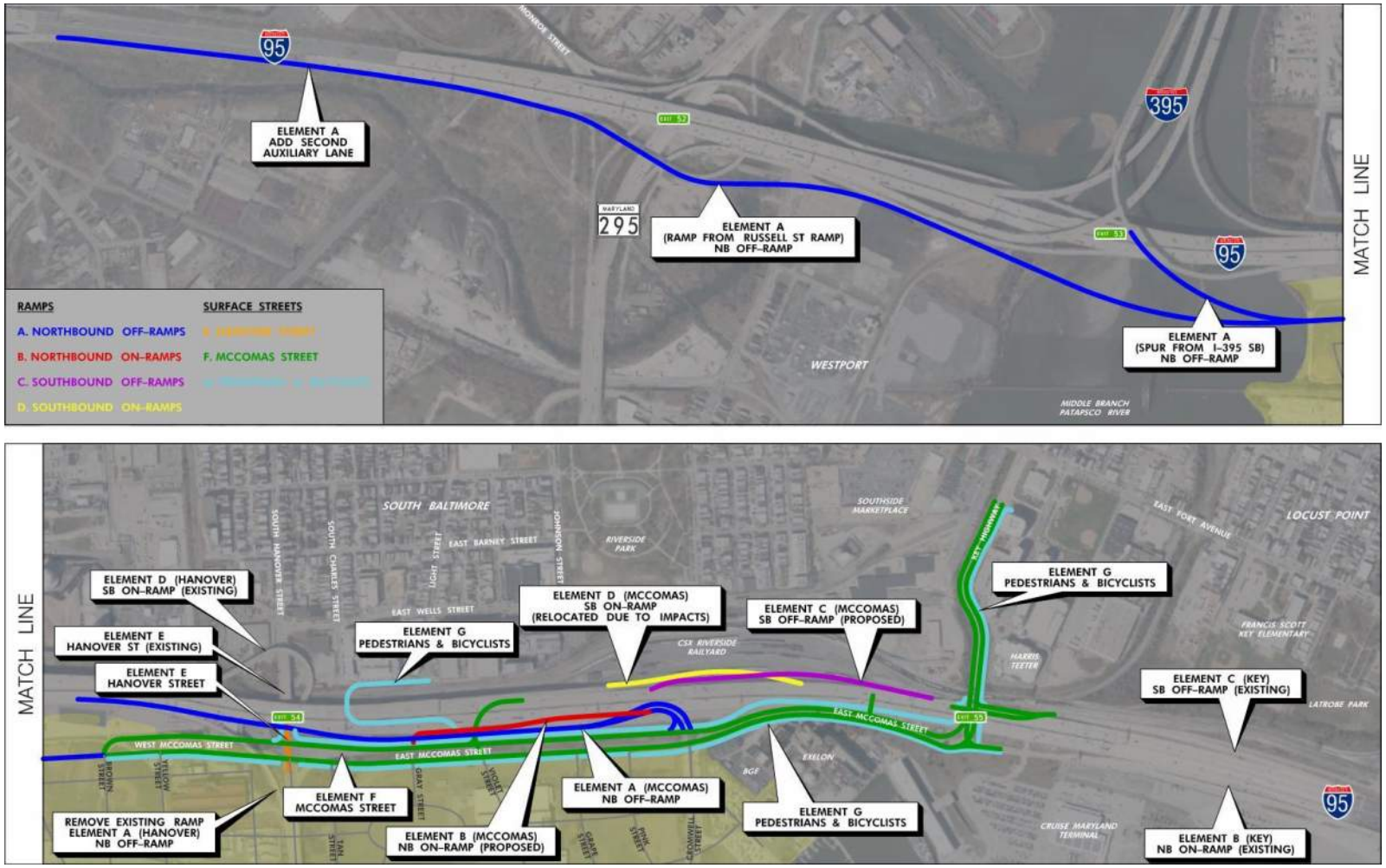
- **Hanover Street** – The existing sidewalks on Hanover Street would remain unchanged on the bridge over the CSX tracks. South of the bridge over the CSX tracks, a new sidewalk is proposed along the west side of Hanover Street, running south to the East McComas Street intersection.
- **Key Highway** – An 11-foot wide shared-use path would be provided on the east side of Key Highway between the intersections of McHenry Row and East McComas Street.
- **McComas Street** – Sidewalks would be installed along both sides of the new East McComas Street boulevard. Likewise, a shared-use path would be installed along the north side of East McComas Street between the Cromwell Street and Key Highway intersections.
- **New Shared-Use Bridge/Path** – A new shared-use path, linking South Baltimore to Port Covington would be constructed. The path would run parallel to the south side of Winder Street, ramping up from the Light Street intersection. A stair case would connect to the path from the Charles Street intersection. At the Charles Street intersection, the ramp would turn south, bridge over the CSX tracks and under I-95, then turn east to connect to the shared-use path proposed along the north side of East McComas Street.

The **Recommended Preferred Alternative** includes five (5) new I-95 access ramps that would connect grade separated roadways. The Recommended Preferred Alternative's conceptual design of the five (5) bridges would require up to 84 bridge piers throughout the Study Area. Two of the I-95 ramp spurs would

be bridged across aquatic resources. The Russell Street NB Ramp would bridge the Gwynn Falls, and the I-395 SB Ramp to McComas Street ramp would span the Middle Branch of the Patapsco River. The conceptual bridge design avoids placement of piers within the Gwynn Falls; however, up to 15 piers would be placed within the Middle Branch of the Patapsco River. In order to construct the piers, it is likely that supplies would be floated in on barges at high tide for use as work platforms, with cranes mounted on them for the pile driving, pier construction, and girder erection. Also, some materials, such as concrete or girders, could be brought via adjacent I-95 ramps and lifted off with the cranes. Cofferdams would be installed for construction of the pier footings and lower section of the pier column, and individual cofferdams could be either temporary or permanent. After erection of the superstructure steel, all construction would be from the deck level. Each pier within the Middle Branch of the Patapsco would be up to 230 square feet. Final design and location of the piers would consider engineering constraints and navigability. The Limits of Disturbance associated with the Recommended Preferred Alternative are shown in Figure 3-1. The roadway improvements associated with the Recommended Preferred Alternative are shown in Figure 3-2.

Figure 3-1. Recommended Preferred Alternative, Limits of Disturbance.

Figure 3-2: Recommended Preferred Alternative Roadway Improvements



4 CONSULTATION HISTORY

In accordance with Section 106 of the National Historic Preservation Act (NHPA) (36 CFR Part 800.3), MDTA initiated Section 106 review in September 2016 and presented information on the three preliminary project build alternatives described in Section 3. MDTA outlined an approach for delineating the Area of Potential Effects (APE) for archeological resources and proposed consulting parties for the Section 106 process. In addition to the Maryland Historical Trust (Maryland's State Historic Preservation Office) and the lead federal agency (Federal Highway Administration) the list of proposed consulting parties include federal agencies with interests in the study area (US Army Corps of Engineers, National Park Service); Native American groups who have expressed interest in Maryland projects (Haudenosaunee Tribes, Onondaga Nation, Saint Regis Mohawk Tribe, Seneca Cayuga Tribe of Oklahoma, Delaware Tribes, Absentee-Shawnee Tribe of Oklahoma, Eastern Shawnee Tribe of Oklahoma, Shawnee Tribe); and local government and preservation groups (Baltimore City Commission for Historical & Architectural Preservation, Baltimore City Department of Transportation, Baltimore City Department of Planning, Baltimore Heritage, Western Maryland Railway Historical Society, Maryland Commission on Indian Affairs).

On November 9, 2016, the Maryland Historical Trust (MHT) concurred with the APE for architectural and archeological resources and concurred with the list of proposed consulting parties. Based on MHT's suggestion, MDTA added the Baltimore Heritage Area Association and Preservation Maryland as potential consulting parties.

MDTA's Assessment of Potential for Cultural Resources (December 2016) was submitted to all proposed consulting parties with an invitation to participate in Section 106 consultation for the project. Federal Highway Administration submitted the Assessment of Potential to Native American groups, in accordance with the federal policy that honors the government-to-government relationship between the federal and tribal governments. Three of the proposed consulting parties (Baltimore Heritage, Baltimore City Commission for Historical & Architectural Preservation, and the Western Maryland Railway Historical Society) expressed interest in being a consulting party and receiving future correspondence. The Assessment of Potential identified previously known cultural resources within the archeological and architectural APEs associated with each alternative for ramp improvements, assessed the potential for the alternatives to impact known historic properties, and provided recommendations for further identification and evaluation efforts. Following completion of the Assessment of Potential, MDTA's recommendations included the following:

- Geoarcheological and underwater remote sensing studies within the archeological APE on Port Covington, East Locust Point, and the Middle Branch of the Patapsco River;
- Phase I archeological identification study within Maisel Street Park, pending results of additional research; and
- Completion of an architectural report including Determinations of Eligibility (DOE) for potentially historic properties and an effects determination on all historic properties within the architectural and archeological APEs.

The MHT concurred with MDTA's approach to cultural resource identification and evaluation on January 13, 2017.

MDTA submitted fieldwork plans for geoarcheological and underwater remote sensing studies on September 8, 2017. The fieldwork plans included the subcontractor scopes of work to complete field studies and documentation. MHT concurred with the fieldwork plans on September 29, 2017.

The purpose of the geoarcheological investigations is to determine if there is potential for archeological resources to be located in areas of fill on the Port Covington peninsula and East Locust Point. Geoarcheological studies are ongoing and architectural Determinations of Eligibility are in review with MHT. Once cultural resource identification studies are complete, MDTA would assess project effects to NRHP-eligible and listed historic properties within the project APE in consultation with project stakeholders.

Section 106 consultation documents and correspondence discussed in this section are included in Appendix A.

5 METHODOLOGY

5.1 Archeological Methods

MDTA is undertaking archeological identification studies in accordance with Maryland Historical Trust's *Standards and Guidelines for Archeological Investigations in Maryland* (Shaffer and Cole 1994). MDTA obtained information on previously identified archeological resources within the APE from the MHT, including MEDUSA (MHT's online GIS-based Cultural Resources Information System), archeological site files, and archeological survey reports. Archival research included examination of historic maps and aerial photographs to identify past land uses within the corridor. MDTA completed a field reconnaissance on September 23, 2016 to assess existing conditions in the archeological APE. Additional geoarcheological survey was recommended on Port Covington and East Locust Point, where a previous archeological survey documented approximately 8-10 feet of fill in the vicinity of the APE. Additional Phase IA underwater archeological investigations were recommended because Build Alternatives would involve construction of piers within the river, and previous archeological surveys elsewhere in the Middle Branch had located submerged cultural resources.

A Phase IA underwater remote sensing investigation was completed in late October/early November using side-scan sonar, marine magnetometer, and sub-bottom profiler data to locate potential submerged cultural resources, in accordance with standard survey techniques required by the Maryland Maritime Archeological Program. A precision magnetic and acoustic survey was completed in areas where there was enough water depth to support marine survey operations and a walking gradiometer survey of areas too shallow for vessel operations. Additional details on the underwater remote sensing methodology is available in the Research Design of the *Phase IA Underwater Archeological Remote Sensing Survey Report I-95 Access Improvements* available in Appendix C.

MDTA has proposed geoarcheological investigations on Port Covington and East Locust Point where project elements including piers would extend below areas of fill into soils with potential to contain archeological resources. These elements include the McComas Street on and off ramps to NB and SB I-95 and the pedestrian/bicyclist bridge that connects Riverside and Port Covington. MDTA proposed nineteen boring locations, as indicated in the *Geoarcheological and Underwater Remote Sensing Fieldwork Plan* in Appendix A. MDTA completed a cut and fill analysis comparing 1897 and 2016 topography that suggests that five to fifteen feet of fill cover most of the study area[1]. In the middle of the study area, from the Riverside Rail Yard to areas south, including I-95 and the eastern portion of the

[1] The 1897 map is the Baltimore City Topographical Survey Plates 2S-1W, 3S-1W, 2S-1E, 3S-1E, 2S-2E, and 3S-2E, by Thos. M. Ward, Malcolm A. Cudlipp, W.A. Wansleben, Frank K. Duncan, R.A. MacGregor and Wm. Bauman Jr. Topography was compared with 2016 two-foot contours available from City of Baltimore, OpenBaltimore Beta, accessed online at https://data.baltimorecity.gov/.

former Baltimore Sun Headquarters parcel – the area has been deeply cut by five to nineteen feet from late nineteenth century elevations. The cut and fill analysis was used to target placement of geoarcheological borings in areas of fill.

5.2 Architectural Methods

MDTA has undertaken architectural studies in accordance with Maryland Historical Trust's *Standards and Guidelines for Architectural and Historical Investigations in Maryland* (MHT 2000). MDTA obtained information on historic resources within the APE that are listed in the Maryland Inventory of Historic Properties (MIHP) and the NRHP from the MHT, including MEDUSA, and on-site archeological site files and archeological survey reports.

Architectural historic properties were field verified via reconnaissance survey. The typically-applied age criterion for eligibility for listing in the NRHP is 50 years. MDTA identified all structures 45-plus years in age, because they are likely to be approaching the 50- year age criterion by the time the project is under construction. MDTA identified potentially historic properties through field survey and GIS parcel research on the Maryland State Department of Assessments and Taxation website (http://dat.maryland.gov/Pages/default.aspx). Nine architectural resources were identified as potentially historic, and MDTA completed Determinations of Eligibility for these resources in accordance with MHT's Guidelines for Compliance-Generated Determinations of Eligibility https://mht.maryland.gov/projectreview_DOEGuide.shtml).

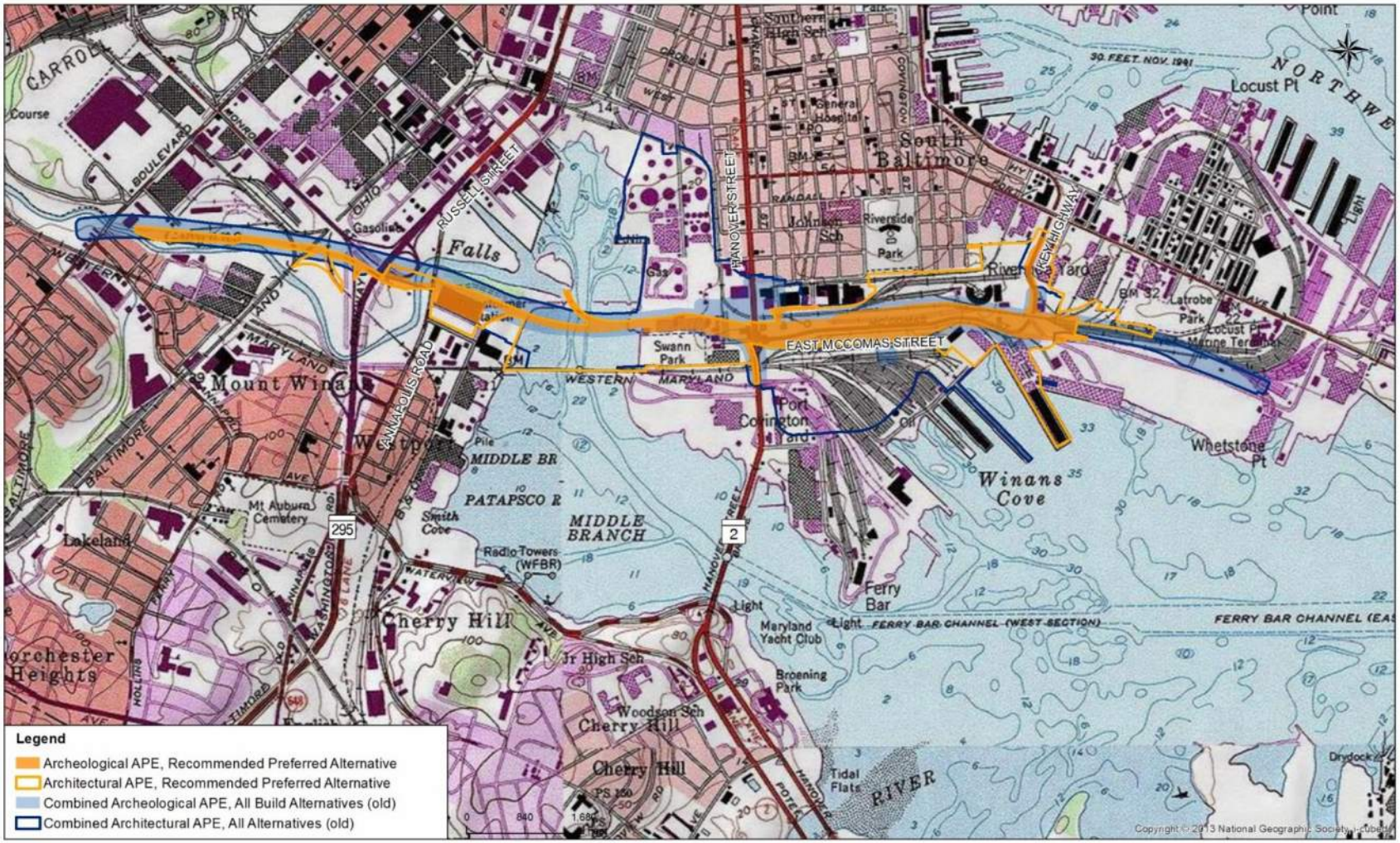
6 AREA OF POTENTIAL EFFECTS FOR THE RECOMMENDED PREFERRED ALTERNATIVE

The APE for archeological resources includes the anticipated limits of physical disturbance. The architectural APE for above ground cultural resources considers where physical disturbance could occur and accounts for possible visual, atmospheric, and audible effects of proposed improvements.

The geographic area containing the APE was defined in the Cultural Resources *Assessment of Potential* memorandum that was prepared in 2016. The Assessment of Potential identified historic properties within the APE and considered the potential for the APE to contain as yet unidentified architectural and archeological historic properties. The APE has changed since preparation of the Assessment of Potential. Most notably, it is smaller. It is narrower along I-95, does not extend as far south or north along I-95, and extends less into the Riverside neighborhood north of I-95 in the vicinity of Hanover Street, because improvements at the Hanover Street loop ramp from Hanover Street to I-95 are no longer proposed. The APE has expanded in one area on the north side of I-95 where proposed improvements include widening a portion of Key Highway.

The APE for the Recommended Preferred alternative is shown In Figure 6-1. For comparison, it overlays the APE for all build alternatives that was presented in the Assessment of Potential.

Figure 6-1. Archeological and Architectural APE for Recommended Preferred Alternative



7 IDENTIFICATION OF RESOURCES FOR THE RECOMMENDED PREFERRED ALTERNATIVE

7.1 Archeological Resources

One archeological survey has been conducted within one part of the archeological APE of the preferred alternative. The survey was completed by the Baltimore Center for Urban Archeology (BCUA) at the site of the proposed Port Covington Commons Business Park in 1990.

No archeological sites have been identified in the APE, but BCUA's survey demonstrated that the Port Covington Rail Terminal was constructed on fill, with potential for archeological sites at a subsurface depth of 8-10 feet. The Port Covington archeological site (18BC72), identified during the survey, is south of the APE. It represents the remnant of a mid- to late-nineteenth-century industrial building that was identified during machine-excavated trenches that were 10-feet wide and up to 12-feet deep. Investigators recommended further survey, finding the Port Covington area in general to have high potential to contain other nineteenth-century industrial sites.

The Assessment of Potential recommended archeological investigations in the vicinity of several undeveloped City-owned parcels identified as Maisel Street Park in the City parcel data. These parcels were located on the east side of Washington Boulevard, bounded to the north by Gwynns Falls. This land area was included in the APE of the Build Alternatives, but is not included within the APE of the Recommended Preferred Alternative. Therefore, Phase I archeological investigations are no longer recommended on these City-owned parcels.

7.1.1 Geoarcheological Investigations

Geoarcheological investigations are proposed on the Port Covington peninsula, primarily along the proposed realignment of East McComas Street where BCUA's archeological investigations suggested high potential for buried archeological resources. BCUA's investigations did not include any subsurface investigations within the APE, so the geoarcheological investigations will shed light on the potential for nineteenth-century industrial sites to be affected by the proposed improvements.

7.1.2 Underwater Remote Sensing Investigations

Underwater remote sensing investigations within the portion of the APE that lies within the Middle Branch of the Patapsco River were completed in late October 2017. The magnetic gradiometer survey identified 89 magnetic anomalies, all of which individually are consistent with relatively small, shallowly buried, ferrous objects. None of those anomalies, individually, are consistent with magnetic signatures from submerged cultural resource sites. There are two areas, however, where the density of those anomalies is significantly greater than the rest of the area surveyed. While those areas most likely have higher densities of anomalies simply due to their proximity to the historic channel, they may represent the remains of buried submerged cultural resources. Full documentation of the underwater remote sensing investigations is available in *Phase IA Underwater Archaeological Remote Sensing Survey Report I-95 Access Improvements* available in Appendix C.

7.2 Architectural Resources

MDTA conducted an architectural survey that included the identification of historic properties and unevaluated architectural resources greater than 45 years in age.

The Recommended Preferred alternative's architectural APE includes two NRHP-eligible or listed historic districts, the Westport Historic District (eligible) and the Riverside Historic District (listed); and the NRHP-eligible Spring Garden Swing Bridge (Table 7-1).

Table 7-1. NRHP Listed and Eligible Resources Within the APE

MIHP Number	Resource Name	NRHP Eligibility
B-1342	Westport Historic District	Determined Eligible on 10/18/2002
B-3668	Spring Garden Swing Bridge	Determined Eligible on 7/30/2002
B-5139	Riverside Historic District	NRHP Listed on 4/30/2008
Source: Maryland Historical Trust, Medusa map-based online cultural resource information system		

Descriptions of the resources in Table 7-1, including information on historical significance and integrity are provided below. The location of these resources is shown in Figures 7-1 through 7-3.

7.2.1 Westport Historic District

Westport is a residential and industrial community in south Baltimore that was determined eligible for the National Register of Historic Places in 2003. The neighborhood consists of a rectangular grid of streets containing early twentieth century rowhouses. Commercial and industrial buildings line the major local roads, particularly Annapolis Road. A power plant and large industrial structures were once located along the Middle Branch of the Patapsco River waterfront, but the last of these were demolished in 2009. The Westport Historic District (MIHP# B-1342) is eligible for the NRHP under Criterion A for its association with the expansion and growth of Baltimore's industrial heritage throughout the early to mid-twentieth century. As Betty Bird noted in a 2008 addendum to the MIHP form, the neighborhood and its architectural fabric are deteriorated, but 95% of the structures in Westport contribute to the District. Route 295 and its interchanges, and the elevated light rail line compromise the historic integrity of the District, and since the demolition of the Power Plant and industrial complexes such as the Carr-Lowery Glass Company, the loss of these structures has diminished the integrity of the District and its association with its industrial heritage.

7.2.2 Spring Garden Swing Bridge

The Spring Garden Swing Bridge (MIHP# B-3668) is a steel and timber trestle constructed in 1904 that spans the Middle Branch of the Potomac River. It once carried a double track railroad operated by the Western Maryland Tidewater Railroad Company, a subsidiary of the Western Maryland Railway from western Maryland to the Port Covington Railyard. The through-truss bridge is 220 feet long with 1,732 feet of pile and timber approaches and contains a frame operator's house on the revolving span. It was constructed by the Pennsylvania Steel Company. The bridge is eligible for the NRHP under Criterion A for its association with the development of the rail transportation system in Maryland and the growth of Baltimore as an industrial power at the turn of the century, and under Criterion C for engineering (Lione 2002). The bridge and trestle retain their original appearance, although much of the timber work has been replaced. The bridge has undergone minor alterations. In addition, the operator cabin has been damaged by fire and the swing span no longer revolves.

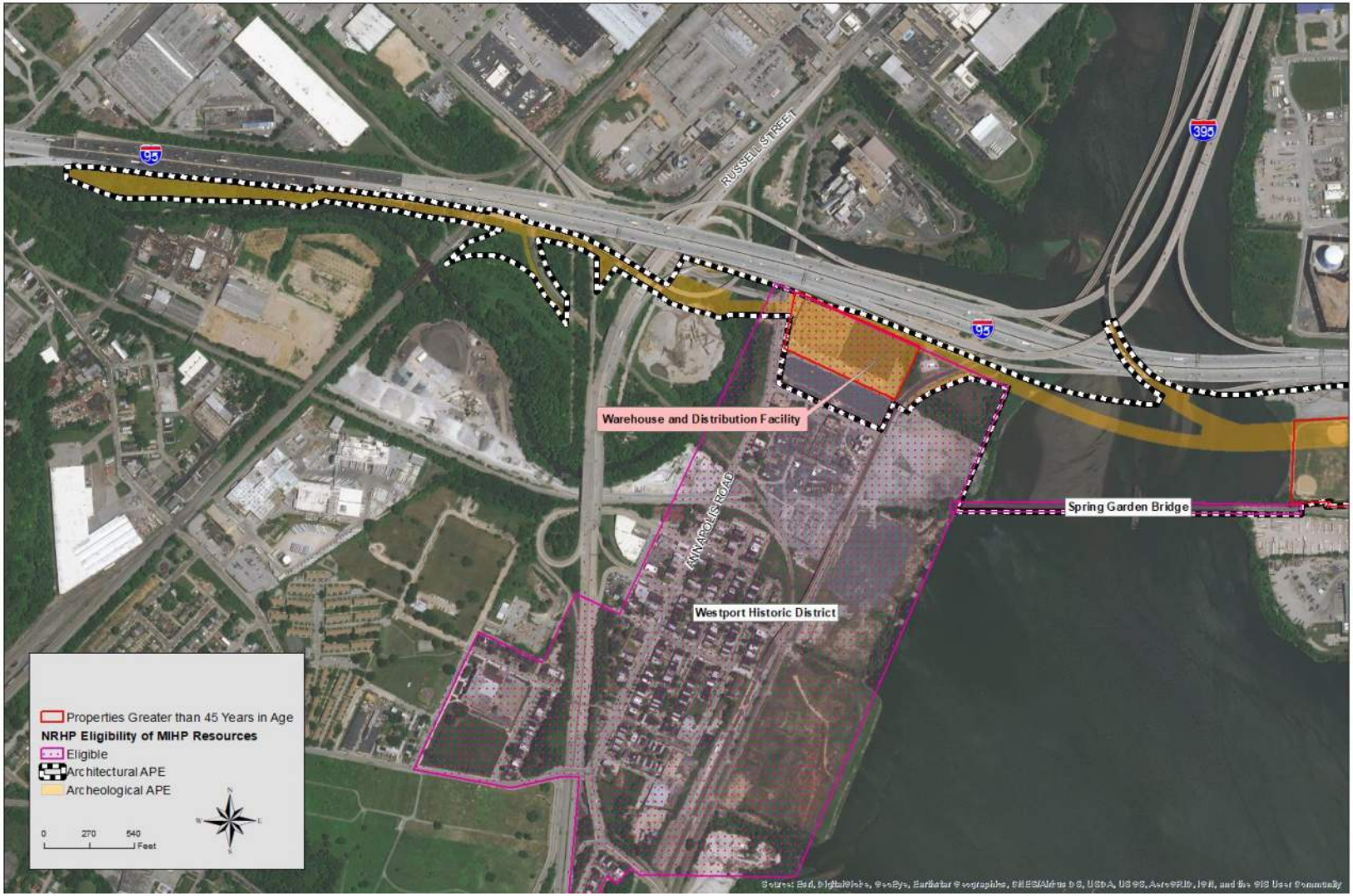
7.2.3 Riverside Historic District

The Riverside Historic District is a 52-block area on Locust Point in south Baltimore that was established in the mid-nineteenth century and is characteristic of Baltimore neighborhoods of the period. Its

rectilinear blocks are lined with two- and three-story brick rowhouses of architectural styles typical for the latter half of the nineteenth century and the first decade of the twentieth century. The Riverside Historic District (MIHP# B-5139) is listed on the NRHP under Criterion A for its association with the development of transportation and industry in Baltimore, and is significant under Criterion C for its architecture, which is representative of the full range of domestic and ecclesiastical building types characteristic of Baltimore neighborhoods during the period from the mid-nineteenth century through the first decade of the twentieth century (Hayward 2007). Although infill development has occurred in recent decades, the district retains a high degree of physical integrity.

Figure 7-1. NRHP Listed and Eligible Resources and Properties for NRHP Evaluation, West side of APE.

Figure 7-2. NRHP Listed and Eligible Resources and Properties for NRHP Evaluation, East side of APE.



8 ARCHITECTURAL NATIONAL REGISTER EVALUATIONS

MDTA and others have evaluated the following nine resources that are 45-plus years of age and located within the APE with DOEs (Table 8-1). Short form and long form DOEs were completed for each of the nine properties listed in Table 8-1. Four properties were considered to be clearly ineligible for NRHP listing and DOE short forms were prepared for those resources. Long forms were prepared for the remainder of the resources. All DOE forms are included in Appendix B.

Table 8-1: Properties For NRHP Evaluation

Resource Name	Address	Construction Date	DOE Type/NRHP Eligibility Status[1]
Warehouse and Distribution Facility	1915-1921 Annapolis Road	1964, 1970	Short Form/Not Eligible
Swann Park	N/A	1900	Short Form/ Not Eligible
Gould Street Generating Station (MIHP Number B-5309)	2105 Gould Street	1905, 1927, 1930, 1953	Long Form/ Eligible
Warehouse	1001 E McComas Street	1929	Short Form/ Not Eligible
Storage Warehouse	200 W.McComas Street	circa 1921	Short Form/ Not Eligible
Rowhouses (MIHP Number B-5310)	201-213 W. McComas Street	1905	Long Form/ Not Eligible
Lyon, Conklin and Company (MIHP Number B-1055)	2101 Race Street	1922	Long Form/ Eligible
Baltimore and Ohio Railroad Bridge over Key Highway (MIHP Number B-5311)	N/A	circa 1930	Long Form/ Not Eligible
Riverside Rail Yard (MIHP Number B-5267)[2]	N/A	1871	Long Form/ Not Eligible

1 NRHP Eligibility status is pending concurrence from Maryland Historical Trust.
2 NRHP eligibility status determined by MTA; pending concurrence from Maryland Historical Trust.

Two MIHP resources that were located within the combined APE of the Build Alternatives presented in the Assessment of Potential are no longer within the APE. These resources are the Baltimore Gas & Electric Company Spring Gardens Station (MIHP Number B-1032) and the Pabst Brewing Company/Maryland Glass and Mirror Company (MIHP Number B-1067). One 45-plus year old structure (Middleton and Meads Company at 1900 South Hanover Street) is no longer within the APE. In addition, some resource names, as presented in the Assessment of Potential, have changed to comply with MHT naming conventions. These resources include:

- Warehouse and Distribution Facility, formerly Howard Uniform Company;
- Warehouse, formerly TE Connectivity;

- Storage Warehouse, formerly Downtown Dog Resort and Spa;
- Rowhouses, formerly 201-213 McComas Street.

Descriptions of individual resources in Table 8-1, including information on historical significance and integrity are provided below. These resources are shown in Figures 7-1 through 7-3.

8.1.1 Warehouse and Distribution Facility, 1915-1921 Annapolis Street

The warehouse and distribution facility at 1915-1921 Annapolis Road large rectangular one-story building (260 feet x 645feet) on a six-acre lot in the Westport community of south Baltimore and was constructed in two phases in 1964 and 1970 and is a leased facility used by multiple tenants for warehouse, assembly plant, and distribution center space. Because the original portion of the building is 53 years old, MDTA assessed its NRHP eligibility.

The warehouse and distribution facility at 1915-1921 Annapolis Road is considered not eligible for the National Register of Historic Places. The facility is not considered eligible under Criterion A or B because it is not known to have any associations with persons or events significant to our past. The facility is not considered eligible under Criterion C because it does not embody distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value. The facility was not evaluated under Criterion D.

8.1.2 Swann Park

Swann Park is an 11-acre city-owned park located on Port Covington, an industrial area in south Baltimore. It is situated south of Interstate 95 on the east bank of the Middle Branch of the Patapsco River and contains ball fields circled by an asphalt walking path. Swann Park was established by the Baltimore City Parks Board in 1900 to provide recreational opportunities for the residents of south Riverside and Port Covington. In 2007, the park was closed due to soil contamination. The current ballfields and accessory structures were installed following remediation.

Swann Park is considered not eligible for the National Register of Historic Places. The park is considered not eligible under Criterion A, because although it was purchased in 1900 during a historically significant period of parks improvements in the City, the Baltimore City Parks Board did little to make improvements to the Park, such as installation of playgrounds or athletic fields that were a hallmark of Progressive ideas of the period. Improvements such as construction of a grandstand were made by the Works Progress Administration in the 1930s, and although those improvements could be considered historically significant, any Works Progress Administration improvements that lasted into the twenty first century were removed when the Park underwent remediation in 2007. The Park is considered not eligible under Criterion B. In the 1960s, an amateur baseball team played games at Swann Park. The team produced major league baseball players. However, the association of these players with Swann Park was brief, and the 2007-2010 remediation and reconstruction of the ball fields in a different configuration than that which existed when these ball players played at Swann Park. Other than weak integrity of feeling because the Park is located in a similar setting as that which existed in the 1960s, the Park retains little integrity from the 1960s time period. The setting has been most notably altered by the construction of Interstate 95, prominent on the northern horizon of the Park, in the 1980s. The Park is considered not eligible under Criterion C. Although the Olmsted Brothers, a noted landscape architecture firm, prepared a plan for improvements at Swann Park, the plan was never implemented. The current park design dates to the last decade, and does not embody distinctive characteristics of historically significant park design. The Park was not evaluated under Criterion D, but demolition,

remediation, and soil removal in 2007 likely would have destroyed any information potential contained at the site.

8.1.3 Gould Street Generating Station

The Gould Street Generating Station at 2105 Gould Street was considered for eligibility for the National Register of Historic Places as part of the I-95 Access Improvements project. It is an electrical generating power plant located on the Locust Point peninsula in south Baltimore, Maryland. The plant complex includes multiple buildings constructed between 1905 and 1952 by the Baltimore Electric Company, and after 1906, the Consolidated Gas Company (which eventually became the Consolidated Gas Electric Light and Power Company). The plant is currently operated by the Constellation Energy Group.

The Gould Street Generating Station is considered locally significant and eligible for inclusion in the National Register of Historic Places as a historic district. The generating station is considered significant under Criterion A because it is associated with the growth of the power generating industry in Baltimore and, with the Pratt Street Station, is one of only two remaining power generation plants in the city. The plant is also significant under Criterion A because it was the first plant to burn pulverized coal in Baltimore, and is an early example of the adoption of this practice nationwide. The burning of pulverized coal was a technical innovation quickly adopted by coal that spans the time period that the plant operated and expanded operation. This includes the years from 1905 when the first plant was constructed until 1977 when Units 1 and 2 were decommissioned and power was primarily provided by plants outside of Baltimore. The generating station is not eligible under Criterion B because it is not associated with the lives of persons significant in our past. The generating station is considered eligible under Criterion C because the 1905 coal preparation plant and 1930 switch house embody distinctive characteristics of Neoclassical architecture and the 1927 steam generating plant embodies distinctive characteristics of Art Deco architecture. The periods of significance under Criterion C are 1905, 1927, and 1930. The generating station is unlikely to contribute to our understanding of human history and is therefore ineligible under Criterion D. Since switching to oil and then natural gas, plant operators have removed the coal elevator and coal conveying system, and the chimneys on the 1927 steam generating plant were razed in 1996. It is unknown whether the turbine generators and other equipment remain inside the building. The setting of the power plant has been moderately compromised in recent decades with a reduction in industries that once surrounded the plant and relied on power that the plant generated. However, the plant retains moderate integrity of location, materials, workmanship, feeling, and association. It continues in use as a power plant, although at reduced capacity in recent decades.

8.1.4 Warehouse

Two warehouses owned by the Transoceanic Cable Ship Company are located at 1001 East McComas Street on the Locust Point peninsula at Port Covington in South Baltimore, MD. The southern warehouse (constructed in 1988) is located on Pier 7 and the northern warehouse (constructed in 1929) is located on Pier 8 of the former McComas Street Terminal, a shipping facility constructed by the City of Baltimore and originally operated by the Western Maryland Railroad. The northern warehouse on Pier 7 is the last remnant of the McComas Street Terminal, constructed by the City of Baltimore and originally leased by the Western Maryland Railway Company beginning in 1929.

The warehouses are considered not eligible for the National Register of Historic Places. THhey are not eligible under Criterion A. The northern warehouse is associated with the McComas Street Terminal, which was constructed to accommodate the growth of commerce in Baltimore and provide a needed ocean terminal. The terminal was no longer needed because it became a duplicate facility; the Western Maryland Railway was absorbed into the Baltimore and Ohio Railroad by 1973, and the Baltimore and Ohio Railroad already operated the terminal facilities that it needed at Curtis Bay and other areas on the

Patapsco River. The southern warehouse is not associated with the McComas Street Terminal, and was constructed after 1988. The warehouses are considered not eligible under Criterion B because they are not associated with the lives of individuals whose specific contributions to history can be identified and documented. The warehouses are considered not eligible under Criterion C because they are not significant for their physical design and construction. The warehouses were not evaluated under Criterion D.

8.1.5 Storage Warehouse

The building at 200 West McComas Street, built circa 1921, is rectangular in plan, and approximately 120 feet wide and 125 feet long. It occupies a 28,367 square foot lot in Port Covington, a community in south Baltimore. It currently houses the Dog Resort and Spa and Swan Harbor Animal Hospital, as a pet boarding and care facility. The building was constructed by the Morton McI. Dukehart Company, a manufacturer of pumps and engines, circa 1921 and was later a facility for the manufacture of medical products and compressed gas for medical and industrial uses owned by Puritan-Bennett Corporation and its predecessor companies. The building was extensively altered and expanded in 2008 when it became a pet care facility.

The industrial building at 200 West McComas Street, currently operated as the Downtown Dog Resort and Spa, is not considered eligible for the National Register of Historic Places. The building is not eligible under Criterion A because it has not made a significant contribution to the industrial development of Baltimore, which fueled the city's growth during the late nineteenth and early twentieth centuries. The building was initially associated with the Morton McI. Dukehart Company, local manufacturer of iron cast pump and pipe accessories. Although metal
manufactories were significant contributors Baltimore's growth, the plant was a minor facility that remained in operation for only seven years. The Puritan-Bennett Corporation and its predecessors (the Kansas City Oxygen Gas Company and the Puritan Compressed Gas Corporation) operated a branch plant at the location, but these companies were headquartered in Kansas City, and had a more historically significant relationship with the development of Kansas City and less influence on the industrial development of Baltimore. The building is not eligible under Criterion B because it is not associated with persons whose specific contributions to history can be identified and documented. The building is not eligible under Criterion C because it is not significant for its physical design or construction, and has been heavily altered during its 2008 renovation. The building was constructed as two connected front-gabled sheds, a typical industrial design for the early twentieth century, with a third shed added during the 1960s. Extensive exterior and interior modifications have been done to the building since its construction, and it retains little integrity of materials and design since its conversion in use to
pet boarding and care. The building was not evaluated under Criterion D, as it is not anticipated to contribute important information that contributes to our understanding of history.

8.1.6 Rowhouses

The 200 block of West McComas Street in the South Baltimore community of Port Covington contains a strip of seven adjacent Italianate-style residential rowhouses in an area that is otherwise industrial in nature. The house numbers are 201, 203, 205, 207, 209, 211, and 213, and the row of houses are located in the southwest quadrant of the intersection of West McComas Street and Race Street. The rowhouses were constructed in 1905 by Charles Burdette, a rowhouse developer most active in west Baltimore.

The rowhouses at 201-213 West McComas Street are considered not eligible for the National Register of Historic Places. They are not considered eligible under Criterion A or B because they are not known to have any associations with persons or events significant to our past. Although they once existed in fairly close association with other blocks of rowhouses along Charles, Hanover, and McComas Street, these other rowhouse blocks were razed by 1948 to allow further development of industry and the remnant strip of rowhouses retains a weak association with the communities of worker housing that developed on the Locust Point peninsula at the turn of the twentieth century. They are not considered eligible under Criterion C because they do not embody distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value. Rather, they are typical but relatively late examples of the Italianate rowhouses being built in residential neighborhoods adjacent to industrial districts. The rowhouses were not evaluated under Criterion D.

8.1.7 Lyon, Conklin and Company

The Lyon, Conklin, and Company Building, constructed in 1922, is a large metal building, rectangular in plan, with a brick office block that occupies most of a 2.5-acre parcel at 2101 Race Street in south Baltimore, MD on the west side of Port Covington. The Lyon, Conklin and Company, manufacturers of tinplate and metal goods, was founded in Baltimore in 1860 by William Lyon and became a copartnership between Lyon and Charles A. Conklin in 1876. Manufacturing facilities for both the Lyon, Conklin, and Company and the Maryland Metal Building Company were housed in the building until the Maryland Metal Building Company closed in the 1960s and the Lyon, Conklin and Company moved out of the building in 2003. The building is currently vacant.

The Lyon, Conklin and Company Building is eligible for listing on the National Register of Historic Places. It is eligible under Criterion A due to its association with the industrial growth of Baltimore, particularly in Port Covington following the Civil War. The company was one of the largest manufactures of tin products in the nineteenth century, but was not as large and diverse as National Enameling and Stamping Company. Nevertheless, it is one of only a few remnants of the tinplate manufacturing industry in Baltimore. It's area of significance is industry, and its period of significance is from 1922, when the McComas Street Plant opened, until 2003 when manufacturing at the plant ceased. The boundary for the National Register-eligible plant is defined as the parcel boundary. The building is not eligible under Criterion B as it is not associated with individuals whose specific contributions to history can be identified and documented. The building does not appear to be eligible under Criterion C. Although sale literature proclaimed the building to be the largest sectional metal building in the United States at the time of its construction, this statement has not been corroborated. The building was not evaluated under Criterion D.

8.1.8 Baltimore and Ohio Railroad Bridge over Key Highway

The railroad bridge that crosses the 1600 block of Key Highway was constructed circa 1930 by the Baltimore and Ohio Railroad. It is located on Locust Point in South Baltimore, east of the CSX Riverside Yard and connects the yard with the North Locust Point Marine Terminal to the north and east, accommodating four sets of railroad tracks. The bridge is an example of a reinforced concrete cast-in-place slab structure. This bridge type became popular in the 1910s and was common by the 1930s and 1940s. The bridge consists of a 90-foot long continuous reinforced concrete span and a superstructure supported by three steel bents, each of which contains five steel beam columns. The bridge is supported by non-original concrete abutments that were likely constructed within the last few decades. Concrete parapets support a simple steel railing.

The Baltimore and Ohio Rail Bridge over Key Highway is not eligible for the National Register of Historic Places. Although the bridge is associated with Baltimore and Ohio Railroad improvement programs to

eliminate at-grade rail crossings, it is one of many bridges constructed by the Baltimore and Ohio Railroad and is not a distinguished example of the many concrete cast-in-place slab bridges constructed during this time period. In addition, the bridge no longer retains its original abutments. Neither the CSX Riverside Yard nor adjacent areas of CSX rail line are eligible for the National Register of Historic Places, and the bridge would not be a contributing element to a historic district. Therefore, the bridge is not eligible under Criterion A or C. The bridge is not associated with the lives of important or significant persons, and it is therefore not significant under Criterion B. The bridge is not anticipated to contribute to our understanding of human history and is therefore ineligible under Criterion D.

8.1.9 Riverside Rail Yard

The Riverside Rail Yard was constructed by the Baltimore and Ohio Railroad in the late nineteenth century. It is bounded by I-95 to the south, Key Highway to the east, and the Riverside neighborhood to the north. The western half of the 34.5-acre rail yard is comprised primarily of rails, sidings, and service buildings and the eastern half is comprised of rails,
sidings, open storage, and buildings containing shops, storage, and offices. The current CSXT active rail line connects to the east and west sides of the rail yard.

A 2013 eligibility determination completed by the Maryland Transit Administration for the CSXT Riverside Rail Yard Purchase Project found the rail yard to be not eligible for listing in the National Register of Historic Places (National Register) due to a lack of integrity (Haas 2013). MTA did not submit the eligibility determination to MHT because the project was canceled; however, MDTA concurs with MTA's eligibility recommendation, and will forward the eligibility determination to MHT for concurrence. MTA noted that although the property is associated with the B&O and was a major yard for the railroad in the late nineteenth century into the twentieth century, the changes that were made to the property in the 1970s and 1980s have altered it to such a degree that it can no longer convey this significance. The property boundaries, configuration of rails, buildings, and use of the property have change significantly throughout the past 40 years so that it no longer resembles a rail yard established in the late nineteenth century. Therefore, the Riverside Rail Yard is not eligible under Criterion A. The Riverside Rail Yard is not eligible under Criterion B as it is not associated with the lives of those significant to local, regional, or national history. The Riverside Rail Yard is not of a notable design, nor does it contain architecturally significant buildings or structures notable for engineering; therefore, it is not eligible under Criterion C. Although archaeological investigations have not been undertaken, the ground has been heavily disturbed and the property is not likely to yield information significant to history or prehistory to deem it eligible under Criterion D.

9 PROJECT EFFECTS TO ARCHITECTURAL HISTORIC PROPERTIES

The preferred alternative's architectural APE includes two NRHP-eligible or listed historic districts, the Westport Historic District (eligible) and the Riverside Historic District (listed); and the NRHP-eligible Spring Garden Bridge. Following the completion of eligibility determinations of nine architectural resources evaluated by MDTA, two resources, the Gould Street Generating Station and Lyon, Conklin and Company were determined to be NRHP-eligible historic properties.

Effects determinations for NRHP-eligible and listed resources are provided below in Table 9-1.

Table 9-1: Effects Determinations for NRHP-eligible and Listed Resources

MIHP Number	Resource Name	NRHP Eligibility[1]	Effect Determination
B-1342	Westport Historic District	Determined Eligible on 10/18/2002	No Adverse Effect
B-3668	Spring Garden Swing Bridge	Determined Eligible on 7/30/2002	No Adverse Effect
B-5139	Riverside Historic District	NRHP Listed on 4/30/2008	No Adverse Effect
B-5309	Gould Street Generating Station	Considered eligible. Awaiting MHT concurrence on eligibility determination.	No Adverse Effect
B-1055	Lyon, Conklin and Company	Considered eligible. Awaiting MHT concurrence on eligibility determination.	No Adverse Effect
[1]Source: Maryland Historical Trust, Medusa map-based online Cultural Resource Information System			

9.1 Westport Historic District

The recommended preferred alternative would result in construction of an elevated I-95 NB spur ramp from Russell Street on the northern edge of the Westport Historic District. The ramp would be at approximately the same elevation as the I-95 main line, and would be supported by bridge piers. Approximately eight concrete bridge piers, similar in appearance to existing piers supporting I-95, would be constructed within the historic district. No contributing structures to the historic district would be demolished or altered by construction of the preferred alternative.

Although the I-95 NB spur ramp would be visible from other properties within the historic district, it would be located adjacent to and visually blend in with the existing elevated main line of I-95 and would otherwise be adjacent to vacant lots that do not contribute to the historic significance of the historic district. Construction of the spur ramp would result in negligible noise or air pollutant emissions within the historic district. The preferred alternative would not introduce visual, atmospheric, or audible elements to the Westport Historic District that would diminish the integrity of the district's significant historic features.

Ramp construction would have no adverse effect to the Westport Historic District.

9.2 Spring Garden Swing Bridge

The recommended preferred alternative would result in construction of an elevated I-95 NB spur ramp from Russell Street north of the Spring Garden Swing Bridge, adjacent and south of existing I-95 main line and ramps that span the Middle Branch of the Patapsco River on reinforced concrete bridge piers. The ramp elevation would be similar to the existing I-95 bridge deck. Approximately nine concrete bridge piers, similar in appearance to existing piers supporting I-95, would be constructed within the river. The elevated spur ramp would be constructed approximately 500 feet north of the Spring Garden Swing Bridge and would not require demolition or any physical alteration of the bridge.

The spur ramp would be visible from the Spring Garden Swing Bridge; however, it would be located adjacent to the existing elevated main line of I-95 and its spur ramps to I-395 and Russell Street which are visually prominent aspects of the viewshed from and towards the Spring Garden Swing Bridge. Construction of the spur ramp would result in negligible noise or air pollutant emissions. The new ramp would not introduce visual, atmospheric, or audible elements within the APE of the Spring Garden Swing Bridge that would diminish the integrity of the bridge's significant historic features.

Ramp construction would have no adverse effect to the Spring Garden Swing Bridge.

9.3 Riverside Historic District

Construction of the recommended preferred alternative would include a new shared-use pedestrian and bicycle bridge/path that would connect Riverside Park to the Port Covington development. The trail would begin within the Riverside Historic District at the south end of Light Street, travel westwards along East Winder Street for 400 feet at grade on the south side of the 1901 South Charles Street apartments. Approximately 100 feet east of South Charles Street, the pedestrian pathway would become elevated and would turn 90 degrees to the south. A stair case at the Charles Street intersection would connect to the elevated path. The path would rise 24 feet to allow a crossing above the CSX railroad tracks and below the I-95 deck, and turn another 90 degrees to the east before returning to grade and connecting to a sidewalk along the north side of the realigned East McComas Street.

Neither the at-grade or elevated portions of the pedestrian pathway would physically alter elements that contribute to the historical or architectural significance of the historic district. The pathway would represent a new visual element within the Riverside Historic District, although it is minor in scale, adjacent to the much more visually dominant I-95 bridge deck, and is not elevated within the viewshed of any properties within the district that contribute to the historic significance of the district. Although there are rowhouses on the 1900 block of Light Street that contribute to the significance of the District, the pedestrian pathway would be designated as painted lines on the existing asphalt of Winder Street in this location. The closest elevated point of the pathway is approximately 300 feet west of the rowhouses,

Pedestrian pathway construction would have no adverse effect to the Riverside Historic District.

9.4 Gould Street Generating Station

Construction of the recommended preferred alternative would involve realigning East McComas Street to the south of its current alignment, along the front elevation of the Generating Station. Construction would result in removal of railroad tracks adjacent to the facility and temporary construction impacts, but no permanent right-of-way acquisition is anticipated. No physical alteration of the station is anticipated. As noted in Section 3, on the north side of the Generating Station, East McComas Street

would be converted to a two-way boulevard from the western side of the Port Covington peninsula to Key Highway. The boulevard would accommodate vehicular and multi-modal connections between South Baltimore, I-95, and the Port Covington development. The median would be designed to accommodate a future light rail spur from Westport. Sidewalks would be installed along both sides of the new East McComas Street boulevard and a shared-use path would be installed along the north side of East McComas Street between the Cromwell Street and Key Highway intersections. The historic significance of the Gould Street Generating Station is conveyed by its setting in Port Covington, the architectural style and relatively intact assemblage of historic structures that comprise the plant complex. The minor visual effect of the realignment of East McComas Street on the Generating Station would not diminish the characteristics that convey its significance.

The realignment of East McComas Street with a median to accommodate light rail, including pedestrian improvements such as installation of sidewalks and a shard use path, would have no adverse effect to the Gould Street Generating Station.

9.5 Lyon, Conklin and Company

Construction of the recommended preferred alternative would involve realigning West and East McComas Street to the south of its current alignment, across from the Lyon, Conklin and Company. As noted in Section 3, on the north side of the Lyon, Conklin and Company building, West McComas Street would be converted to a two-way boulevard from the western side of the Port Covington peninsula to Key Highway. The boulevard would accommodate vehicular and multi-modal connections between South Baltimore, I-95, and the Port Covington development. The median would be designed to accommodate a future light rail spur from Westport. Sidewalks would be installed along the south side of the new West McComas Street boulevard. Proposed ramp improvements include demolition of the existing ramp from I-95 NB to Hanover Street SB and the realignment of the ramp from I-95 NB to East McComas Street. Realignment of the ramp would require widening the existing elevated main line of NB I-95 by one lane. Because the proposed lane would be part of the existing elevated main line of I-95 it would be a minor visual addition to the viewshed towards I-95, which is already dominated by the visually prominent elevated structure. The historic significance of the Lyon, Conklin and Company building is conveyed by its setting in industrial Port Covington. The ramp improvements and realignment of West McComas Street would represent a minor visual effect on the building that would not diminish the characteristics that convey its significance.

The realignment of the I-95 to McComas Street ramp and the realignment of West McComas Street, including a sidewalk on the south side of the roadway, would have no adverse effect to the Lyon, Conklin and Company building.

10 PROJECT EFFECTS TO ARCHEOLOGICAL HISTORIC PROPERTIES

There are no previously identified NRHP-eligible or listed archeological resources within the APE of the recommended preferred alternative. Final project effects on archeological resources will be determined following additional archeological investigations.

10.1 Geoarcheological Investigations

[Pending Results of Geoarcheological Investigations]

10.2 Underwater Remote Sensing Investigations

Two areas of anomalies were identified where density is significantly greater than the rest of the area surveyed. While those areas most likely have higher densities of anomalies simply due to their proximity to the historic channel, they may represent the remains of buried submerged cultural resources.

11 CONCLUSIONS AND RECOMMENDATIONS

Archeological and architectural investigations are ongoing, and conclusions and MDTA anticipates that conclusions and recommendations will be updated as consultation with MHT and other Section 106 stakeholders proceeds.

11.1 Future Consultation

MDTA will continue consultation with MHT and other Section 106 stakeholders regarding ongoing cultural resource studies. MDTA will complete a geoarcheological investigations report following completion of planned geoprobe investigations for review by MHT. MDTA will avoid the areas of underwater magnetic anomalies within the Middle Branch of the Patapsco River or will undertake additional investigations in accordance with the procedures of MHT's Maritime Archeological Program if resources cannot be avoided. MDTA anticipates submitting the nine Determinations of Eligibility to MHT and will continue to consult with MHT and Section 106 consultation parties on project effects to historic architectural properties. Should any adverse effects determinations to historic properties be made, MDTA will work with Section 106 consulting parties to resolve adverse effects and document commitments made in a Memorandum of Agreement.

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APPENDIX A

I-95 Access Improvements Cultural Resources Assessment of Effects Technical Report

APPENDIX A - Section 106 Correspondence

Section 106 Initiation Letter
MHT Response to Section 106 Initiation
Transmittal of Assessment of Potential
MHT Response to Assessment of Potential

Section 106 Initiation Letter

Maryland Transportation Authority

Larry Hogan
Governor

Boyd K. Rutherford
Lt. Governor

Pete K. Rahn
Chairman

Katherine Bays Armstrong
Peter J. Basso
William H. Cox, Jr.
William C. Ensor, III
W. Lee Gaines, Jr.
William K. Hellmann
Randall Nixon
John Von Paris

Milt Chaffee
Executive Director

2310 Broening Highway
Baltimore MD 21224
410-537-1000
410-537-1003 (fax)
711 (MD Relay)
1-866-713-1596

e-mail: mdta@mdta.maryland.gov

www.mdta.maryland.gov

September 9, 2016

Ms. Elizabeth Hughes
State Historic Preservation Officer
Maryland Historical Trust
Division of Historic and Cultural Programs
100 Community Place
Crownsville, MD 21032-2023

ATTN: Beth Cole, Administrator
Review and Compliance

RE: Section 106 Initiation of Consultation
I-95 Access Improvements, Caton Avenue to Fort McHenry Tunnel
Environmental Assessment
Baltimore City, Maryland

Dear Ms. Hughes:

The Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of federal funds from the Federal Highway Administration to prepare planning studies for a suite of improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities to support existing and planned development in the Port Covington area of Baltimore City, Maryland (**Figure 1**). The purpose of this letter is to initiate consultation pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), identify potential consulting parties, and delineate a proposed area of potential effects (APE) for your review and comment.

As shown in **Figure 1**, the study area generally follows the northern boundary of the Port Covington peninsula and includes the I-95 corridor. In addition, the improvements extend to several City streets (Hanover Street, McComas Street and Key Highway), pedestrian facilities, and the CSX Railroad tracks.

Project Alternatives

Four alternatives for transportation improvements have been developed for the project. Each alternative is composed of eight project elements with various options for improvements. Proposed improvements associated with the three Build alternatives (Alternatives 2, 3, and 4) would accommodate planned growth at Port Covington, a key growth cluster, while maintaining the functionality of the local and regional transportation system and enhancing multi-modal connections around and across I-95.

The eight project elements and options include:

Element A: I-95 Northbound Off Ramps
- Option 1: Maintain the Existing Hanover Street and McComas Street Ramps
- Option 2: Provide a Spur Ramp from Hanover Street Ramp to McComas Street
- Option 3: Relocate the Hanover Street Ramp – New Exit
- Option 4: Relocate the Hanover Street Ramp – A-B Exits
- Option 5: Complete the Hanover Street Interchange
- Option 6: Modify the McComas Street Off Ramp

Element B: I-95 Northbound On Ramp
- Option 1: Maintain the Existing Ramp
- Option 2: Construct an Additional On Ramp from Hanover Street
- Option 3: Construct a New Additional On Ramp

Element C: I-95 Southbound Off Ramp
- Option 1: Maintain the Existing Ramp
- Option 2: Improve the Existing Ramp
- Option 3: Provide a Two Lane Exit
- Option 4: Provide an Additional I-95 Southbound Off Ramp from the Existing Ramp
- Option 5: Provide an Additional I-95 Southbound Off Ramp from a New Location

Element D: I-95 Southbound On Ramps
- Option 1: Maintain the Existing Ramps
- Option 2: Widen the Existing Hanover Street Ramp
- Option 3: Provide Roundabout along Hanover Street
- Option 4: Reconstruct the Existing Ramp to Lengthen the Weave

Element E: Hanover Street
- Option 1: Maintain Existing Hanover Street Grade
- Option 2: Reconstruct Hanover Street

Element F: McComas Street
- Option 1: Maintain One Way McComas Street
- Option 2: Construct Two Way McComas Street

Element G: Pedestrians and Bicycles
- Option 1: Maintain Existing Pedestrian Connections
- Option 2: Construct Additional Pedestrian Connection to South Baltimore

Element H: CSX
- Option 1: Modify CSX Tracks South of McComas Street
- Option 2: Remove CSX Tracks South of McComas Street

Proposed Area of Potential Effects (APE)

Under Section 106, the proposed APE is defined in 36 CFR Part 800.16(d) as follows: "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking."

The APE for archaeological resources comprises the geographic area in which the ground surface is physically impacted by the project, referred to as the project limits of disturbance (LOD). To account for possible project changes, the current archaeological APE has been defined as a 100-foot buffer surrounding the LOD.

The APE for architectural historic resources includes the area in which the project may directly or indirectly cause changes in the character or use of historic properties, if they exist. This includes the entire area comprising the archaeological APE. To account for potential visual, atmospheric, or audible effects, the APE for architectural historic resources also extends beyond the actual construction limits of the project to include those properties that may be affected by visual changes or patterns of use, or may experience a change in historic character associated with the proposed undertaking. Because project impacts are limited mainly to the existing elevated I-95 right-of-way, and because of the relatively dense development comprising the project corridor, possible visual, atmospheric, and audible impacts beyond the tax parcels immediately abutting the road right-of-way, are expected to be negligible. Generally, the architectural APE combines the LOD and all overlapping parcels, in order to take into account the full potential effects on an entire resource.

The recommended APEs do not include the entirety of the Sagamore Development Company's proposed Port Covington Development. The development will take place regardless of the undertaking outlined here. The MDTA understands that potential Impacts to historic resources located inside the boundaries of the Port Covington Development will be addressed as part of a separate investigation in conjunction with the proposed development. The recommended APEs for both architectural and archeological resources are delineated in **Figure 2**.

MDTA has also attached a list of identified consulting parties to participate in the Section 106 consultation process (**Attachment A**).

Next Steps

The MDTA requests your review and concurrence of the proposed APE delineations and list of recommended consulting parties. The MDTA would be happy to provide MHT with any additional information or justification for the enclosed and would be happy to consult directly with your office concerning the project. To aid in our studies, we also cordially request any information your office may have regarding historic properties.

We look forward to working with you as we develop this exciting project in support of the proposed development at Port Covington. If you have any questions concerning the project or the information presented, please contact me directly at 410-537-5650 or our cultural resources consultant, Sarah Michailof at Straughan Environmental, Inc. She can be reached at 443-539-2522 or smichailof@straughanenvironmental.com.

Sincerely,

Dennis Simpson
Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosures and Attachments

cc: Jeanette Mar, FHWA
Sarah Michailof, Cultural Resource Specialist, Straughan Environmental, Inc.
Christina Alexiou-Hidalgo, NEPA Project Manager, STV, Inc.
Mark Cheskey, PB (on behalf of Baltimore City Department of Transportation)
Eric Almquist, RK&K (on behalf of MDTA)

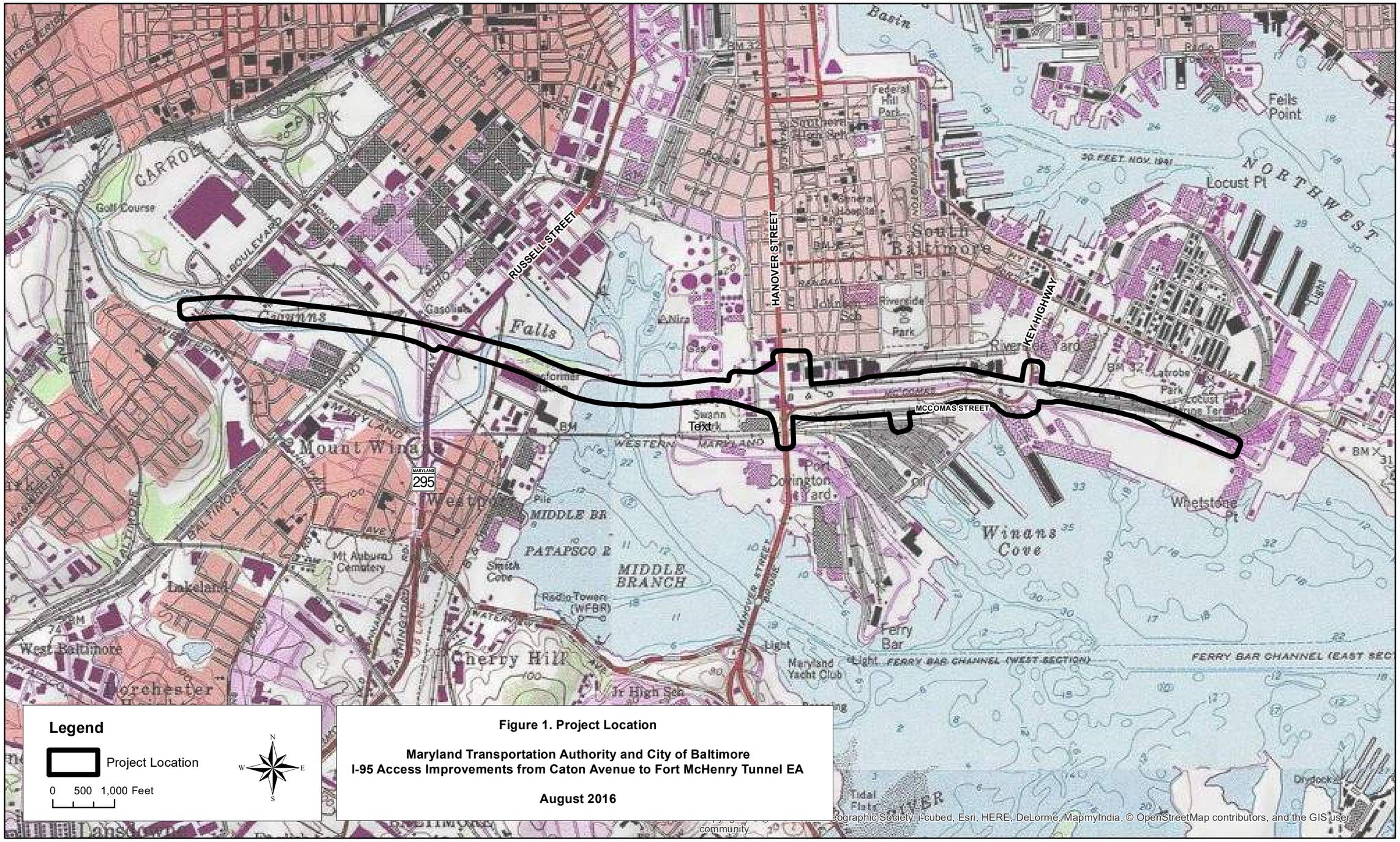

Figure 1. Project Location

Maryland Transportation Authority and City of Baltimore
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel EA

August 2016

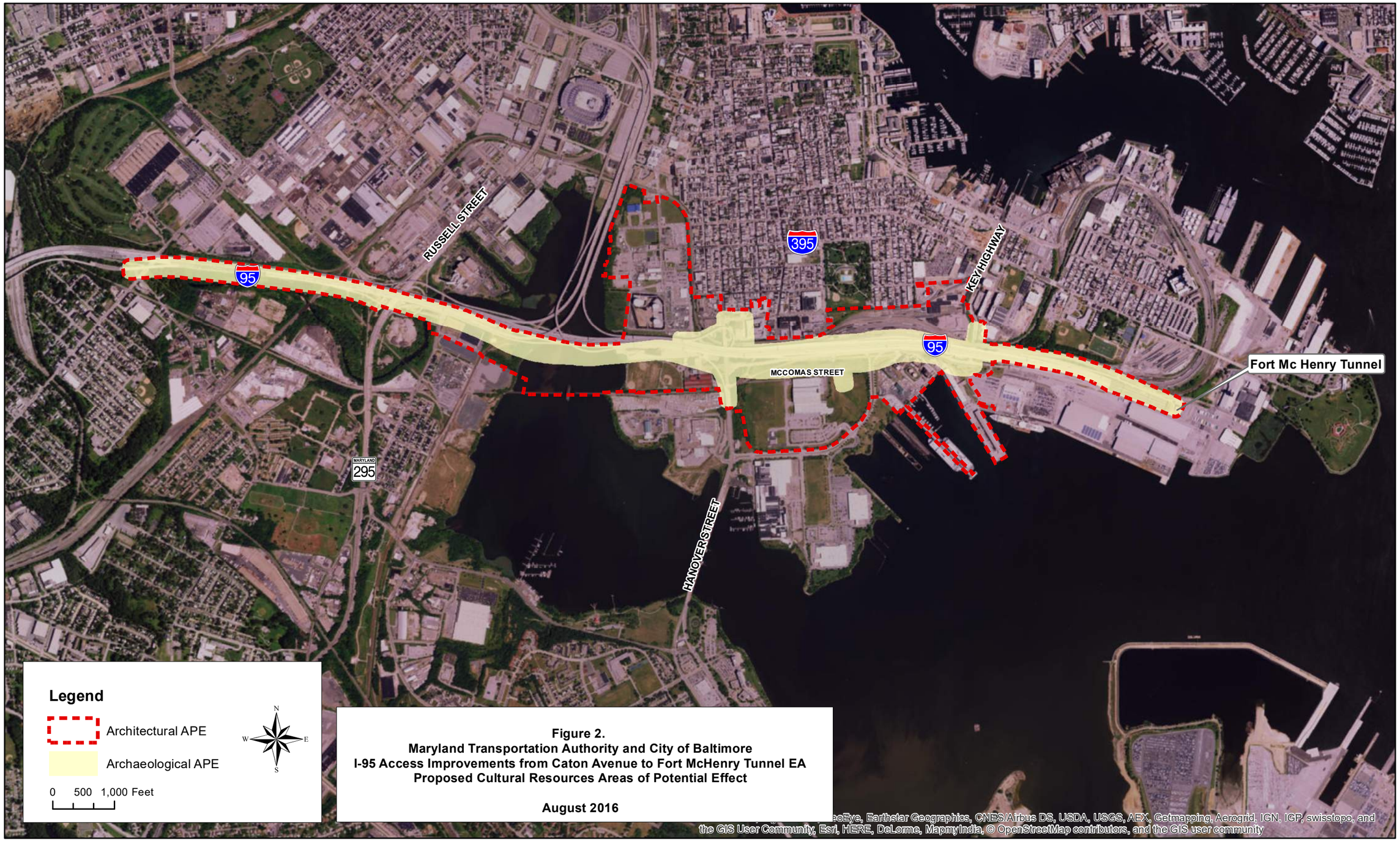

Figure 2.
Maryland Transportation Authority and City of Baltimore
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel EA
Proposed Cultural Resources Areas of Potential Effect

August 2016

Attachment A

Section 106 Initiation and Consultation
I-95 Access Improvements, Caton Avenue to Fort McHenry Tunnel
Environmental Assessment
Baltimore City, Maryland

List of Proposed Section 106 Consulting Parties

Federal Agencies

US Army Corps of Engineers
Baltimore District
City Crescent Building
10 South Howard Street
Baltimore, MD 21201
ATTN: Joseph P. DaVia, Chief, Maryland Section Northern
(410) 962-5691

National Park Service
Fort McHenry National Monument and Historic Shrine
2400 East Fort Avenue
Baltimore, MD 21230
ATTN: Tina Cappetta, Superintendent
(410) 962-4290

Indian Tribes

Haudenosaunee Tribes

Jesse Bergevin, Historic Resources Specialist
2037 Dream Catcher Plaza
Oneida, NY 13421-0662
(315) 829-8463
(315) 829-8473 Fax
jbergevin@oneida-nation.org

Anthony Gonyea, Faithkeeper (Beaver Clan)
Onondaga Nation
RR #1, Box 245
Nedrow, NY 13120
(315) 952-3109
ononcomm@gmail.com
(requests hard copy)

Mr. Arnold Printup, THPO
Saint Regis Mohawk Tribe
412 State Route 37
Akwesasne, NY 13655
(518) 358-2272 ext. 164
(518) 358-3203 FAX
arnold.printup@srmt-nsn.gov

Paul Barton, THPO
Seneca Cayuga Tribe of Oklahoma
23701 South 655 Road
Grove, OK 74344
(918) 787-7979
pbarton@sctribe.com

Delaware Tribes

Ms. Susan Bachor
Delaware Tribe Historic Preservation Representative
P.O. Box 64
Pocono Lake, PA 18347
(610) 761-7452
temple@delawaretribe.org

Shawnee Tribes

Leonard Longhorn
Cultural Preservation Director/ THPO
Absentee-Shawnee Tribe of Oklahoma
2025 S. Gordon Cooper Dr
Shawnee, Oklahoma 74801
(405) 275-4030 ext. 203
(405) 878-4711 FAX
llonghorn@astribe.com

Ms. Robin Dushane, THPO
Cultural Preservation Director
Eastern Shawnee Tribe of Oklahoma
12705 South 705 Road
Wyandotte, OK 74370
(918) 666-2435 ext. 1845
(918) 533-4101 cell
(918) 533-4104 FAX
rdushane@estoo.net

Ms. Kim Jumper, THPO
Shawnee Tribe
P. O. Box 189
29 S Hwy 69A
Miami, OK 74355
(918) 542-2441
(918) 542-2922
kim.jumper@shawnee-tribe.com

Local Government and Local Preservation Groups

Baltimore City Commission for Historical & Architectural Preservation
417 East Fayette Street, 8th floor
Baltimore, MD 21202
ATTN: Eric Holcomb, Executive Director
eric.holcomb@baltimorecity.gov
(410) 396-4866

Baltimore City Department of Transportation
417 E. Fayette Street
5th Floor
Baltimore, MD 21202
(410) 396-6802
ATTN: Frank Murphy, Acting Director

Baltimore City Department of Planning
417 E. Fayette Street, 8th Floor
Baltimore, MD 21202
ATTN: Thomas J. Stosur, Director
deptofplanning@baltimorecity.gov
(410) 396-7526

Baltimore Heritage
11 1/2 West Chase Street
Baltimore, MD 21201
ATTN: Johns Hopkins, Executive Director
hopkins@baltimoreheritage.org
(410) 332-9992

Western Maryland Railway Historical Society
99 Shenandoah View Drive
Harpers Ferry WV 25425
ATTN: Kenneth (Ken) G. Mazer, President/Chairman of the Board
ken.wmrhs@comcast.net

E. Keith Colston, Administrative Director
Maryland Commission on Indian Affairs
301 West Preston Street
Suite 1500
Baltimore, MD 21201
keith.colston@maryland.gov
(410) 767-7631

MHT Response to Section 106 Initiation

MARYLAND DEPARTMENT OF
PLANNING
MARYLAND HISTORICAL TRUST

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

Wendi W. Peters, Secretary
Ewing McDowell, Deputy Secretary

November 9, 2016

Dennis Simpson
Director, Division of Project Planning & Program Development
Maryland Transportation Authority
2310 Broening Highway
Baltimore, MD 21224

Re: I-95 Access Improvements, Caton Avenue to Fort McHenry Tunnel
Initiation of Section 106 Consultation
Baltimore City, Maryland

Dear Mr. Simpson:

Thank you for your recent letter regarding the above-referenced project. Your submittal formally initiated consultation with the Trust, Maryland's State Historic Preservation Office, pursuant to Section 106 of the National Historic Preservation Act, for this federally assisted undertaking. Based on our review of the submitted materials, we offer the following comments and concurrence.

The Maryland Transportation Authority (MDTA) is proposing a suite of improvements to Interstate 95, ramps, connecting roads and other transportation facilities to support development in the Port Covington area of Baltimore City. The project study area generally includes the northern boundary of the Port Covington peninsula along the I-95 corridor between Washington Boulevard and the Fort McHenry Tunnel.

Based on the four existing alternatives developed for the undertaking, MDTA has delineated an Area of Potential Effects (APE) for historic architectural and archeological resources. The Trust agrees with the defined APE as described in your letter and illustrated in Figure 2 of your submittal. We recognize that MDTA may make further refinements to its APEs as planning proceeds based on alignment changes, the addition of ancillary actions, or other modifications.

MDTA also requested the Trust's assistance identifying potential consulting parties for this undertaking. We agree that Attachment A to MDTA's letter identifies appropriate consulting parties. We also suggest that MDTA include the Baltimore National Heritage Area and Preservation Maryland as consulting parties. As the Section 106 coordination and public outreach efforts progress, additional relevant parties may be identified and invited to participate in the consultation.

We look forward to ongoing consultation with MDTA and other involved parties to successfully complete the Section 106 consultation for this undertaking as project planning proceeds. If you have questions or need further assistance, please contact me (for historic structures) at tim.tamburrino@maryland.gov / 410-514-7637 or Beth Cole (for archeology) at beth.cole@maryland.gov / 410-514-7631. Thank you for providing us this opportunity to comment.

Sincerely,

Tim Tamburrino
Preservation Officer, Project Review and Compliance
TJT/201604309

Transmittal of Assessment of Potential

Maryland Transportation Authority

Larry Hogan
Governor

Boyd K. Rutherford
Lt. Governor

Pete K. Rahn
Chairman

Katherine Bays Armstrong
Peter J. Basso
William H. Cox, Jr.
William C. Ensor, III
W. Lee Gaines, Jr.
William K. Hellmann
Randall Nixon
John Von Paris

Milt Chaffee
Executive Director

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Baltimore MD 21224
410-537-1000
410-537-1003 (fax)
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1-866-713-1596

e-mail: mdta@mdta.maryland.gov

www.mdta.maryland.gov

December 22, 2016

Ms. Elizabeth Hughes
State Historic Preservation Officer
Maryland Historical Trust
Division of Historic and Cultural Programs
100 Community Place
Crownsville, MD 21032-2023

ATTN: Beth Cole, Administrator, Review and Compliance

VIA E-MAIL

RE: Section 106 Consultation
Assessment of Potential for Cultural Resources
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Ms. Hughes:

As you know, the Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of Federal Highway Administration grant funds to prepare planning studies for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland. The use of federal funds triggers Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), which requires consideration of a project's impacts on historic properties. Pursuant to Section 106, the MDTA is pleased to provide you with the accompanying technical memorandum for your formal review and comment. Duplicate copies have been mailed to the consulting parties identified in the Initiation of Consultation letter dated September 9, 2016, and to the Baltimore National Heritage Area and Preservation Maryland, as suggested by your office on November 9, 2016.

The MDTA respectfully requests your expedited review of the enclosed. If you have any comments or questions concerning the project or the information presented, please contact me directly at 410-537-5651 or our cultural resources consultant, Sarah Michailof at Straughan Environmental, Inc. She can be reached at 443-539-2522 or smichailof@straughanenvironmental.com.

Sincerely,

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

cc: Jeanette Mar, FHWA
Sarah Michailof, Cultural Resource Specialist, Straughan Environmental, Inc.
Christina Alexiou-Hidalgo, NEPA Project Manager, STV, Inc.
Erron Ramsey, RK&K (on behalf of MDTA)

Maryland Transportation Authority

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December 22, 2016

US Army Corps of Engineers
Baltimore District
City Crescent Building
10 South Howard Street
Baltimore, MD 2120

ATTN: Joseph P. DaVia, Chief, Maryland Section Northern
VIA E-MAIL

RE: Section 106 Consultation
Assessment of Potential for Cultural Resources
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Mr. DaVia:

The Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of Federal Highway Administration grant funds to prepare planning studies for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland. The use of federal funds triggers Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), which requires consideration of a project's impacts to historic properties. Section 106 also gives an enhanced opportunity to individuals and organizations to participate as consulting parties. The purpose of this letter is to formally invite your organization to join as a consulting party and to provide you with the accompanying technical memorandum for your review and comment.

If you have any comments or questions concerning the project or the information presented, or if you would like to request a paper copy, please contact me directly at 410-537-5651 or our cultural resources consultant, Sarah Michailof at Straughan Environmental, Inc. by January 13, 2017. She can be reached at 443-539-2522 or smichailof@straughanenvironmental.com.

Sincerely,

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

cc: Jeanette Mar, FHWA
Sarah Michailof, Cultural Resource Specialist, Straughan Environmental, Inc.
Christina Alexiou-Hidalgo, NEPA Project Manager, STV, Inc.
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www.mdta.maryland.gov

December 22, 2016

Frank Murphy, Acting Director
Baltimore City Department of Transportation
417 E. Fayette Street
5th Floor
Baltimore, MD 21202

VIA E-MAIL

RE: Section 106 Consultation
Assessment of Potential for Cultural Resources
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Mr. Murphy:

The Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of Federal Highway Administration grant funds to prepare planning studies for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland. The use of federal funds triggers Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), which requires consideration of a project's impacts to historic properties. Section 106 also gives an enhanced opportunity to individuals and organizations to participate as consulting parties. The purpose of this letter is to formally invite your organization to join as a consulting party and to provide you with the accompanying technical memorandum for your review and comment.

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Sincerely,

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

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Sarah Michailof, Cultural Resource Specialist, Straughan Environmental, Inc.
Christina Alexiou-Hidalgo, NEPA Project Manager, STV, Inc.
Erron Ramsey, RK&K (on behalf of MDTA)

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Baltimore MD 21224
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711 (MD Relay)
1-866-713-1596

e-mail: mdta@mdta.maryland.gov

www.mdta.maryland.gov

December 22, 2016

Thomas J. Stosur, Director
Baltimore City Department of Planning
417 E. Fayette Street, 8th Floor
Baltimore, MD 21202

VIA E-MAIL

RE: Section 106 Consultation
Assessment of Potential for Cultural Resources
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Mr. Stosur:

The Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of Federal Highway Administration grant funds to prepare planning studies for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland. The use of federal funds triggers Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), which requires consideration of a project's impacts to historic properties. Section 106 also gives an enhanced opportunity to individuals and organizations to participate as consulting parties. The purpose of this letter is to formally invite your organization to join as a consulting party and to provide you with the accompanying technical memorandum for your review and comment.

If you have any comments or questions concerning the project or the information presented, or if you would like to request a paper copy, please contact me directly at 410-537-5651 or our cultural resources consultant, Sarah Michailof at Straughan Environmental, Inc. by January 13, 2017. She can be reached at 443-539-2522 or smichailof@straughanenvironmental.com.

Sincerely,

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

cc: Jeanette Mar, FHWA
Sarah Michailof, Cultural Resource Specialist, Straughan Environmental, Inc.
Christina Alexiou-Hidalgo, NEPA Project Manager, STV, Inc.
Erron Ramsey, RK&K (on behalf of MDTA)

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e-mail: mdta@mdta.maryland.gov

www.mdta.maryland.gov

December 22, 2016

Johns Hopkins, Executive Director
Baltimore Heritage
11 ½ West Chase Street
Baltimore, MD 21201

VIA E-MAIL

RE: Section 106 Consultation
Assessment of Potential for Cultural Resources
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Mr. Hopkins:

The Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of Federal Highway Administration grant funds to prepare planning studies for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland. The use of federal funds triggers Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), which requires consideration of a project's impacts to historic properties. Section 106 also gives an enhanced opportunity to individuals and organizations to participate as consulting parties. The purpose of this letter is to formally invite your organization to join as a consulting party and to provide you with the accompanying technical memorandum for your review and comment.

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Sincerely,

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

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www.mdta.maryland.gov

December 22, 2016

Mr. Jason Vaughan, MHP
Director, Historic Preservation and Interpretation
Baltimore Heritage Area Association, Inc.
12 W. Madison Street, Suite 120
Baltimore, MD 21202

VIA E-MAIL

RE: Section 106 Consultation
Assessment of Potential for Cultural Resources
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Mr. Vaughan:

The Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of Federal Highway Administration grant funds to prepare planning studies for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland. The use of federal funds triggers Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), which requires consideration of a project's impacts to historic properties. Section 106 also gives an enhanced opportunity to individuals and organizations to participate as consulting parties. The purpose of this letter is to formally invite your organization to join as a consulting party and to provide you with the accompanying technical memorandum for your review and comment.

If you have any comments or questions concerning the project or the information presented, or if you would like to request a paper copy, please contact me directly at 410-537-5651 or our cultural resources consultant, Sarah Michailof at Straughan Environmental, Inc. by January 13, 2017. She can be reached at 443-539-2522 or smichailof@straughanenvironmental.com.

Sincerely,

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

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Sarah Michailof, Cultural Resource Specialist, Straughan Environmental, Inc.
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December 22, 2016

Eric Holcomb, Executive Director
Baltimore City Commission for Historical & Architectural Preservation
417 East Fayette Street, 8th floor
Baltimore, MD 21202

VIA E-MAIL

RE: Section 106 Consultation
Assessment of Potential for Cultural Resources
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Mr. Holcomb:

The Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of Federal Highway Administration grant funds to prepare planning studies for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland. The use of federal funds triggers Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), which requires consideration of a project's impacts to historic properties. Section 106 also gives an enhanced opportunity to individuals and organizations to participate as consulting parties. The purpose of this letter is to formally invite your organization to join as a consulting party and to provide you with the accompanying technical memorandum for your review and comment.

If you have any comments or questions concerning the project or the information presented, or if you would like to request a paper copy, please contact me directly at 410-537-5651 or our cultural resources consultant, Sarah Michailof at Straughan Environmental, Inc. by January 13, 2017. She can be reached at 443-539-2522 or smichailof@straughanenvironmental.com.

Sincerely,

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

cc: Jeanette Mar, FHWA
Sarah Michailof, Cultural Resource Specialist, Straughan Environmental, Inc.
Christina Alexiou-Hidalgo, NEPA Project Manager, STV, Inc.
Erron Ramsey, RK&K (on behalf of MDTA)

Maryland Transportation Authority

Larry Hogan
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William K. Hellmann
Randall Nixon
John Von Paris

Milt Chaffee
Executive Director

2310 Broening Highway
Baltimore MD 21224
410-537-1000
410-537-1003 (fax)
711 (MD Relay)
1-866-713-1596

e-mail: mdta@mdta.maryland.gov

www.mdta.maryland.gov

December 22, 2016

E. Keith Colston, Administrative Director
Maryland Commission on Indian Affairs
301 West Preston Street
Suite 1500
Baltimore, MD 21201

VIA E-MAIL

RE: Section 106 Consultation
Assessment of Potential for Cultural Resources
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Mr. Colston:

The Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of Federal Highway Administration grant funds to prepare planning studies for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland. The use of federal funds triggers Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), which requires consideration of a project's impacts to historic properties. Section 106 also gives an enhanced opportunity to individuals and organizations to participate as consulting parties. The purpose of this letter is to formally invite your organization to join as a consulting party and to provide you with the accompanying technical memorandum for your review and comment.

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Sincerely,

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

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e-mail: mdta@mdta.maryland.gov

www.mdta.maryland.gov

December 22, 2016

National Park Service
Fort McHenry National Monument and Historic Shrine
2400 East Fort Avenue
Baltimore, MD 21230

ATTN: Tina Cappetta, Superintendent

VIA E-MAIL

RE: Section 106 Consultation
Assessment of Potential for Cultural Resources
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Ms. Cappetta:

The Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of Federal Highway Administration grant funds to prepare planning studies for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland. The use of federal funds triggers Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), which requires consideration of a project's impacts to historic properties. Section 106 also gives an enhanced opportunity to individuals and organizations to participate as consulting parties. The purpose of this letter is to formally invite your organization to join as a consulting party and to provide you with the accompanying technical memorandum for your review and comment.

If you have any comments or questions concerning the project or the information presented, or if you would like to request a paper copy, please contact me directly at 410-537-5651 or our cultural resources consultant, Sarah Michailof at Straughan Environmental, Inc. by January 13, 2017. She can be reached at 443-539-2522 or smichailof@straughanenvironmental.com.

Sincerely,

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

cc: Jeanette Mar, FHWA
Sarah Michailof, Cultural Resource Specialist, Straughan Environmental, Inc.
Christina Alexiou-Hidalgo, NEPA Project Manager, STV, Inc.
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www.mdta.maryland.gov

December 22, 2016

Ms. Margaret De Arcangelis, Preservation Services Director
Preservation Maryland
3600 Clipper Mill Road, Suite 248
Baltimore, MD 21211

VIA E-MAIL

RE: Section 106 Consultation
Assessment of Potential for Cultural Resources
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Ms. De Arcangelis:

The Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of Federal Highway Administration grant funds to prepare planning studies for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland. The use of federal funds triggers Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), which requires consideration of a project's impacts to historic properties. Section 106 also gives an enhanced opportunity to individuals and organizations to participate as consulting parties. The purpose of this letter is to formally invite your organization to join as a consulting party and to provide you with the accompanying technical memorandum for your review and comment.

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Sincerely,

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

cc: Jeanette Mar, FHWA
Sarah Michailof, Cultural Resource Specialist, Straughan Environmental, Inc.
Christina Alexiou-Hidalgo, NEPA Project Manager, STV, Inc.
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www.mdta.maryland.gov

December 22, 2016

Kenneth G. Mazer, President/Chairman of the Board
Western Maryland Railway Historical Society
99 Shenandoah View Drive
Harpers Ferry WV 25425

VIA E-MAIL

RE: Section 106 Consultation
Assessment of Potential for Cultural Resources
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Mr. Mazer:

The Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), anticipates the use of Federal Highway Administration grant funds to prepare planning studies for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland. The use of federal funds triggers Section 106 of the National Historic Preservation Act of 1966, as amended and its implementing regulations (36 CFR § 800), which requires consideration of a project's impacts to historic properties. Section 106 also gives an enhanced opportunity to individuals and organizations to participate as consulting parties. The purpose of this letter is to formally invite your organization to join as a consulting party and to provide you with the accompanying technical memorandum for your review and comment.

If you have any comments or questions concerning the project or the information presented, or if you would like to request a paper copy, please contact me directly at 410-537-5651 or our cultural resources consultant, Sarah Michailof at Straughan Environmental, Inc. by January 13, 2017. She can be reached at 443-539-2522 or smichailof@straughanenvironmental.com.

Sincerely,

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

cc: Jeanette Mar, FHWA
Sarah Michailof, Cultural Resource Specialist, Straughan Environmental, Inc.
Christina Alexiou-Hidalgo, NEPA Project Manager, STV, Inc.
Erron Ramsey, RK&K (on behalf of MDTA)

MHT Response to Assessment of Potential

Sarah Michailof

From: Erron Ramsey <eramsey@rkk.com>
Sent: Friday, January 6, 2017 10:28 AM
To: Alexiou-Hidalgo, Christina; Glen Smith (gsmith2@mdta.state.md.us); Melissa Williams (MdTA)
Cc: Sarah Michailof
Subject: FW: MDTA I-95 Improvements Section 106 Consultation

Good morning,
FYI, here is the email we received from JHU, Baltimore Heritage in response to the transmittal of the Section 106 Assessment of Potential Cultural Resources Report. We will continue to forward them information as a consulting party for now.
Thanks, Erron

From: Johns Hopkins [mailto:hopkins@baltimoreheritage.org]
Sent: Wednesday, December 28, 2016 10:55 AM
To: Philip Hayden <phayden@rkk.com>
Cc: Erron Ramsey <eramsey@rkk.com>
Subject: Re: MDTA I-95 Improvements Section 106 Consultation

Philip - thank you for forwarding this to me. It sounds as if things are in the earliest stages of the Section 106 process. If you don't mind, I'd like to be copied on the other material that is generated as you move forward. I am not yet able to get a good unerstanding of what the potential impacts could be for this project and thus not sure yet whether we'd like to be an official Section 106 consulting party, but maybe the next round of materials will help. Thanks again and have a good rest of your holiday. Johns

---
Johns Hopkins, Executive Director
Baltimore Heritage
11 ½ West Chase Street, Baltimore, MD 21201
office 410.332.9992

On Thu, Dec 22, 2016 at 10:51 AM, Philip Hayden <phayden@rkk.com> wrote:

> Dear Johns,
>
> On behalf of the Maryland Transportation Authority (MDTA), I am pleased to submit the attached documentation for your review and comment.
>
> Very truly yours,
>
> Philip A. Hayden

PHILIP A. HAYDEN

Senior Architectural Historian

RK&K

81 W Mosher St

Baltimore, MD 21217

410.728.2900 P | 410.462.9107 D
www.rkk.com

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Sarah Michailof

From: Ken Mazer <mazerk@comcast.net> on behalf of Ken Mazer <Ken.WMRHS@comcast.net>
Sent: Wednesday, January 11, 2017 5:38 PM
To: Philip Hayden; Ken Mazer; Sarah Michailof
Cc: Erron Ramsey
Subject: Re: MDTA I-95 Improvements Section 106 Consultation

Mr. Harden & Ms. Michailof,

We have the MDTA documents and concluded that in our opinion the WMRHS does not have a direct factor in this project. The material is very interesting and shows some details we were not aware of from a historical sense. The WMRHS input could be in the form of old property documents and right-of-way drawings in the area of study, of which we have many. Probably any direct connection to the WMRHS likely ended when Chessie/CSX sold all the properties, long after the Western Maryland Railway ceased to exist. We do have a historical connection with the Western Maryland Railway, and have a historical interest in the properties that were WM Ry in the study area, but probably not much else.

I'd like to be kept in the loop if anything involving the Spring Garden Draw bridge take place. Thanks for contacting the WMRHS and myself for input.

Sincerely,

Ken Mazer
WMRHS, President

From: Philip Hayden <phayden@rkk.com>
Date: Thursday, December 22, 2016 at 3:51 PM
To: Ken WMRHS <Ken.WMRHS@comcast.net>, "smichailof@straughanenvironmental.com" <smichailof@straughanenvironmental.com>
Cc: Erron Ramsey <eramsey@rkk.com>
Subject: RE: MDTA I-95 Improvements Section 106 Consultation

Dear Mr. Mazer,
Thank you for your request. We will send you a paper copy of the document on Tuesday, December 27.
Happy Holidays!
Phil Hayden

From: Ken Mazer [mailto:mazerk@comcast.net] **On Behalf Of** Ken Mazer
Sent: Thursday, December 22, 2016 3:47 PM
To: smichailof@straughanenvironmental.com
Cc: Philip Hayden <phayden@rkk.com>
Subject: Re: MDTA I-95 Improvements Section 106 Consultation

Ms. Michailof,

I'd like to request paper copies of the subject documents be mailed to me at the following address:

Kenneth G. Mazer, President

Western Maryland Railway Historical Society
99 Shenandoah View Drive
Harpers Ferry WV 25425

Warmest regards,
Ken Mazer
WMRHS

From: Philip Hayden <phayden@rkk.com>
Date: Thursday, December 22, 2016 at 10:54 AM
To: Ken WMRHS <ken.wmrhs@comcast.net>
Cc: Erron Ramsey <eramsey@rkk.com>
Subject: MDTA I-95 Improvements Section 106 Consultation

Dear Mr. Mazer,
On behalf of the Maryland Transportation Authority (MDTA), I am pleased to submit the attached documentation for your review and comment.

Very truly yours,
Philip A. Hayden

PHILIP A. HAYDEN
Senior Architectural Historian

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81 W Mosher St
Baltimore, MD 21217

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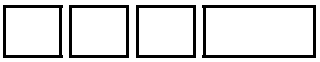

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Sarah Michailof

From: Holcomb, Eric <Eric.Holcomb@baltimorecity.gov>
Sent: Friday, January 13, 2017 3:24 PM
To: phayden@rkk.com; Sarah Michailof
Cc: Stosur, Tom; Feinberg, Laurie
Subject: Section 106 Consultation I-95 Access Improvements

Dear Mr. Hayden,

The Division for Historical and Architectural Preservation of the Baltimore City Department of Planning has reviewed the *Assessment of Potential I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel* and concurs with the comments in Maryland Historical Trust's November 9, 2016 letter (page 28 of the pdf).

We would also like to become a consulting party. We look forward to working with you.

Sincerely,

Eric Holcomb
Division Chief, Historical and Architectural Preservation
Executive Director, Commission for Historical and Architectural Preservation
City of Baltimore | Department of Planning
417 E. Fayette St., 8th Floor | Baltimore, MD 21202
Phone: 443-984-2728 | Fax: 410-244-7358
http://www.baltimorecity.gov/Government/AgenciesDepartments/Planning.aspx

Our Mission: To build Baltimore as a diverse, sustainable and thriving city of neighborhoods and as the economic and cultural driver for the region

MARYLAND DEPARTMENT OF
PLANNING
MARYLAND HISTORICAL TRUST

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

Wendi W. Peters, Secretary
Ewing McDowell, Deputy Secretary

January 13, 2017

Melissa Williams
Acting Director, Division of Project Planning & Program Development
Maryland Transportation Authority
2310 Broening Highway
Baltimore, MD 21224

Re: I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Baltimore City, Maryland

Dear Ms. Williams:

Thank you for your recent letter regarding the above-referenced project. Your submittal represents ongoing consultation with the Trust, Maryland's State Historic Preservation Office, pursuant to Section 106 of the National Historic Preservation Act, for this federally assisted undertaking. Based on our review of the submitted materials, we offer the following comments.

The Maryland Transportation Authority (MDTA) is proposing a suite of improvements to Interstate 95, ramps, connecting roads and other transportation facilities to support development in the Port Covington area of Baltimore City. The project study area generally includes the northern boundary of the Port Covington peninsula along the I-95 corridor between Washington Boulevard and the Fort McHenry Tunnel.

MDTA has conducted a reconnaissance of the historic built environment and assessed the archeological potential within the Area of Potential Effects (APEs) for this undertaking. We concur with the overall approach for conducting and completing the cultural resources investigations, as outlined in your submittal. We encourage frequent coordination with our office to ensure that the investigations are commensurate with the scale of the undertaking and consistent with our standards and guidelines. Please feel free to consult with the Trust prior to the initiation of any detailed investigations to ensure a reasonable and appropriate level of effort is performed for the project. We look forward to receiving the results of the architectural resources survey for review and comment, when available.

For the proposed terrestrial and underwater archeological investigations, the Trust will need to see scopes of work that provide detailed descriptions of the proposed methodologies for the research and field investigations, accompanying maps of the survey areas, and justification for the proposed levels of effort. As noted in the submittal, there has been considerable disturbance throughout the archeological APE as a result of various land alterations. The scopes of work should clearly identify the potential for National Register eligible archeological resources within the APE and justify why field investigations are warranted. The initiation of any underwater investigations must be closely coordinated with the Trust in advance of implementation. We await further consultation with MDTA and its consultant prior to the initiation of any detailed archeological investigations to ensure a reasonable and appropriate level of effort is performed for the project.

We look forward to ongoing consultation with MDTA and other involved parties to successfully complete the Section 106 consultation for this undertaking as project planning proceeds. If you have questions or need further assistance, please contact Tim Tamburrino (for historic structures) at tim.tamburrino@maryland.gov / 410-514-7637 or me (for archeology) at beth.cole@maryland.gov / 410-514-7631. Thank you for providing us this opportunity to comment.

Sincerely,

Beth Cole

Beth Cole
Administrator, Project Review and Compliance

BC/TJT/201605930

Maryland Transportation Authority

Larry Hogan
Governor

Boyd K. Rutherford
Lt. Governor

Pete K. Rahn
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www.mdta.maryland.gov

September 8, 2017

Ms. Elizabeth Hughes
State Historic Preservation Officer
Maryland Historical Trust
Division of Historic and Cultural Programs
100 Community Place
Crownsville, MD 21032-2023

ATTN: Beth Cole, Administrator, Review and Compliance

VIA E-MAIL

RE: Geoarcheological and Underwater Remote Sensing Fieldwork Plan
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Ms. Cole:

As you are aware, the Maryland Transportation Authority (MDTA), in partnership with the City of Baltimore (City), in cooperation with the Federal Highway Administration is developing an Environmental Assessment for proposed improvements to Interstate 95 (I-95) ramps, connecting roads, and other transportation facilities in the Port Covington area of Baltimore City, Maryland.

Enclosed for your consideration is proposed work plan for geoarcheological and underwater remote sensing investigations for the I-95 Access Improvements Project. The need for these investigations was identified following completion of a field reconnaissance and background research, which was documented in the Cultural Resources Assessment of Potential (AOP) submitted to Maryland Historical Trust (MHT) in December 2016.

Enclosed with this letter is the work plan and scope of work proposed by geoarcheologist Dan Wagner (GeoSci Consultants LLC) and underwater archeologist Jeffrey Morris (GeoMar Research). These scopes of work include the approach and methodology for their respective tasks.

Please review and provide comments on the proposed work plan. The MDTA respectfully requests your expedited review of the enclosed. If you have any comments or questions concerning the project or the information presented, please contact me directly at 410-537-5651 or our cultural resources consultant, Sarah Michailof at Straughan Environmental, Inc. She can be reached at 443-539-2522 or smichailof@straughanenvironmental.com.

Sincerely,

Melissa Williams
Director, Division of Project Planning & Program Development
Maryland Transportation Authority

Enclosure: Assessment of Potential for Cultural Resources (December 2015)

cc: Sarah Michailof, Cultural Resource Specialist, Straughan Environmental, Inc.
Christina Alexiou-Hidalgo, NEPA Project Manager, STV, Inc.
Erron Ramsey, RK&K (on behalf of MDTA)

STRAUGHAN ENVIRONMENTAL

Date: September 8, 2017

To: Beth Cole, Administrator, Review and Compliance
Maryland Historical Trust

From: Sarah Michailof, Cultural Resource Specialist
Straughan Environmental, Inc.

RE: Geoarcheological and Underwater Remote Sensing Fieldwork Plan
Federal Highway Administration, Maryland Transportation Authority, and City of Baltimore
I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Environmental Assessment, Baltimore City, Maryland

Dear Ms. Cole:

Straughan Environmental, Inc. submits this fieldwork plan in support of proposed geoarcheological and underwater remote sensing investigations for MDTA's I-95 Access Improvements project. MDTA identified a need for these investigations following completion of a field reconnaissance and background research, which was documented in the Cultural Resources Assessment of Potential (AOP) submitted to Maryland Historical Trust (MHT) in December 2016.

The AOP recommended geoarcheological survey on Port Covington and East Locust Point where project elements including piers would extend below areas of fill into soils with potential to contain archeological resources. These elements include the McComas Street on and off ramps to northbound and southbound I-95 and the pedestrian/bicyclist bridge that connects Riverside and Port Covington. The proposed study area for geoarcheological borings, including nineteen proposed boring locations, is shown in **Figure 1**. The AOP also recommended underwater remote sensing investigations in areas where piers would be constructed within the Middle Branch of the Patapsco River. The proposed study area for remote sensing investigations is included as **Figure 2**.

Straughan has attached the scopes of work (**Attachment A**) prepared by geoarcheologist Dan Wagner (GeoSci Consultants LLC) and underwater archeologist Jeffrey Morris (GeoMar Research). These scopes of work include the approach and methodology for their respective tasks.

Regarding the geoarcheology scope of work, Straughan has refined the field work plans in consultation with GeoSci Consultants following submittal of the geoarcheology scope of work. The

10245 Old Columbia Road • Columbia, MD • 21046 • Voice 301.362.9200 • Fax 410.309.6160

refinement is based on new information regarding subsurface conditions in the study area and new information on changes in grade in the study area since the late nineteenth century. Straughan has learned that Swann Park underwent remediation for soil contamination with arsenic in 2008. Contaminated soil was removed and the entire site has been capped with a layer of geotextile fabric and clean soil fill. The geoprobe borings would require damage to the geotextile fabric, and therefore, no geoprobe borings are proposed within the park.

Since preparation of the geoarcheology scope of work, Straughan has completed a GIS cut and fill analysis to aid in the selection of geoarcheological boring locations. The analysis compares changes in ground elevation from the late nineteenth century to the present day, and can indicate areas where cutting of the ground surface has resulted in elevation decreases or areas where filling of the ground surface has resulted in elevation increase[1]. In general, barring previous undocumented episodes of fill, cutting the ground surface by a few feet or more results in the removal or disturbance of archeological resource-bearing soil deposits. In areas where fill materials have been placed, there is potential that archeological resources have been buried and preserved. The cut and fill analysis suggests that five to fifteen feet of fill cover most of the study area. In the middle of the study area, from the Riverside Rail Yard to areas south, including I-95 and the eastern portion of the former Baltimore Sun Headquarters parcel – the area has been deeply cut by five to nineteen feet from late nineteenth century elevations. GeoSci has used the cut and fill analysis to target placement of geoarcheological borings in areas of fill. In areas of fill, the borings are placed every 100 feet. Four geoarcheological borings at a 250-foot interval are proposed in areas that have been cut, to assist in field verification of the cut and fill analysis. The easternmost section of the study area (along McComas Street north of TE Connectivity and the South Locust Point Marine Terminal) overlays an area of made land that was within the Middle Branch of the Patapsco River in 1897. Three borings have been proposed in the area. The map depicting areas of cut and fill and the location of the 1897 shoreline is included as **Figure 3**.

Straughan will assist in the geoarcheological investigations by providing a Geoprobe contractor and a GPS technician who will locate the borings with a GPS unit capable of sub-meter accuracy for plotting on project mapping in the geoarcheology report to be prepared by GeoSci Consultants.

Please let me know if you have any questions or comments regarding the geoarcheological and remote sensing investigations. If the approach meets with your approval, kindly provide written

[1] The 1897 map is the Baltimore City Topographical Survey Plates 2S-1W, 3S-1W, 2S-1E, 3S-1E, 2S-2E, and 3S-2E, by Thos. M. Ward, Malcolm A. Cudlipp, W.A. Wansleben, Frank K. Duncan, R.A. MacGregor and Wm. Bauman Jr. Topography was compared with 2016 two-foot contours available from City of Baltimore, OpenBaltimore Beta, accessed online at https://data.baltimorecity.gov/.

concurrence by September 26, 2017. Please contact me at smichailof@straughanenvironmental.com or 443-539-2522 if you need additional information regarding the I-95 Access Improvements project.

Sincerely,

Sarah Michailof
Cultural Resource Specialist
Straughan Environmental, Inc.

Figure 1. I-95 ACCESS IMPROVEMENTS FROM CATON AVENUE TO FORT MCHENRY TUNNEL - PREFERRED ALTERNATIVE

Honeywell Avoidance Option 2 - Proposed Geoarcheology Study Area, August 18, 2017

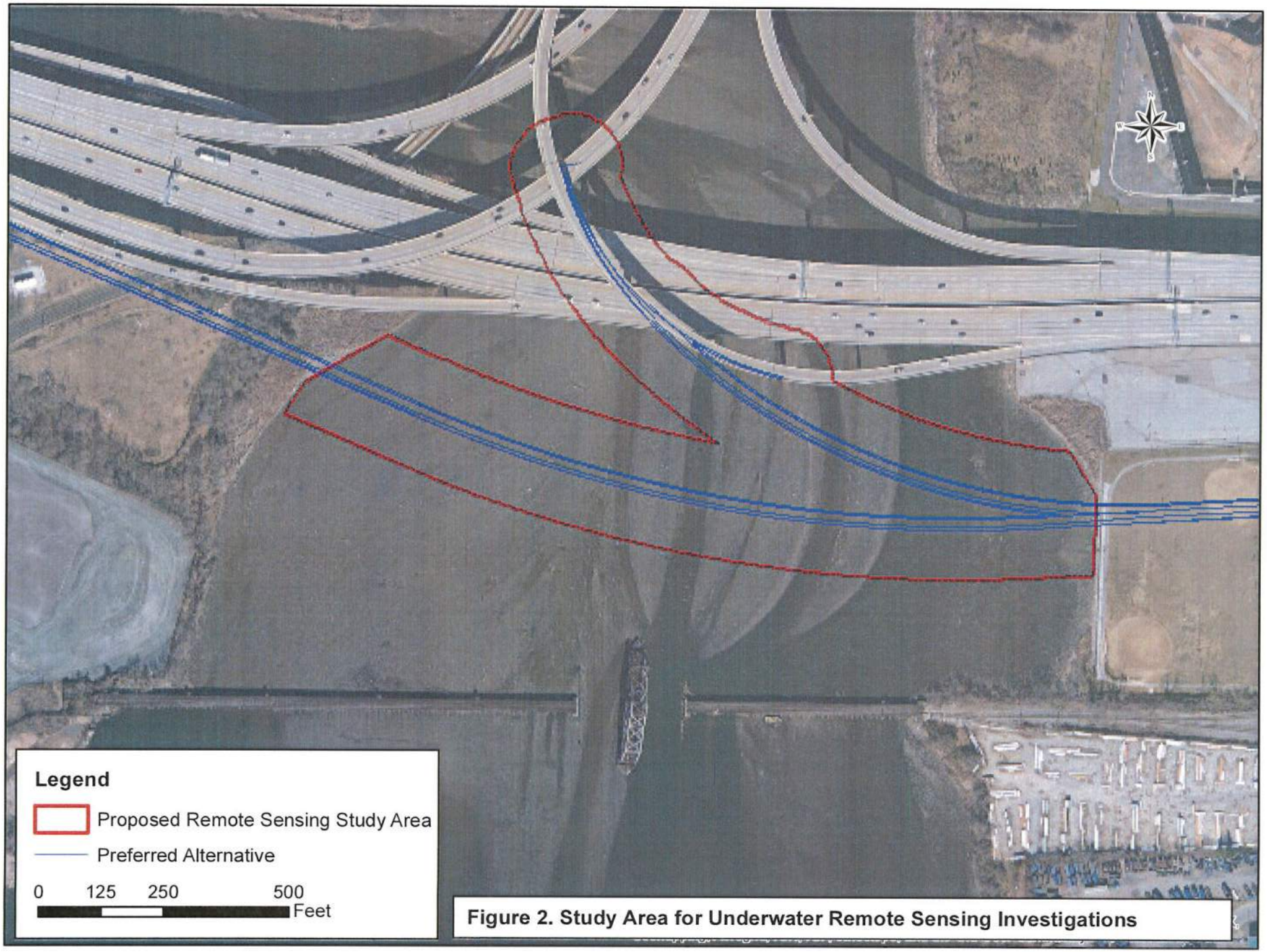
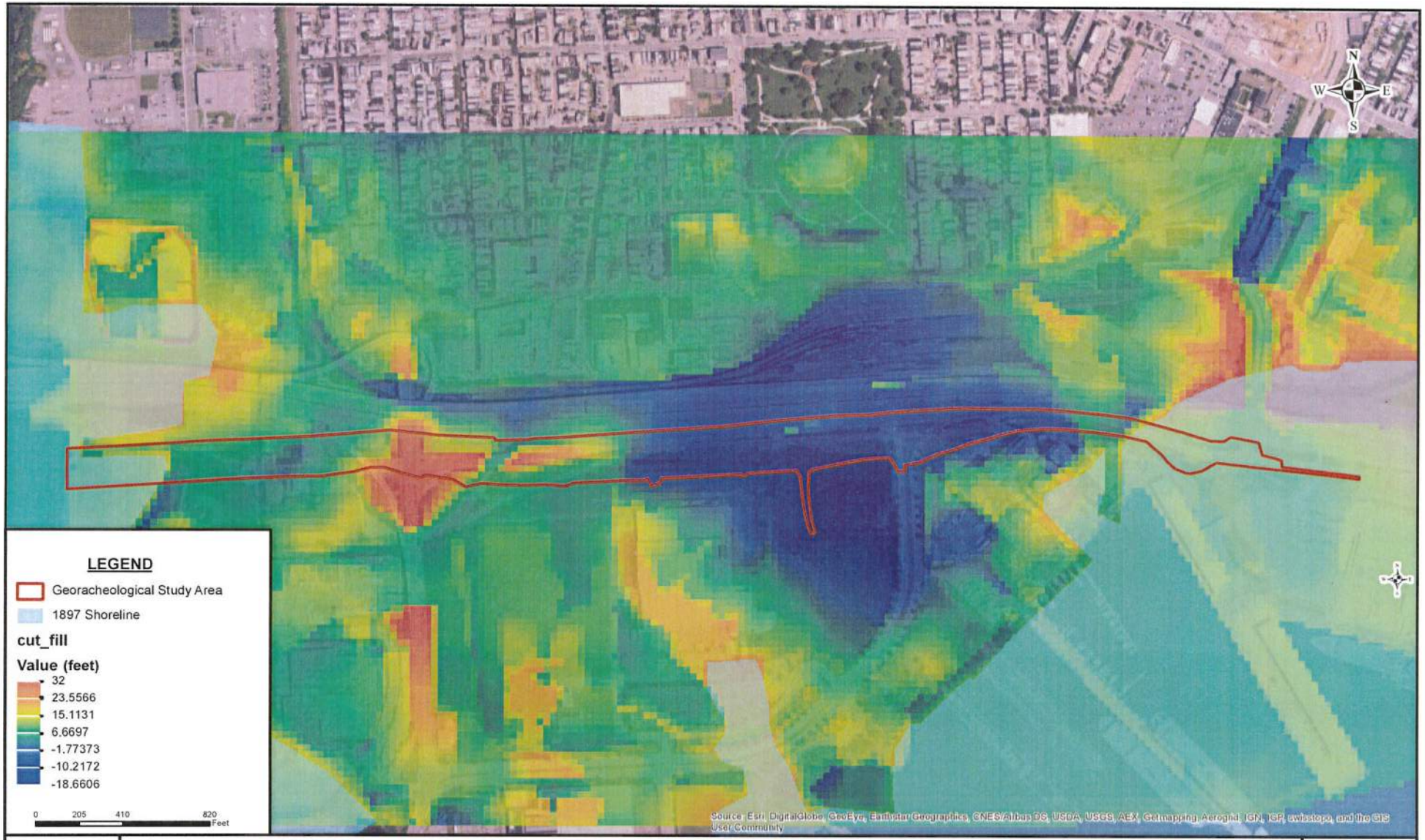


Figure 2. Study Area for Underwater Remote Sensing Investigations



I-95 ACCESS IMPROVEMENTS FROM CATON AVENUE TO FORT MCHENRY TUNNEL

Proposed Geoarcheology Study Area, December 6, 2016

Map Date - November 2016

MARYLAND DEPARTMENT OF
PLANNING
MARYLAND HISTORICAL TRUST

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

Robert S. McCord, Acting Secretary

September 29, 2017

Melissa Williams
Director, Division of Project Planning & Program Development
Maryland Transportation Authority
2310 Broening Highway
Baltimore, MD 21224

Re: I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel
Geoarcheological and Underwater Remote Sensing Proposed Work Plans
Baltimore City, Maryland

Dear Ms. Williams:

Thank you for your recent letter regarding, received by the Maryland Historical Trust (Trust) on September 18, 2017, regarding the above-referenced project. Your submittal represents ongoing consultation with the Trust, Maryland's State Historic Preservation Office, pursuant to Section 106 of the National Historic Preservation Act, for this federally assisted undertaking.

The submittal provided the Trust with copies of the proposed work plans for completing geoarcheological and underwater remote sensing surveys within portions of the project planning area. Trust staff reviewed and work plans and we have no further comments on the proposed methodologies. We look forward to receiving the results of this initial investigation, when available. The results will help inform future decisions regarding the need for additional terrestrial and underwater archeological work related to this project.

We look forward to ongoing consultation with MDTA and other involved parties to successfully complete the Section 106 consultation for this undertaking as project planning proceeds. If you have questions or need further assistance, please contact me at beth.cole@maryland.gov / 410-697-9541. Thank you for providing us this opportunity to comment.

Sincerely,

Beth Cole

Beth Cole
Administrator, Project Review and Compliance

BC/ 201705383
cc: Sarah Michailof (Straughan Environmental Inc.)

APPENDIX B

I-95 Access Improvements Cultural Resources Assessment of Effects Technical Report

APPENDIX B

Phase IA, Underwater Archaeological Remote Sensing Survey Report
I-95 Access Improvements from
Caton Avenue to Fort McHenry Tunnel Baltimore, Maryland

Phase IA, Underwater Archaeological Remote Sensing Survey Report I-95 Access Improvements from Caton Avenue to Fort McHenry Tunnel Baltimore, Maryland

Submitted to:

Straughan Environmental, Inc.
10245 Old Columbia Road
Columbia, MD 21046

Submitted By:

Geomar Research, LLC
3235 Southern Pine Lane
Port Republic, MD 20676

Authors:
Jeffrey D. Morris
Joshua Daniel

Principal Investigator:
Jeffrey D. Morris

December 17, 2017

Abstract

This report describes the survey and results of a Phase IA, underwater archaeological remote sensing survey completed on the Middle Branch of the Patapsco River, underneath and just south of the existing I-95 bridge. The Maryland Transportation Authority (MDTA) and the Baltimore City Department of Transportation (Baltimore City DOT), in coordination with the Federal Highway Administration (FHWA), are studying a suite of improvements to Interstate 95 (I-95) ramps and other nearby transportation facilities to support ongoing and planned redevelopment of the Port Covington peninsula in south Baltimore. These improvements are collectively known as the I-95 Access Improvements from Caton Avenue to the Fort McHenry Tunnel (I-95 Access Improvements). Geomar Research, LLC was contracted by Straughan Environmental, Inc. of Columbia, Maryland to conduct an underwater marine archaeological remote sensing survey of the proposed construction site in Maryland Archaeological Unit 7. The survey covered 22 acres under and south of the existing I-95 bridge over the Middle Branch of the Patapsco River including the proposed project area impact area. The proposed project is in a previously unsurveyed area.

The Phase IA, underwater remote sensing survey did not identify any potential submerged cultural resources through visual or side scan sonar imaging of the area. However, a magnetic gradiometer survey of the area, identified 89 magnetic anomalies, all of which individually are consistent with relatively small, shallowly buried, ferrous objects. None of those anomalies, individually, are consistent with magnetic signatures from submerged cultural resource sites. There are two areas, however, where the density of those anomalies is significantly greater than the rest of the area surveyed. While those areas most likely have higher densities of anomalies simply due to there proximity to the historic channel, additional investigation of those areas should be conducted prior to construction activities to insure that those anomalies do not represent the remains of buried submerged cultural resources.

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Introduction

Geomar Research, LLC was contracted by Straughan Environmental, Inc. of Columbia, Maryland to conduct a Phase IA marine archaeological remote sensing survey of the proposed construction site in the Middle Branch of the Patapsco River, Maryland. The Maryland Transportation Authority (MDTA) and the Baltimore City Department of Transportation (Baltimore City DOT), in coordination with the Federal Highway Administration (FHWA), are studying a suite of improvements to Interstate 95 (I-95) ramps and other nearby transportation facilities to support ongoing and planned redevelopment of the Port Covington peninsula in south Baltimore. These improvements are collectively known as the I-95 Access Improvements from Caton Avenue to the Fort McHenry Tunnel (I-95 Access Improvements). The construction activities would include the construction of additional bridge piers. The Maryland Historical Trust (MHT) of the Maryland Department of Planning requested that a Phase IA, underwater archaeological remote sensing survey be performed to comply with section 106 of the National Historic Preservation Act of 1966, as amended. The objective of this survey was to determine if submerged cultural resources are located in the area of the proposed activity underneath and south of the existing I-95 bridge.

Geomar Research conducted the remote sensing survey between October 30-31 and on November 3, 2017. Project personnel included Jeffery D. Morris, Principal Investigator and Remote Sensing Equipment Operator and Nicholas Lentocha, Field Technician. Joshua Daniel conducted archival and historic research prior to survey as well as magnetic data analysis. The report was prepared jointly by Jeffrey D. Morris and Joshua Daniel.

The organization of the report follows the Standards and Guidelines for Archeological Investigations in Maryland (Shaffer and Cole 1994). Introduction, research design, results, and recommendations are each presented in separate sections of this report. The references cited and appropriate appendices follow.

Area Description

The survey area is located underneath and south of the existing I-95 bridge over the Middle Branch of the Patapsco River, south and east of Gwynn's Falls, north of the abandoned Western Maryland Tidewater Railroad Company, Spring Garden Swing Bridge (SGSB), and west of Swann Park (Figures 1 & 4). The survey area lies in the Middle Branch of the Patapsco River watershed, and straddles USGS 7.5' quadrangle Baltimore East and Baltimore West, which is located in Maryland Archaeological Research Unit 7 (Figure 2). The Maryland Transportation Authority plans call for the construction of additional bridges and ramps associated with the I-95 bridge (Figure 3). Proposed improvements within the Middle Branch would be located adjacent to the existing elevated Interstate 95 main line. Two elevated ramps, one exiting from northbound Interstate 95 and the other exiting from Russell Street southbound, would merge north of the Spring Garden Swing Bridge, adjacent and south of the existing I-95 main line and ramps that span the Middle Branch of the Patapsco River. The ramp elevations would be similar to the existing I-95 bridge deck. Approximately 12 concrete bridge piers, similar in appearance to existing piers supporting I-95, would be constructed within the river to support the ramps. Straughan Environmental, Inc. in consultation with The Maryland Historic

Trust and the Maryland Transportation Authority delineated the extents of the areas to be impacted by the proposed construction activities (outlined in red on Figure 3).

While NOAA navigational chart 12281 shows a navigable channel north of the Spring Garden Swing Bridge (Figure 4), field investigation determined that water depths greater than 3 feet MLW do not currently exist in the surveyed areas north of the Spring Garden Swing Bridge, except directly adjacent to the bridge's north eastern end. The area surveyed is characterized by intertidal mud flats that are littered with snags, trash, tires, shopping carts, traffic drums, and other modern trash and debris (Figures 5 & 6). A review of historical aerial photographs identified overhead imagery dating back to 1924 of the area. Those photographs, in particular a 1953 image of the area, clearly show the historic channel north of the Spring Garden Swing Bridge with shoals to either side (Figure 7). The total area surveyed by Geomar Research encompassed approximately 22 acres.

Research Design

Historical Research Methodology

A literature and archival investigation associated with Phase I archeological research was initiated by surveying primary and secondary sources. The focus of that research was the historical development of South Baltimore and the Middle Branch of the Patapsco. Historical and literary sources were examined for information on activities such as prehistoric habitation, colonization, development, agriculture, industry, trade, commerce, warfare, and transportation. Data related to those activities were noted and evaluated for relevance to human activity in the project area. Reference material was examined at the Maryland Historic Trust prior to and post archaeological survey. The historical background generated by that research provided a context for the interpretation of the archaeological record.

Remote Sensing Survey Methodology

The primary goal of this effort was to perform a Phase 1A underwater archaeological remote sensing survey utilizing side-scan sonar, marine magnetometer, and sub-bottom profiler data to locate potential submerged cultural resources in the portions of the Middle Branch of the Patapsco River that will be impacted by the project. These are the standard survey methods and techniques required by the Maryland Maritime Archaeological Program to comply with Section 106 remote sensing survey. That research method requires a lane spacing of 50-feet to allow for the identification of small magnetic and acoustic anomalies and the collection of side-scan sonar, magnetometer, and sub-bottom profiler data. Due to the intertidal nature of the survey area,

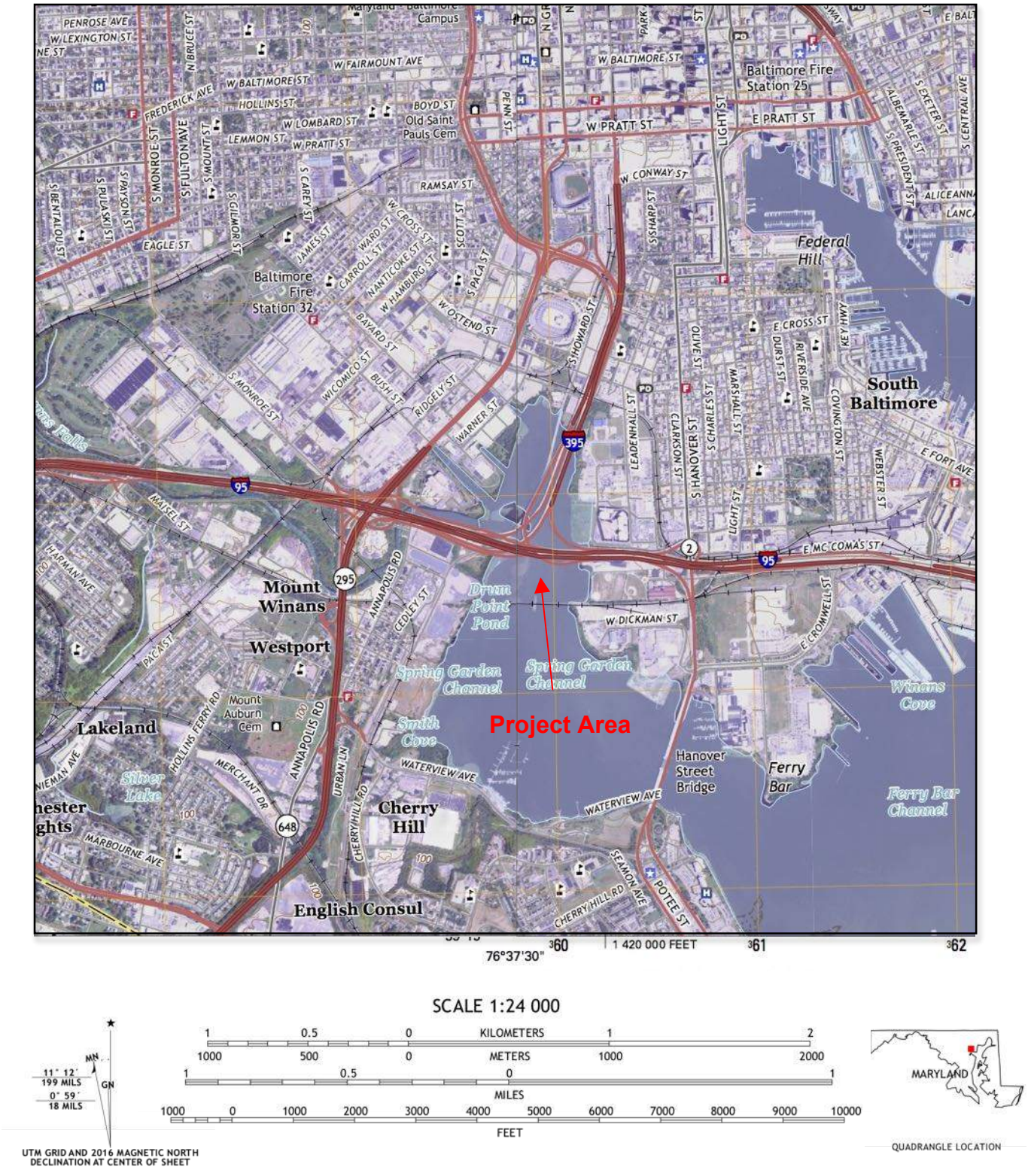

Figure 1. Project Location Map (USGS 7. 5' Map, Baltimore East and Baltimore West, Maryland Quadrangles).

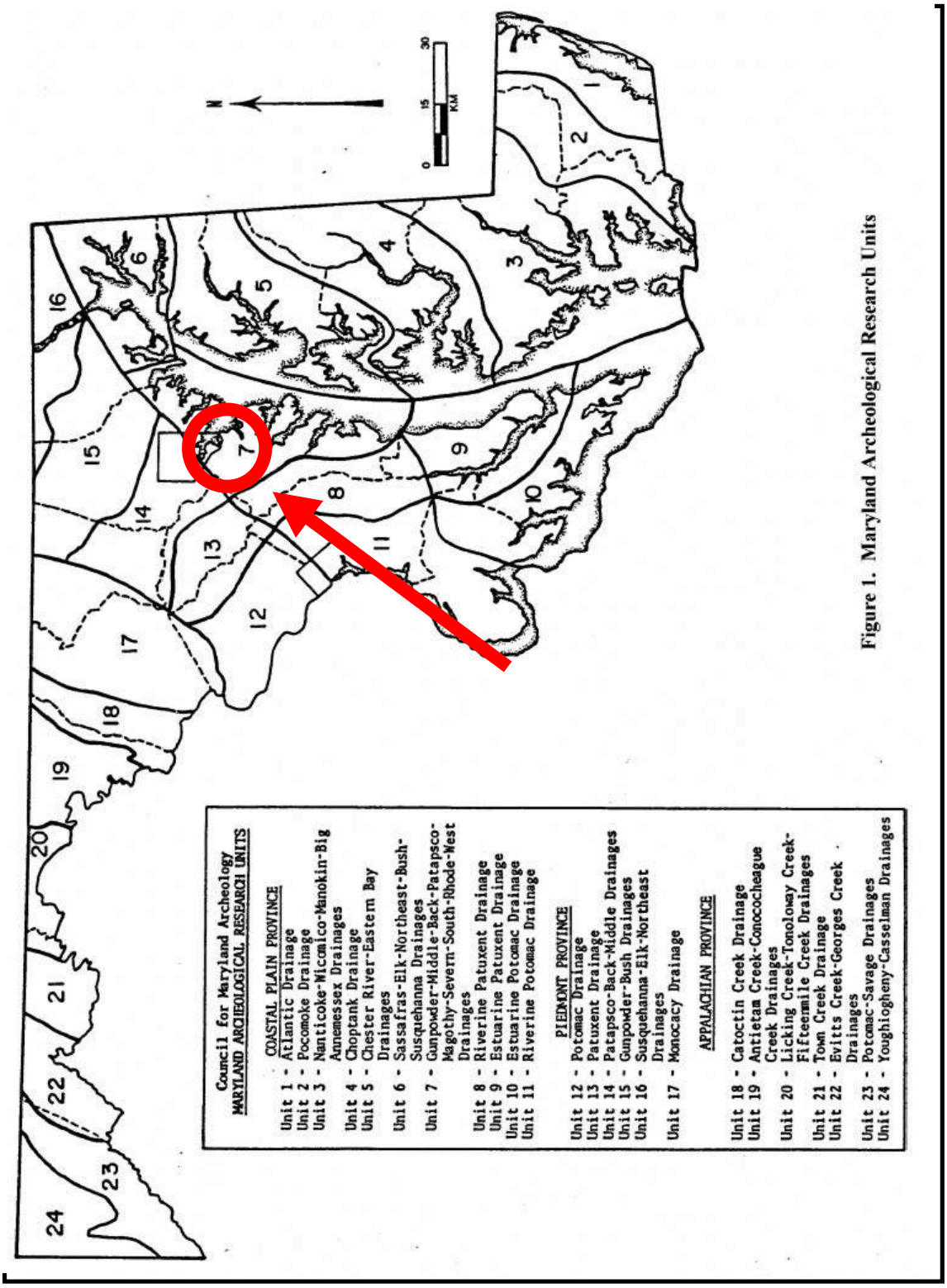

Figure 1. Maryland Archeological Research Units

Figure 2. Council of Maryland Archeology's Maryland Archeological Research Unit Map

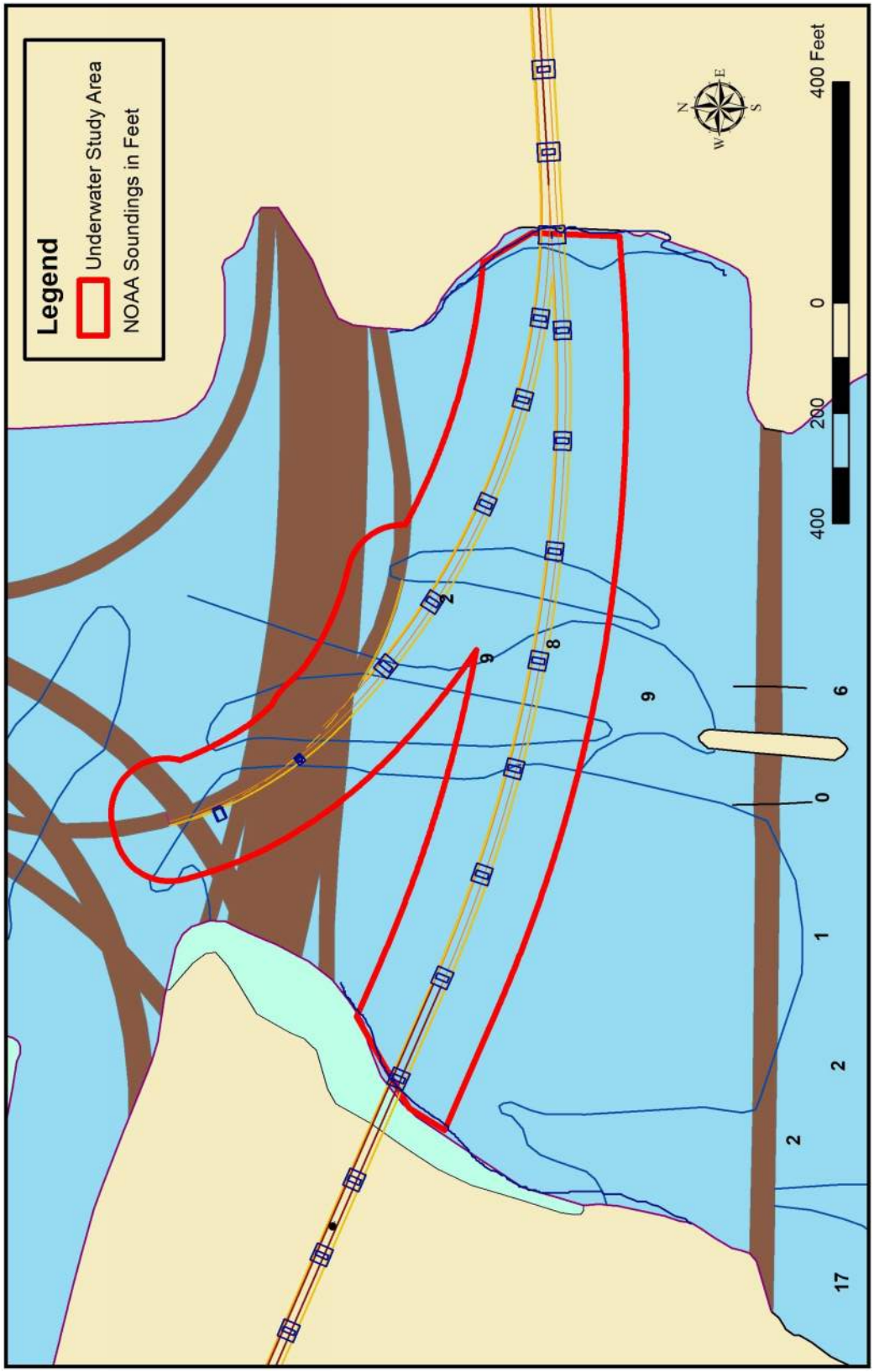

Figure 3. Construction Plan Provided by Straughan Environmental, Inc.

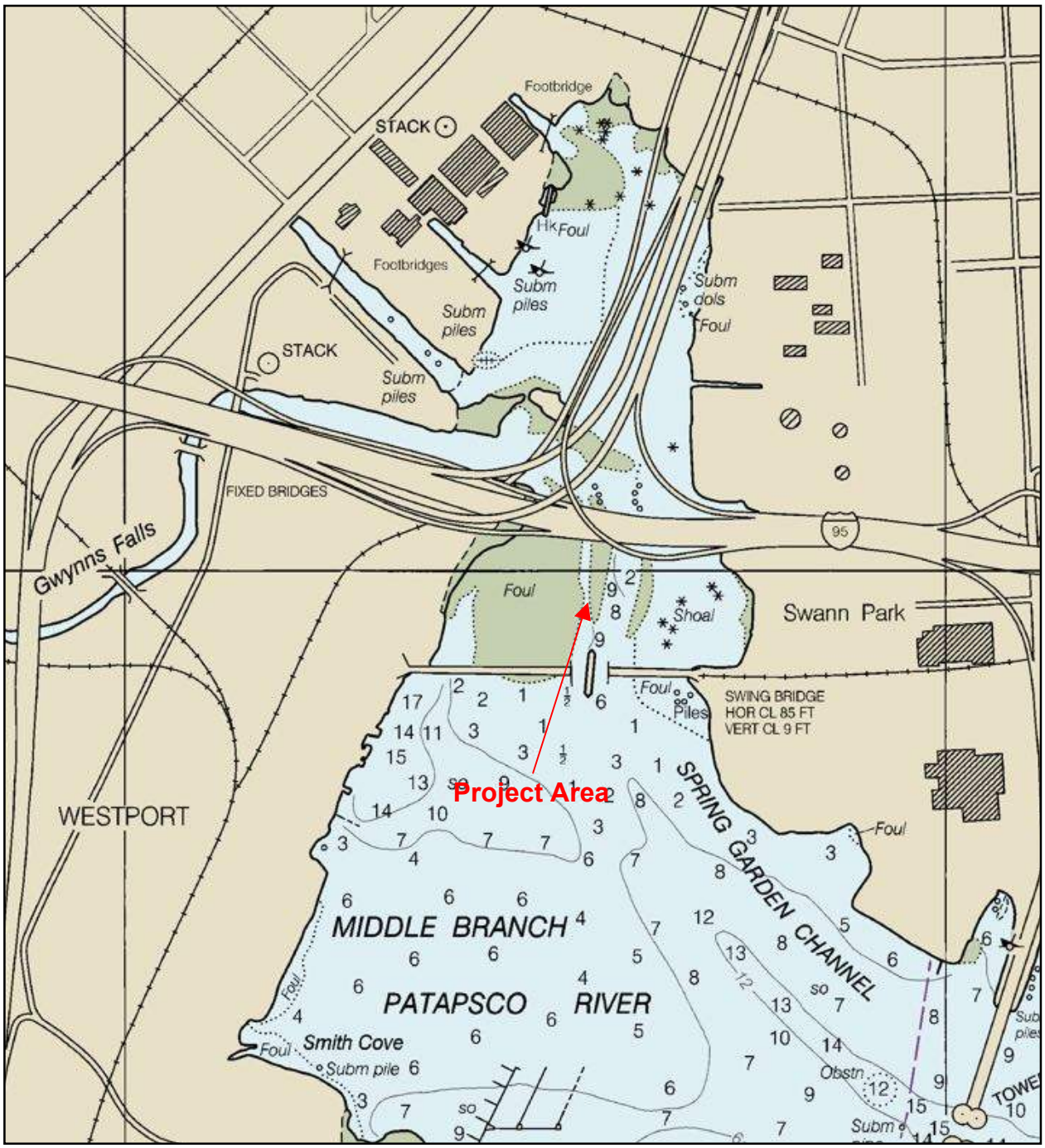

Figure 4. NOAA Raster Navigation Chart 12881.

Figure 5. Photograph Looking North, Center Section of the Survey Area (High Tide).

Figure 6. Photograph Looking North, Western Side of the Survey Area (Low Tide).

Figure 7. 1953 Aerial Photograph, U.S. Agricultural Stabilization and Conservation Service.

Figure 8. 1972 Aerial Photograph, Maps, Inc. for Baltimore City Planning Department.

traditional underwater archaeological survey methods could not be employed. The area is characterized by mud flats that at high tide have only inches of water over them, while at low tide are almost completely exposed. Those mud flats consist of unconsolidated soft sediments that even at low tide cannot support the weight of a person standing on them. As a result, Geomar Research executed the survey using visual survey of the mud flats at low tide for evidence of exposed submerged cultural resources on the surface. Side scan sonar survey was conducted of one channel through the area with enough water to support Geomar's survey vessel at high tide. To detect completely buried submerged cultural resources, Geomar Research employed a magnetic gradiometer that was mounted to a shallow draft skiff that was rowed through the area at high tide and mounted that same gradiometer to an amphibious dolly and pushed it across the mud flats at low tide (Figures 9 & 10). To allow survey personnel to safely traverse the mud flats, specially designed mud shoes, commercially known as "Mudder Boots" were worn. Sub-bottom profiler data could not be collected in the survey area due to the extremely shallow water depths. The survey instrumentation employed by Geomar Research, LLC represents industry standard systems for geophysical surveys.

The survey conducted by Geomar Research, LLC was conducted using Geographic Coordinates, based upon the World Geodetic System 1984 datum (WGS84). All data was converted from Geographic Coordinates to Maryland State Plane Coordinates based upon the 1983 North American Datum (NAD83) utilizing ESRI's ArcGIS software. All coordinates and measurements listed in this document are in feet based upon the Maryland State Plane Coordinate System using NAD83.

Side scan survey operations were performed from a twenty-five foot Parker Marine fiberglass survey vessel, *Big Blue*. The vessel is equipped with all United States Coast Guard required equipment to ensure personnel and vessel safety. Navigation and positioning data aboard *Big Blue* is received on a permanently mounted Simrad NSE12 integrated navigation system which includes a Simrad GPS25 shipboard Wide Area Augmentation System Differential Global Positioning System (WAAS DGPS), digital echosounder, and radar. The vessel DGPS signal is provided to the two primary survey data collection systems through an RS-232 signal splitter system. Hypack, Inc.'s hydrographic survey suite served as the primary survey navigation system. Hypack provided the capability to layout survey lines, collect navigation and magnetic data, and provided an accurate real-time visual representation of the survey vessel and survey lane tracking. Additional ship-board power is provided by portable Honda generators, rated to 2000 watts.

Acoustic data was collected using an Edgetech 4125 digital side-scan sonar system. The Edgetech 4125 system is a dual frequency unit operating at 600 and 1600 kHz with selectable range control from 5 to 150 meters. Geomar personnel selected a range scale setting of 25 meters and performed manual gain adjustment to ensure that high quality sonar records were recorded. The files generated by the Edgetech 4125 were recorded by Edgetech's Discover software and converted to standard *.XTF format. Echovision's 2020 survey software provided sonar and navigation data analysis and targeting, and sonar and navigation data post-processing capabilities. The acoustic target database, coverage, and towfish track were generated using Echovision's 2020 software.

Magnetic data was collected using a Geometrics G858 GAP gradiometer. The Geometrics G858 consists of two Geometrics G858 cesium vapor magnetometers and can detect variations in the earth's magnetic field to .008 nano-tesla's (Gamma) and takes readings of that field 10 times a second (10 Hertz). For this survey two G858 sensors were mounted in a vertical

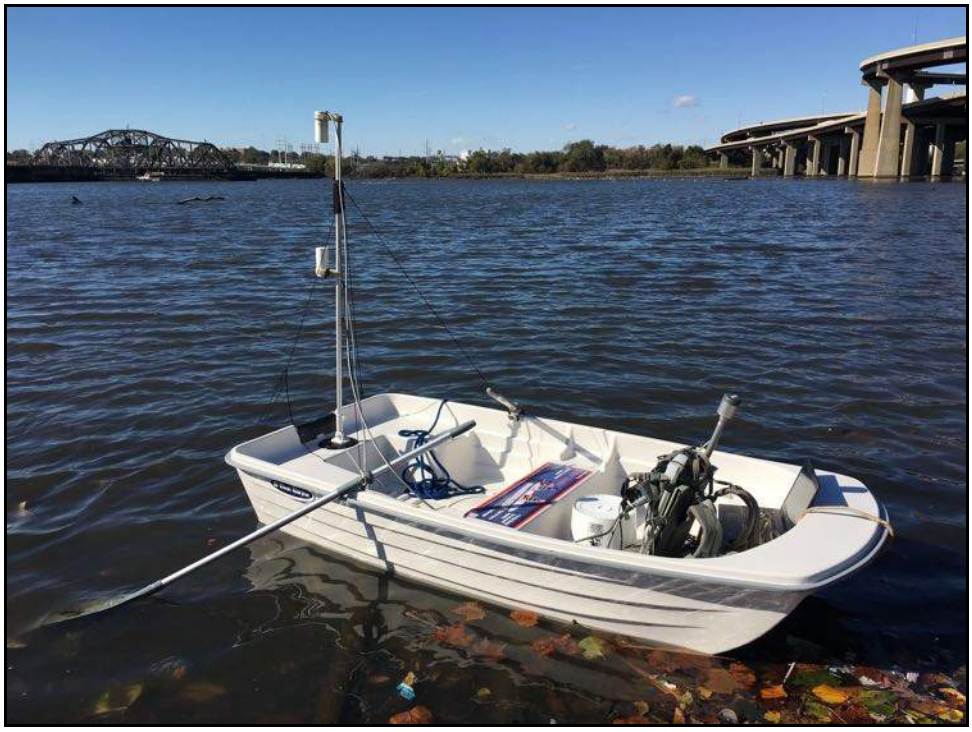

Figure 9. Shallow Draft Skiff Rigged with Magnetic Gradiometer.

Figure 10. Amphibious Cart Rigged with Magnetic Gradiometer.

gradiometer configuration with a 1m separation between the sensors. The G858 GAP includes an integrated Tallysman TW5341 DGPS with <1m positional accuracy in WAAS mode. All magnetic data collected during the survey was analyzed and edited in Hypack's single beam survey editor and exported into an XYZ point file. The XYZ files were imported in ESRI's ArcGIS Geographic Information System (GIS) where the data was processed using the ArcGIS 3D Analyst extension to generate magnetic and contour maps.

All survey data was integrated for visualization and the production of survey maps using ESRI's ArcGIS 10.5 software. Magnetic data gradient maps, the survey geo-database, data provided by Straughan Environmental, Inc., as well as data from NOAA's *ENC Direct* online GIS database system were integrated into a single ArcGIS project. This GIS project allowed Geomar Research personnel to analyze the spatial relationships between acoustic and magnetic anomalies and the surrounding geology, construction plans, and obstructions.

Background Research

Environment

The survey area is located in the Middle Branch of the Patapsco River underneath and south of the existing I95 / I395 interchange and, south and east of Gwynn's Falls, north of the abandoned Western Maryland Tidewater Railroad Company, Spring Garden Swing Bridge, and west of Swann Park.

This survey searched an area of approximately 22 acres in the waterway. A flat coastal plain with elevations of less than twenty feet dominates this region of Maryland. The Atlantic Coastal Plain topographic feature applies to the low, mostly featureless, plain extending from Staten Island, New York to Florida. In the survey area, the coastal plain consists of one topographic type: a flat featureless plain (Maryland 1973).

Hydrology

The first known European to enter the Patapsco River drainage was Captain John Smith, who may have traveled up to the site of present day Baltimore Harbor basin. This river system is located 170 miles from the mouth of the Chesapeake Bay and is fed by numerous deep and shallow creeks. Pleasure creeks along the south shore run from the river's mouth to the northwest basin of Baltimore's harbor system. The Middle Branch of the Patapsco, except for the northwest shore around Port Covington and modern day Locust Point, were only moderately industrialized compared to the northern shore of the Patapsco River and the industrialized areas of Curtis Bay.

The entrance to the Middle Branch of the Patapsco has a deep federally maintained channel to allow large vessels to navigate to the modern Locust Point Marine Terminal. The area from Ferry Bar to the Hanover Street Bridge has not changed significantly since the mid nineteenth century with depths between 5-18 feet (Patapsco 1856) (NOAA). From the Hanover Street Bridge northward to the headwaters, the area has shoaled significantly and is only accessible by shoal draft vessels today. While the area north of the Spring Garden Swing Bridge is not named on modern charts, historically the area was known as Ridgely's Cove as depicted on the 1856 chart of the Patapsco River (Figure 11).

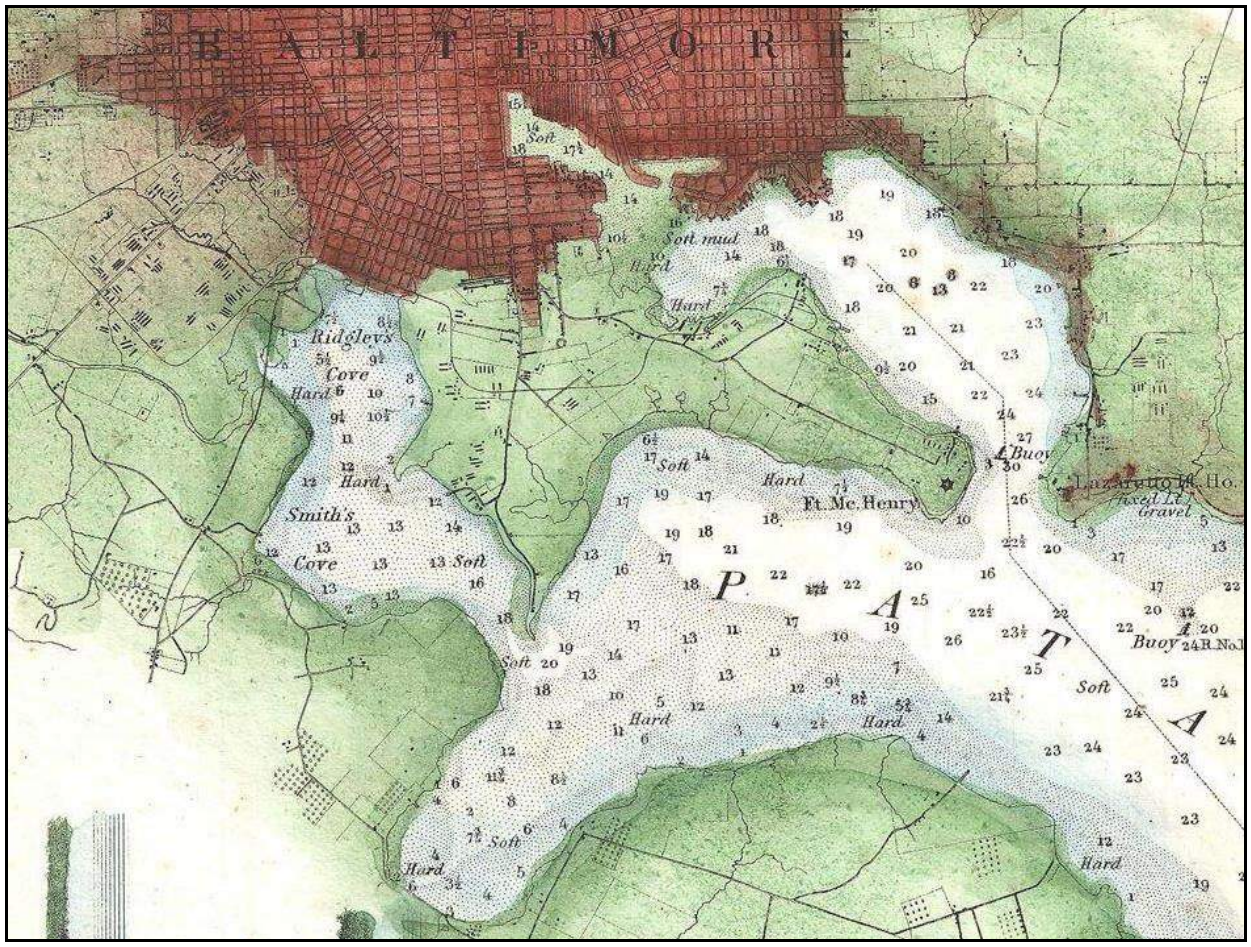

Figure 11. Patapsco River and Approaches (1856)

The bottom characteristics in the Middle Branch of the Patapsco are generally a silt-clay mud in deep locations and sand-clay sediments in shallow areas (Koski-Karell 1979 and Young 1962). Amounts of overburden mud matrix vary with amounts up to forty feet recorded in Baltimore Harbor. A characteristic of these sediments is the absorption of acoustical energy transmitted from geophysical instruments. These "soft sediment areas" have shown that the bottom mud contains high levels of methane gas. This phenomenon of gassy sediments absorbs this energy and prevents identifying sub-strata (Koski-Karell 1979 and Mueser 1978).

Upland soils in the area consist of *Sassafras-Croom-Chillum* association, that represent gently sloping to steep, well-drained loamy soils with some compacted gravel sub soils. These soils are not associated with farming practices due to high management required of the soil for crop production. This association is better for industrial or residential usage (Maryland 1973). During the survey, the crew observed marsh grass and noted riprap along the eastern shoreline and marsh grass along the western side of the survey area

Cultural Settings

Changes in sea level and environmental conditions associated with the climatic changes from the Pleistocene to the modern Holocene have submerged numerous cultural resources from

a once terrestrial setting. Natural phenomena have drastically changed the Chesapeake Bay shoreline (Hurricanes: 1933, Agnes-1972, Fran-1996, Dennis-1999, and Floyd-1999). Archival research in the MHT library provided a pre-survey chronology and settlement patterns by reviewing site forms, local reports, regional data, MHT documents, and secondary sources.

Prehistoric Context

The first people to occupy the Chesapeake Bay region have been grouped into three distinct periods: Paleo-Indian, Archaic, and Woodland eras. Archaic and Woodland eras each have been subdivided into early, middle and late phases, with a terminal Archaic phase prior to Early Woodland (Curry 1980).

The first humans could have entered the region as early as 13,000 years ago as hunting groups pursued big game herd animals. These groups, whose main subsistence strategy was hunting and gathering, are typically associated with fluted projectile points, the most common in Maryland being *Clovis* and *Dalton* style projectile points (Curry 1980 and Dent 1995).

The Archaic period covers from 8,000 to 1,000 years B.C. and is associated with environmental changes of increased temperatures and sea level rise, which initiated the Chesapeake marine estuary. This period represents an era of changing climatic conditions that resulted in the emergence of flora and fauna comparable to those seen in modern times. The hunter-gather groups relied more heavily on smaller game animals, shellfish, migratory fish and birds as natural responses to the period's transformation. Human groups in the Chesapeake region adjusted to these habitat changes by progressive social adaptation toward an increased reliance on seasonal settlement sites, which can be used to exploit seasonal resources (Curry 1980 and Dent 1995).

The prehistoric tool kits of archaic people moved away from the fluted biface to notched projectile points, scrapers, drills, and hammer stones. Two artifacts indicate the increase in sedentism of the archaic period: stone axes believed for use of cutting vegetation and soapstone bowls for cooking. This tool technology appears to suggest usage of available natural resources to support substance societies as people became less dependant on hunting gathering and migration. Variations in population, environment and natural resources changes contributed to human occupation changes during this time (Curry 1980 and Dent 1995).

The Woodland period, covering from 1,000 B.C. to European contact [1608], is the richest archaeological period for the Chesapeake region, with thousands of inventoried archaeological sites in Maryland. Archaeologists associate the development and use of pottery for cooking and storage with this period for which numerous styles and types having been identified throughout the region. Pottery development can be viewed as a means of supporting the move from horticulture to agricultural systems of developing flora food sources. The introduction of the bow and arrow occurred in the later part of the Middle Woodland phase. Bow and arrow are a more accurate way to hunt and allowed the hunter to increase the distance to their quarry (Curry 1980 and Dent 1995).

The riverine system of the Patapsco River could provide diverse resources to assist the Woodland period's more sedentary lifestyle. This period in North American history was characterized by the spreading of agricultural practices (Curry 1980, Dent 1995, Potter 1993, and Trigger 1979. At the time of European contact, John Smith found no people along the shores of the Patapsco River (Travers 2016).

Historic Context

In his adventure of exploring the Chesapeake Bay, Captain John Smith was the first European to enter the Patapsco River drainage in 1608. These explorers went into the Patapsco River along the Anne Arundel County side and took the waterway to the end of navigable water. After climbing the heights at the fall line, they returned and departed along the northern shoreline or Baltimore City and County side (Roundtree 2007 and Travers 2016).

George Calvert, Baron Baltimore, was granted lands north of the Virginia colony by King Charles I. These lands extended between the Potomac and Delaware Rivers and extended as far north as the fortieth parallel (McWilliams 2011). After his father's death, Cecil Calvert, the son of George Calvert and the second Lord Baltimore, received the charter for the Maryland colony. In 1633, Cecil sent his brother Leonard to lead the first expedition to the new colony, sailing with 200 colonists in the *Ark* and the *Dove*. On March 25, 1634, settlers arrived at St. Clement's Island, which provided a temporary base of operations, and took possession of the colony. Soon after, the first capital of the colony was established downriver at St. Mary's City on land that was purchased from the Yaocomaco tribe (Figure 12) (Kimball and Henson 2017; Travers 2016).

Figure 12. The 1651 John Ferrar map showing the location of both St. Mary's City and the Patapsco (Bolus) River.

European settlement throughout the rest of the 17th century focused on areas along the shores of the Chesapeake Bay and the Potomac, Patuxent, and Patapsco Rivers. However, early growth around modern Baltimore was slower than in other areas in the region, leading one local historian to label the period between 1645 and 1745 as "The Empty Century" (Comer and Comer 2001).

In 1729, Baltimore was officially chartered as Baltimore Town, but growth of the town as a seaport was slow as places such as Fell's Point, Whetstone Point, Elkridge Landing, and Joppa were more convenient for shipping and the transport of tobacco (Travers 2016). Elkridge Landing, located on the shores of the Patapsco River, had a customs house, race track, and a deep channel leading to the open river (Keith 2005). By 1752, Baltimore Town consisted of approximately 25 houses and 200 residents. A small finger pier provided limited access to shipping for the tobacco trade (Travers 2016). Around the same time Nicholas Rogers sailed the brig *Phillip and James* to Barbados with a mixed cargo of hams, beans, peas, corn, tobacco, barrels of flour and bread, iron, and staves and headings (Beirne 1984). As late as the early 1760s, Baltimore's tobacco exports were valued at almost double all other exports combined, but the port's importance lagged behind that of the port of Annapolis.

Figure 13. Baltimore in 1752 (courtesy the Maryland Historical Society).

In 1772, the Ellicott brothers constructed the nation's largest flour mill on the Patapsco River at what is now Ellicott City; in 1830 this became the first of many destinations for the Baltimore and Ohio Railroad (Keith 2005). A year later in 1773, Baltimore annexed Fell's Point, providing the town with both deep water port access and a number of established shipyards (Beirne 1984; Travers 2016). After the colonies declared their independence from Britain, the first frigate in the Continental Navy, the *Virginia*, was constructed at Fell's Point. While the British blockaded the port of Annapolis, Baltimore was largely ignored; a British force anchored

briefly at the mouth of the Patapsco. However, the town contributed significantly to the war effort by providing 248 privateers to prey on enemy commerce (Beirne 1984). It was during the revolution that Baltimore surpassed Annapolis in importance as a port.

In August 1785, John O'Donnell sailed up the Patapsco in the *Pallas*. The ship brought a cargo of satins, silks, tea, china, and nankeens from Canton, bringing the first of many cargoes from China (Beirne 1984). Upon arrival O'Donnell purchased 1,809 acres east of Fell's Point and named it Canton. The first frigate in the Federal Navy, the 38 gun *Constellation*, was built at Harris Creek in Canton and launched on September 7, 1797 (Beirne 1984; Chapelle 1949; Travers 2016).

By 1790, seven packets provided regular service between Baltimore to other East Coast ports, aided by the development of the Baltimore clipper (Figure 14). This style of ship was long, light, and had extremely raked (aft leaning) masts (Chapelle 1930). Their top hamper was sparse, freeboard low, and their stem and stern posts raked. They were popular with pirates, privateers, slavers, and those requiring a swift vessel with shallow draft.

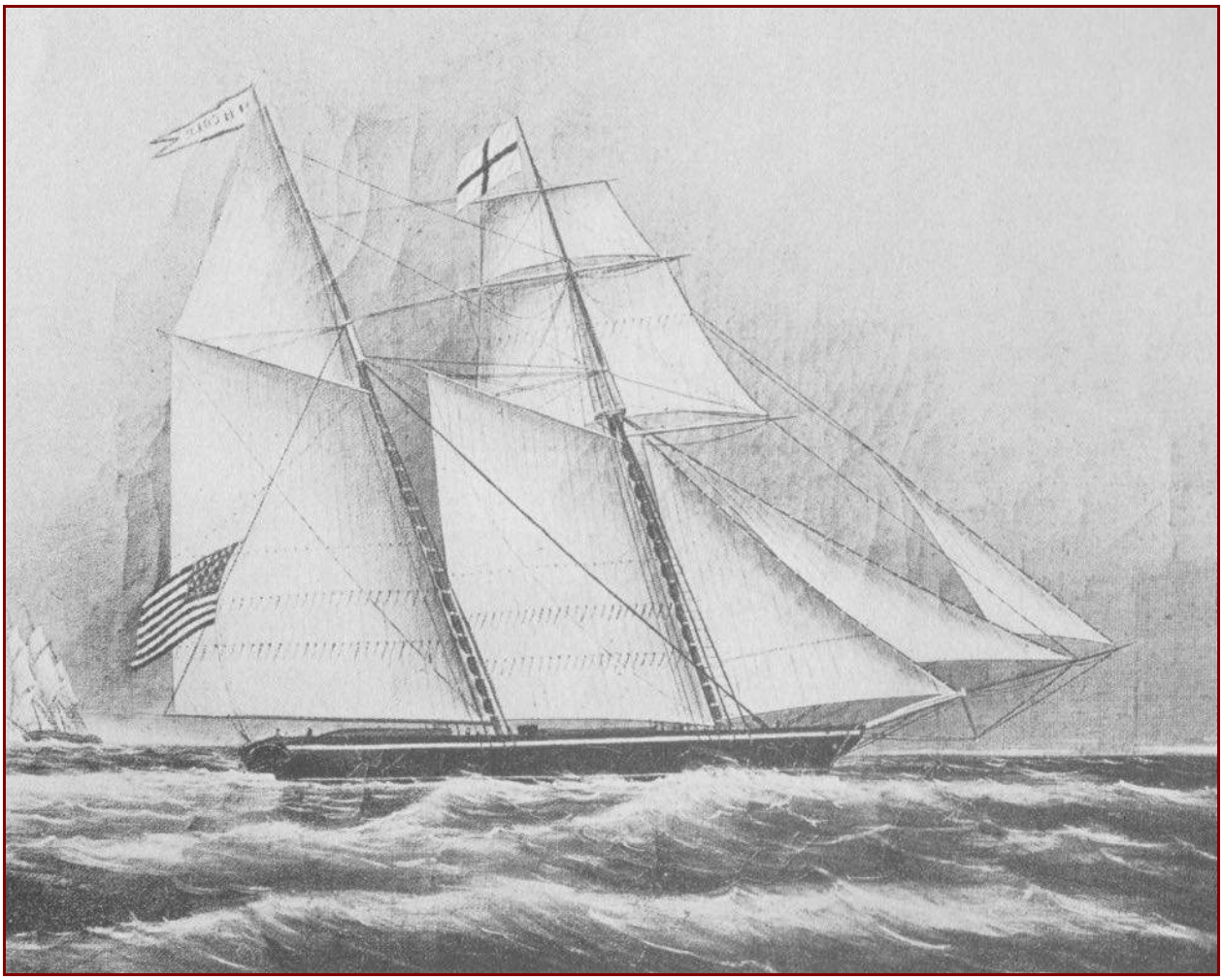

Figure 14. The Baltimore clipper *H.H. Cole*, 98 tons, built in 1843 (Chapelle 1930).

Prior to the 19th century, little development occurred in the area around the Middle Branch of the Patapsco River (Figure 15). The founders of Baltimore Town originally proposed to locate their settlement on the Middle Branch, but the plan was thwarted by the English immigrant John Moale, who arrived in 1719 (Keith 2005). Moale purchased land on the north shore of the Middle Branch with the intent of mining iron ore. He argued to defeat a bill of the colonial legislature that would have established Baltimore on his own lands. An English company, the Principio Furnace Company, was already mining Whetstone Point, and the Baltimore Company was digging ore nearby which provided material for their iron furnace which was located at the mouth of Gwynns Falls.

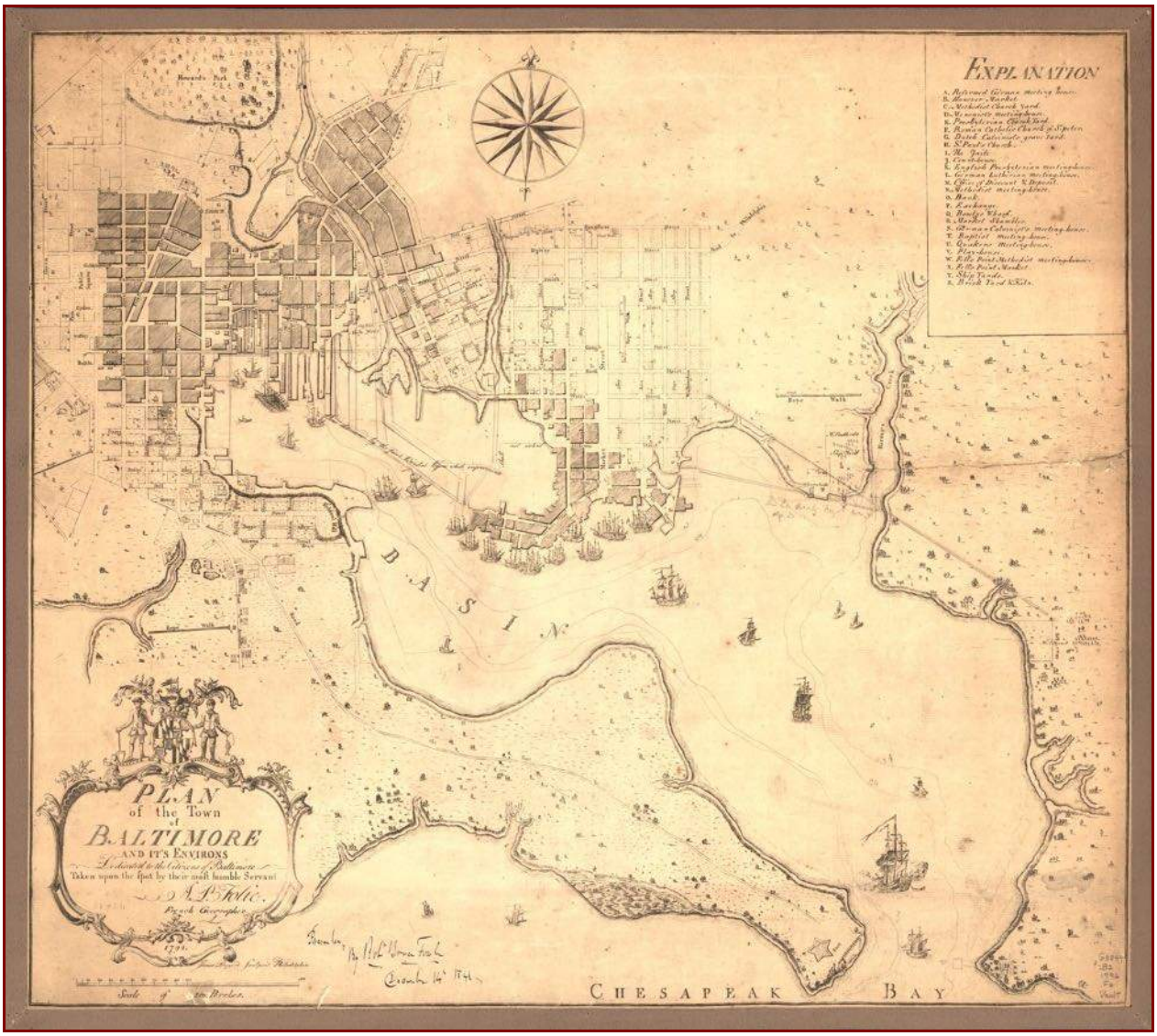

Figure 15. A plan of Baltimore dated 1792. Note the lack of development in the area around the Middle Branch to the south (courtesy Library of Congress).

On September 13, 1814, British naval forces began a bombardment of Fort McHenry after putting an invasion force ashore. The area around the Middle Branch played a key role in

this battle. Ships were purposefully sunk in the channel to hamper British progress. Anticipating that some of the British ships might slip through the line of sunken ships, General Sam Smith, a Revolutionary War veteran, established batteries at Fort Babcock and Fort Covington (Keith 2005). These preparations were effective when the militia manning the batteries repulsed a 1,200 man landing force off Fort Covington. The British soon withdrew from the area.

By the early 1800s, with the help of import firms and investment and banking concerns, Baltimore had grown from insignificance to commercial importance (Travers 2016). In 1813, the city built and operated the steamer, *Chesapeake*. The packet steamer industry continued to grow in the 1820s and 1830s as a fleet of steamers made regular runs between Baltimore and Norfolk and points further south. This growth lead to the founding in 1839 of the Baltimore Steam Packet Company, nicknamed the Old Bay Line (Travers 2016). Between 1831 and 1843, ten steam ship companies were formed in the city (Dilworth 2011).

This growth was not without cost. On April 14, 1842, the boilers of the newly built steamer *Medora* exploded as the ship backed away from Cully's Wharf on the south side of the harbor basin (Travers 2016). The explosion killed 26 people and 38 others were injured. The *Medora* quickly sank to her paddle guards. Eventually the *Medora* was raised, rebuilt and christened the *Herald*.

The establishment of the Baltimore and Ohio Railroad in 1827 ushered in new growth for the port of Baltimore (Travers 2016). Industrial and agricultural goods could be cheaply shipped from the interior to the port for export overseas. Grain and coal, two major exports, were delivered dockside in less time and at less expense. Additionally, bird guano, an important fertilizer, was imported from Peru beginning in 1832. In the 1850s, the port began importing phosphate lime, becoming the nation's leader in the chemical and fertilizer industries. At the same time, imports of coffee from Rio de Janeiro grew, making Baltimore the leading importer of the commodity in 1851 (Beirne 1984). In 1856, the first bridge over the Middle Branch of the Patapsco River was the wooden "long bridge" over Ferry Bar point and was an extension of Light Street which then continued into Anne Arundel County to the south (Keith 2005). By 1859, the area around the Middle Branch had become a hub of road, railroad, and shipping (Comer and Comer 2001).

An influx of immigrants beginning in the 1830s marked a period of significant growth in the population on Baltimore (Dilworth 2011). Arriving mainly from Germany and Ireland, these immigrants contributed to a population of over 80,000 people, making Baltimore the second largest city in the United States only behind New York. By 1850, the population continued to increase to almost 170,000, maintaining Baltimore's status as the second largest city.

In the Antebellum Period of Baltimore's history, the city became a powerhouse of both industrial and technological activity. It was an early user of gas lighting. Industry within the city embraced steam technology to power not only ships and railroads, but factories as well (Dilworth 2011). In 1844, Samuel Morse sent the first telegraph messages from Baltimore to Washington, revolutionizing the communications industry. In the same decade, Thomas Kensett, Jr. started a cannery near Federal Hill. Oysters and vegetables were cooked and preserved in tin-coated iron cans, making Baltimore the leader in the food-canning industry (Keith 2005).

In the 1820s, Ross Winans arrived in Baltimore to build cars and locomotives for the B&O railroad (Keith 2005). Prior to the beginning of the Civil War, he purchased land on both sides of the Middle Branch. The tract of land on the west side of the Middle Branch was known as Mount Winans. On the east side, Ross and his son Thomas owned a pier and shipyard on Ferry Bar point, which subsequently became part of Port Covington. In 1858, Thomas designed

and built a ship he believed would cross the Atlantic in four days. The ship was propelled solely by steam, a radical step at the time. With the need for wind eliminated, Ross reasoned the ship could be long, round, and thin to slice quickly through the water; the "cigar ship" was 180 feet in length with a 16-foot beam (Figure 16). On its first trial run in January 1859, the ship made 12 knots. The vessel was lengthened to 194 feet in February and 235 feet in October. The following month, the ship went to Norfolk for experimental sea trials. The ship was never a great success and ended its career tied up at its dock in Baltimore.

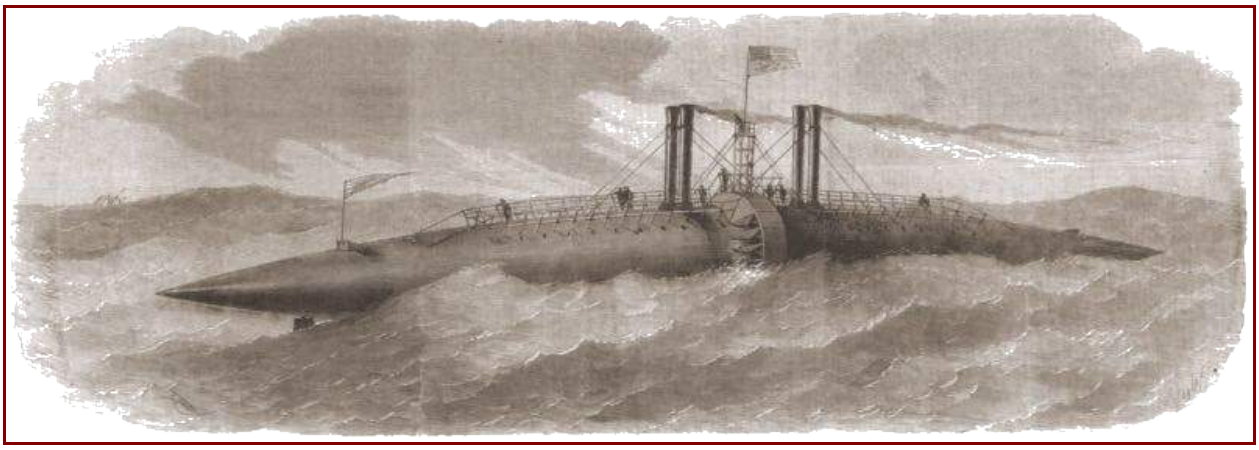

Figure 16. Winan's "cigar ship" from the *Illustrated London News*, 1858.

With the secession of the Southern States from the Union, Baltimore found itself at the center of the events early in the Civil War. The city provided a vital seaport and railroad link between the capital and the rest of the major northern cities. As it was only half-heartedly committed to the Union cause, General Benjamin Butler seized and occupied Federal Hill with his forces in May 1861, constructing batteries pointing over the harbor and center of the city, assuring Baltimore's allegiance to the Union (Travers 2016). As a result, commerce slowed to a trickle as industry was redirected to the war effort, reducing exports by 60 percent.

In 1865, with the surrender of the Confederate Army, Baltimore's businessmen began the job of reconstructing their shattered industries. Steamship services were soon restored to both Charleston, South Carolina, and Havana, Cuba (Travers 2016). After suffering through years of damage and destruction at the hands of Confederate raiders, the B&O railroad was rebuilt and renovated. To ensure the survival of Baltimore as an important port, the railroad also purchased and rebuilt three blockade runners to facilitate Baltimore's first post-war transatlantic service. For their first three years of service, these were the only United States flagged ships to carry on trade with Europe. While not a resounding success, this service lead to a business venture with the North German Lloyd Company, which provided a direct route between Baltimore and Bremen, Germany (Beirne 1984; Travers 2016). This service continued to land immigrants at the B&O terminal at Locust Point and continued until 1914 with the outbreak of the Great War.

The growth met a setback when, on July 24, 1868, a great flood hastened the end of the milling era on the Patapsco River (Keith 2005). The torrent destroyed the town of Avalon, killed 50 people, obliterated a mail train, and damaged or destroyed most of the mills, many of which were never rebuilt. By 1872, however, newly constructed grain elevators brought the wheat market from the Midwest to Baltimore for shipment to Europe. Four years later, the growth of

the port of Baltimore was so substantial that it ranked as the sixth largest in the world (Travers 2016).

By the late 1800s, a number of resorts had developed along the Middle Branch (Keith 2005). This resulted in the area becoming a gathering place for swimmers, fishermen, and pleasure boaters. Upstream from Ferry Bar the Baltimore Yacht Club was established. On the northeast shore were the Corinthian Yacht Club, the Ariel Rowing Club, the Arundel Boat Club, and the Baltimore Athletic Club. On the south side of the river, swimmers could use a sand beach which extended from the Maryland Drydock Company to Hanover Street.

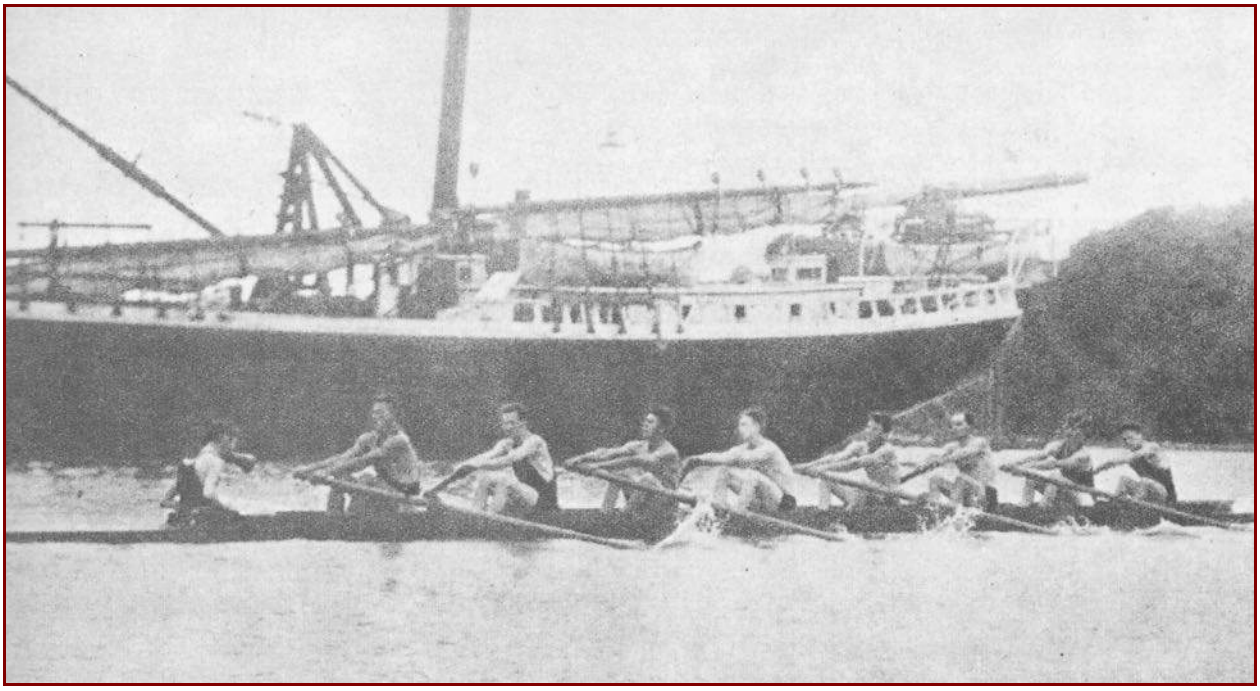

Figure 17. Members from Ariel club rowing past a schooner on the Middle Branch (Keith 2005).

The economic boom of the previous few decades subsided by the turn of the century (Comer and Comer 2001). In 1914, the wooden "long bridge" was replaced with the current, elaborate Hanover Street bridge (Figure 18) (Keith 2005). The next decade produced another effort to revive the trans-Atlantic passenger service with the founding of the Baltimore Steamship Line (Beirne 1984). The small, sleek vessels sailed weekly for Europe. However, the company failed to weather the economic depression of the 1930s. The steel mills in the area found it increasingly difficult to compete with their larger counterparts in the Midwest (Comer and Comer 2001). Where Baltimore was once at the forefront of technological innovation, newer advances elsewhere in the country made factories and equipment in Baltimore obsolete, and the importance of water transport was surpassed by trucking.

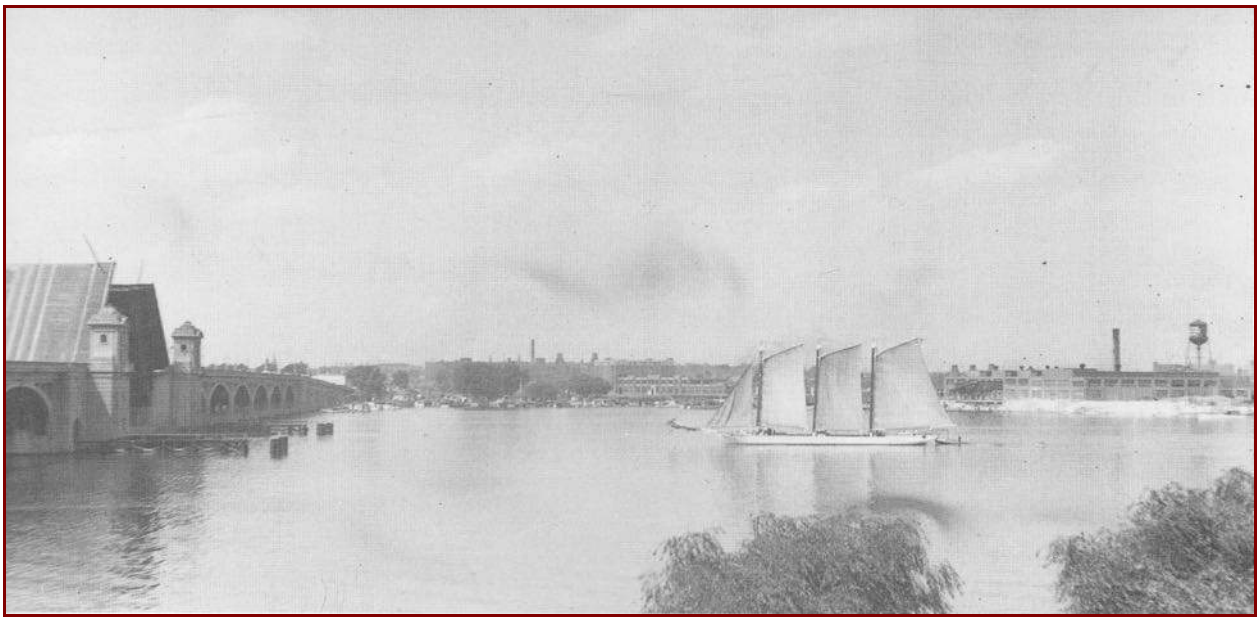

Figure 18. The three-masted schooner *William J. Sandford* sailing past the Hanover Street bridge on the Middle Branch, circa 1920 (Keith 2005).

On February 7, 1904, a fire in the Hurst building quickly exploded and spread flaming debris to nearby buildings (Travers 2016). The Hurst building stood approximately 1.4 miles north of the study area, at the current site of the Royal Farms Arena. Aided by strong winds, the fires quickly spread, encompassing 140 acres of downtown Baltimore. Firemen and equipment from Washington, Pennsylvania, Delaware, and New York fought the fires which left an estimated 1,500 buildings downtown a smoldering ruin. Before rebuilding could begin however, the rubble needed to be discarded. By some accounts, the debris was used to fill in parts of the Middle Branch, creating the two finger canals to the west of the current survey area (Comer and Comer 2001).

The construction of the Panama Canal in 1914 brought some commerce and another maritime disaster to Baltimore. On March 7, 1913, the British freighter *Alum Chine* exploded off of Hawkins Point while loading dynamite to be used in the construction of the canal, killing 33 men and wounding 60 (Travers 2016). Shockwaves resembled an earthquake in East Baltimore and were felt as far away as Philadelphia and Atlantic City.

On April 6, 1917, when the United States declared war on Germany and entered the Great War, Baltimore was ready and prepared to aid in the construction of ships for the war. The transport and storage of material for the war effort stimulated the growth of warehouses and piers serving the port. This, in turn, revealed the shortcomings of the port. In 1920, the Maryland legislature approved loans of up to $50 million for harbor improvement (Travers 2016). These included channel improvements in the Patapsco which increased the channel depth to 38 feet to accommodate larger vessels and dredging a new channel to shorten the distance between Baltimore and the Chesapeake and Delaware Canal. The investment in the port paid off over the next decade as 39 overseas steamship companies regularly steamed from the port, and a coastal and inter-coastal cargo and passenger vessels provided regular service.

On March 23, 1934, the hulk of the *Purnell T. White* arrived in Baltimore harbor (Burgess 1970). Built in 1917 at Sharptown, Maryland, the four-masted schooner made a

number of successful trips along the eastern seaboard, occasionally travelling as far as South America, the West Indies, and making Transatlantic voyages (Figure 19). In January, 1934, the *White* had been severely damaged on a voyage from South Carolina with a load of lumber and towed into Berkley, Virginia.

In Berkley, the *White*'s managing owner, R. B. White, surveyed the ship and dismissed any hope of the vessel sailing again (Burgess 1970). However, her cargo of lumber needed to be discharged, so she was towed to Baltimore and moored at Shrylock's lumber wharf. She was eventually sold to Weaver and Hubbard of Baltimore, taken to a ships' graveyard in the Middle Branch, and moored alongside a World War I steamer hull with the idea the ship would be converted into a barge. Landfill was dumped at the edge of the nearby B&O Railroad property and eventually encroached on the hull and by 1946, covered the ships poop deck. The decks eventually fell in and part of the bow was set afire. In 1957, the landfill was cleaned and the hold was pumped. Amazingly, 24 years after the ship was last caulked, the hull floated and was towed to Hawkins Point where the pumps keeping her afloat were stopped and she settled into the bottom. The exact location of the ship's graveyard in the Middle Branch is not documented and therefore could account for submerged cultural resources in the study area. The 1953 aerial photograph of the area shows what appears to be sunken ships hulls just south of the Spring Garden Swing Bridge along the eastern edge of the Swing Garden Channel (Figure 7).

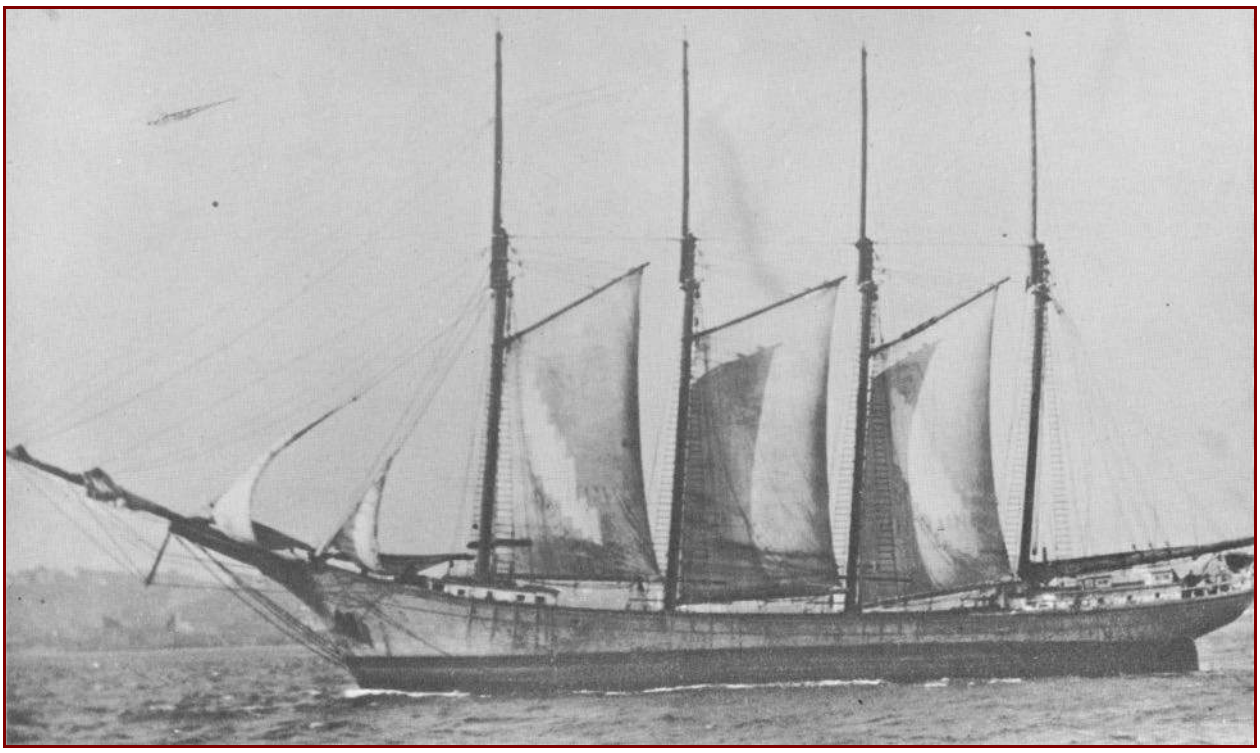

Figure 19. The *Purnell T. White* near New York harbor, circa 1930 (Burgess 1970).

When war again came to the United States in 1941, Baltimore was prepared to help with the war effort. While operating at peak efficiency, the port established production and performance records. The *Patrick Henry* was launched about five months after the keel laying

ceremony at Bethlehem Steel's Fairfield shipyard west of Curtis Bay, which is south and east of the project area (Figure 20) (Travers 2016). The *Patrick Henry* was the first Liberty ship, and the first of many built in Baltimore. As the war progressed, the shipyard operated around the clock and employed approximately 47,000 workers. Construction times were also decreased to an average of 30 days per ship. In 1944, the company shifted production to the larger, more practical Victory ships. In total, the shipyard built 384 Liberty ships, 94 Victory ships, and 30 LSTs.

By the end of the war the port was in need of refurbishment. A lack of communication and direction between owners, agencies, and industry lead to the establishment of the Port of Baltimore Commission. The Commission became the Maryland Port Authority in 1956 and subsequently the Maryland Port Administration in 1971 (Travers 2016). The Commission was charged with coordinating maritime efforts between state and local governments, and private enterprise, and maintaining the port as a world leader in maritime commerce. Baltimore continues to be a contender in the major ports of the United States, with port facilities at Locust Point, Canton, and Port Covington on the Middle Branch. Exports and imports include chemicals, construction materials, machinery, sugar, textiles, heavy equipment, coal, and grain.

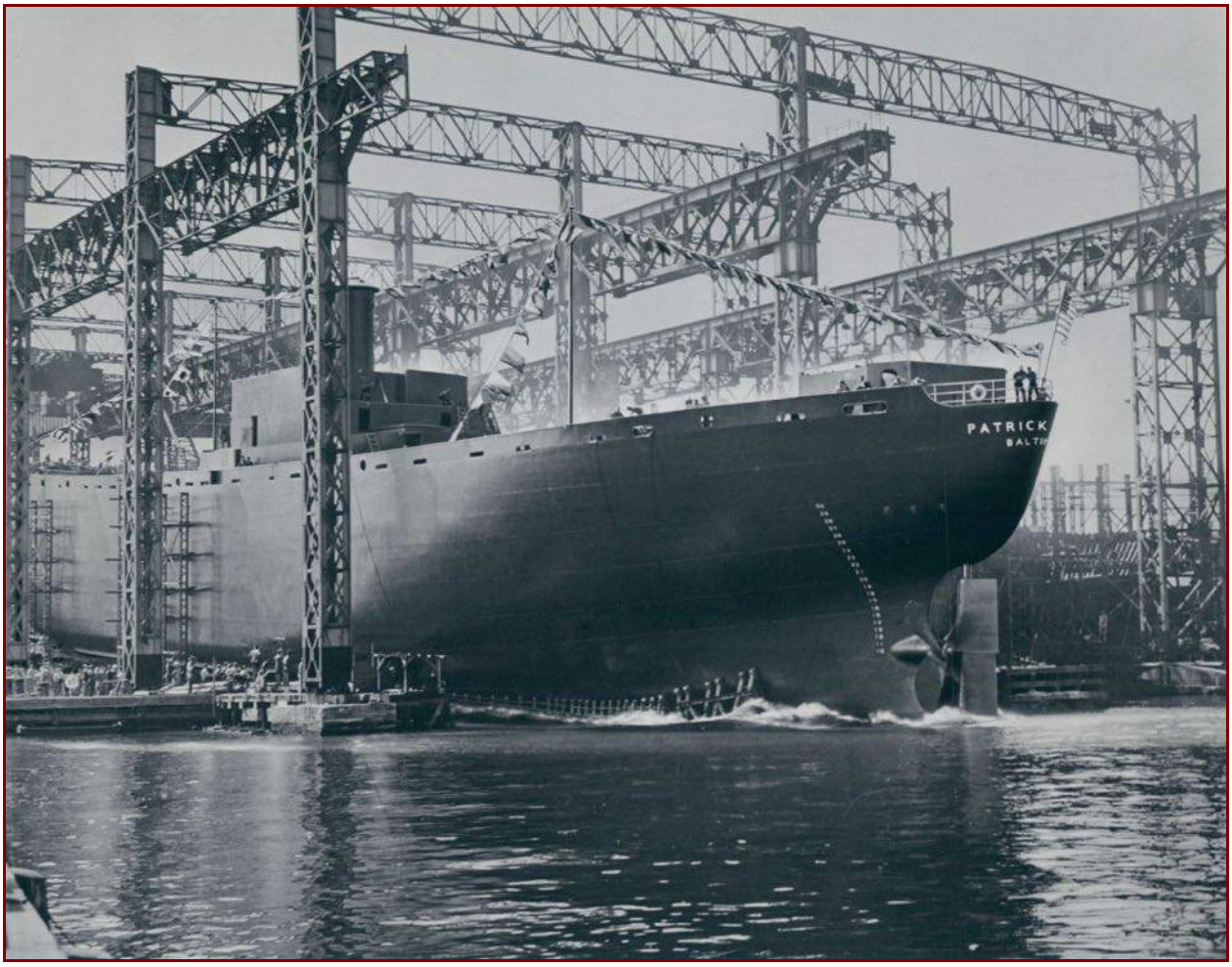

Figure 20. The *Patrick Henry*, the first Liberty Ship, slipping into the water at the Bethlehem Steel's Fairfield shipyard (Baltimore Sun n.d.).

Critical Examination

A search of the Maryland Historical Trust's site files failed to identify any archaeological sites within the project area. However, the Spring Garden Swing Bridge, architectural inventory number B-3668, is located immediately south of the project area. The bridge, fabricated by the Pennsylvania Steel Company and built by the Western Maryland Tidewater Railroad Company in 1904, is currently in a dilapidated condition. Magnetic anomalies in the survey area could potentially be associated with both bridge construction activities and disarticulated structural elements.

There are the remains of three vessels that are charted by NOAA north of the area. These vessel remains are also visible in Google Earth. The Automated Wreck and Obstruction Information System (AWOIS) does not list any details for these vessels. The historic aerial photographs of the area show that a total of five vessel hulls appear to have been abandoned at those locations between 1927 and 1948 (Figure 21). No additional information was found identifying or describing those vessels.

Description of Field Work and Survey Findings

Geomar Research conducted 46 survey transects with a maximum separation of 50 feet (15m) apart with the magnetic gradiometer. Only one survey line was completed with side scan sonar, due to water depth. The overall survey area was broken into four distinct sections: west, center, east, and north. For the west and east areas the lines were run east-west, while in the center and northern areas the lines were run roughly north-south (Figure 22). A section of the area delineated by Straughan Environmental could not be surveyed because the pilings of the existing I95 / I395 interchange are in the way. This area, however, was visually surveyed for indications of submerged cultural resources.

The remote sensing survey conducted by Geomar Research identified eighty-nine magnetic anomalies in the overall survey area and a variety of sonar contacts. While all of those anomalies are consistent with modern debris, there is one area where the density of these anomalies is significantly greater than the rest of the area surveyed. While that area most likely has a higher density of anomalies simply due to its proximity to the historic channel, additional investigation of the that area is recommended.

Side-scan Sonar Data

During the survey, no side-scan sonar anomalies were detected that are consistent with submerged cultural resources. Forty-six tires and several small linear and point contacts were detected, but they were all consistent with general debris (Figure 23). The only feature detected of significance was the existing Spring Garden Swing Bridge and disarticulated timbers related to it.

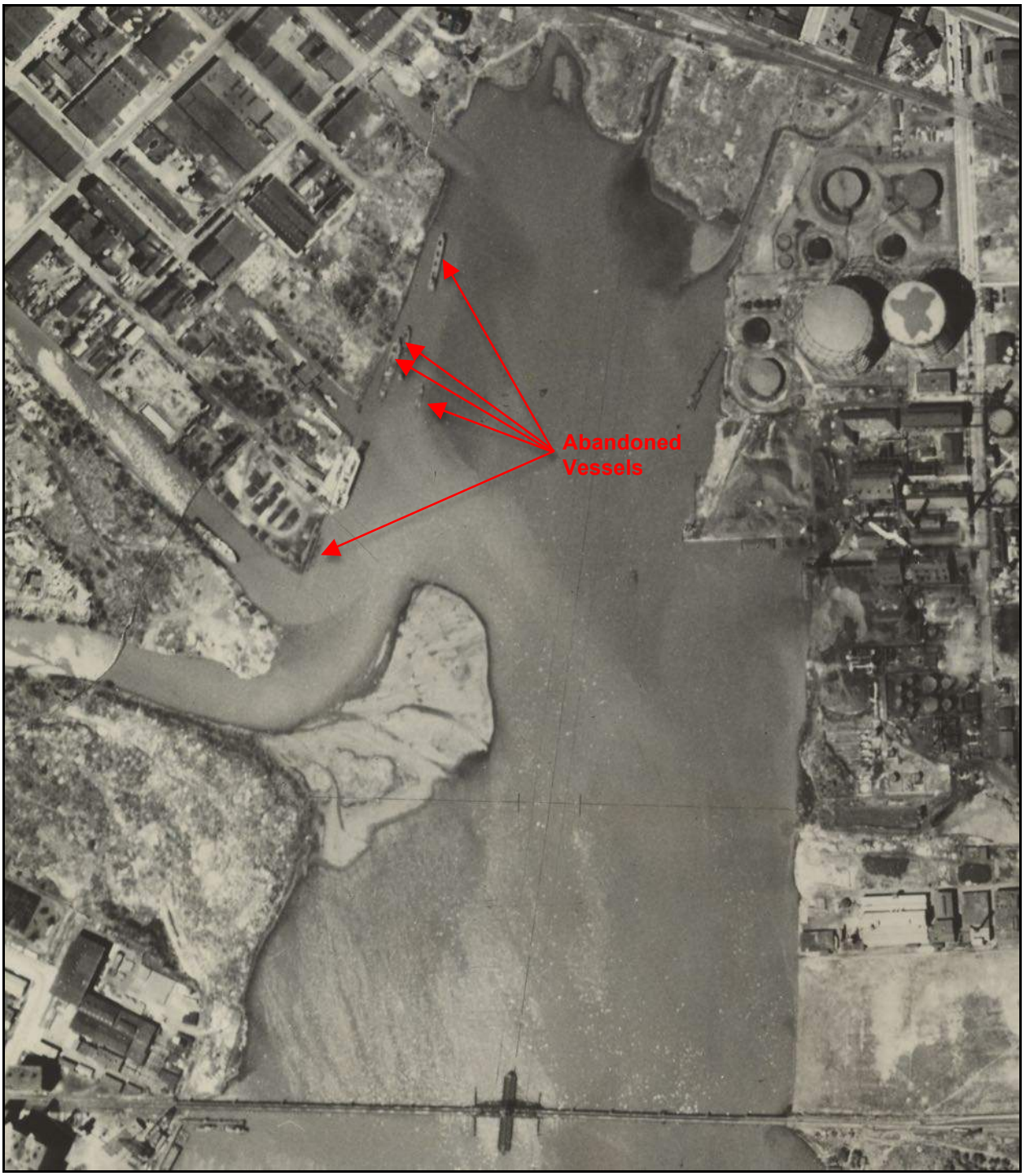

Figure 21. 1948 Aerial Photograph, Aero Services Corp. for the District Engineer, Baltimore, MD.

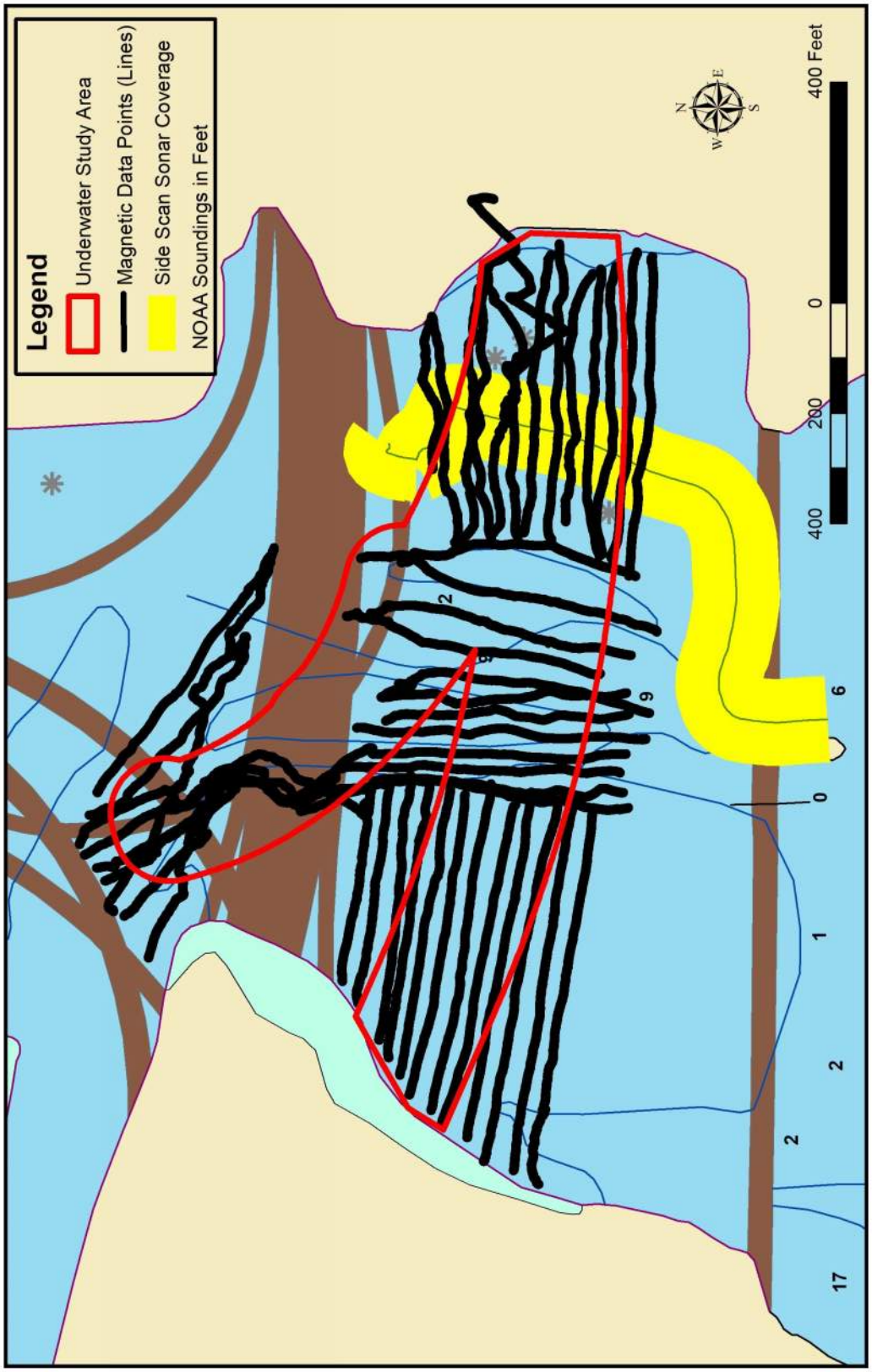

Figure 22. Remote Sensing Data Sensor Coverage

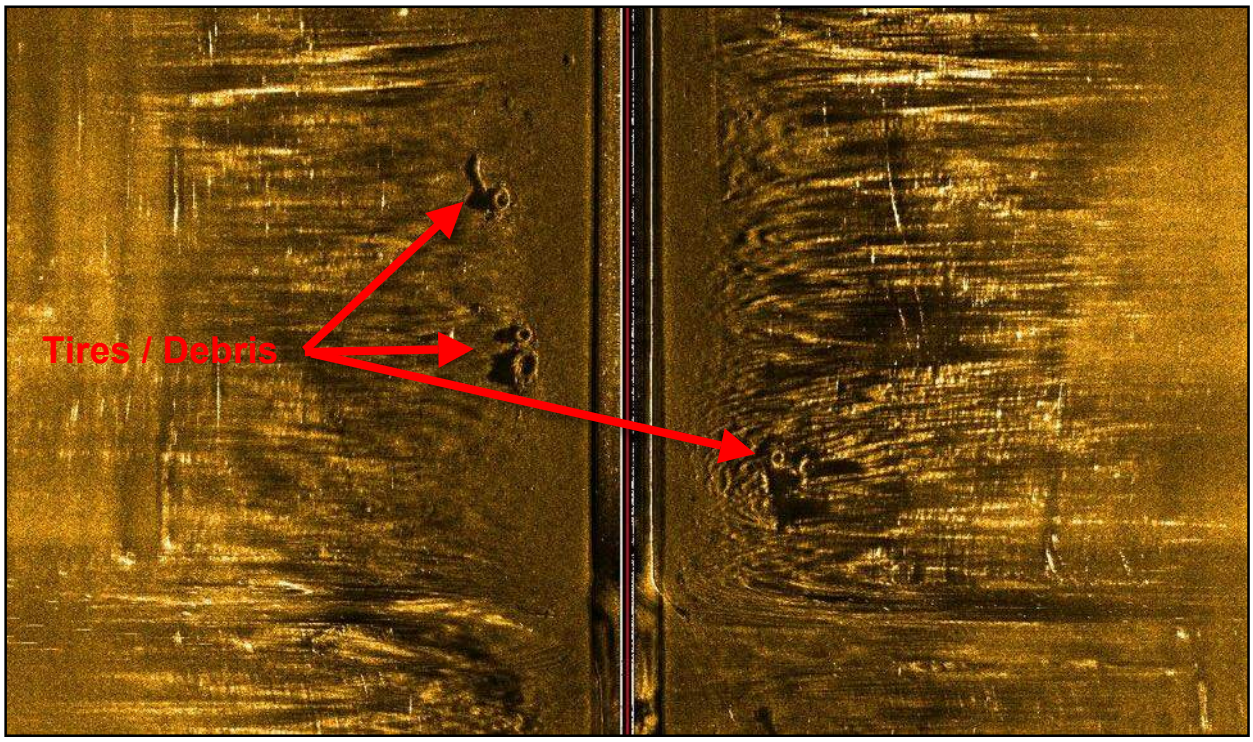

Figure 23. 1600 kHz Side Scan Sonar Image of Tires and Debris

Sub-Bottom Profiler Data

Sub-bottom profiler data was not collected in the area due to water depths shallower than the minimum necessary to collect data.

Magnetometer Data

Magnetic gradiometer data was collected along 46 survey transects in four survey sections underneath and south of the I95 / I395 interchange covering the areas delineated by Straughan Environmental and MHT (Figure 22). The only exception is where there are existing bridge piers physically in the way. The magnetic data collected underneath and in the vicinity of the bridge piers is of no real scientific value as the extremely large magnetic signatures of these structures distorts the magnetic fields around them as can be clearly seen on the magnetic contour map of the area (Figure 24). These distortions make the detection of smaller magnetic anomalies suggestive of submerged cultural resource sites nearly impossible even with a gradiometer which is used specifically to eliminate local background interference. In addition, GPS data collected with the magnetic data underneath of the bridge is of poor quality due to the limited view of the sky beneath the bridge and multipath of the incoming GPS signals.

The survey detected 89 magnetic anomalies within the area surveyed (Table 1, Figure 25). The magnetic contour map shows the relative strength and size of the larger anomalies and their location in relation to the existing interchange, shoreline, and the planned locations of piers (Figure 24). The table provides details of each of the anomalies identified including target number, location, magnetic intensity, duration in feet, and magnetic signature characteristics.

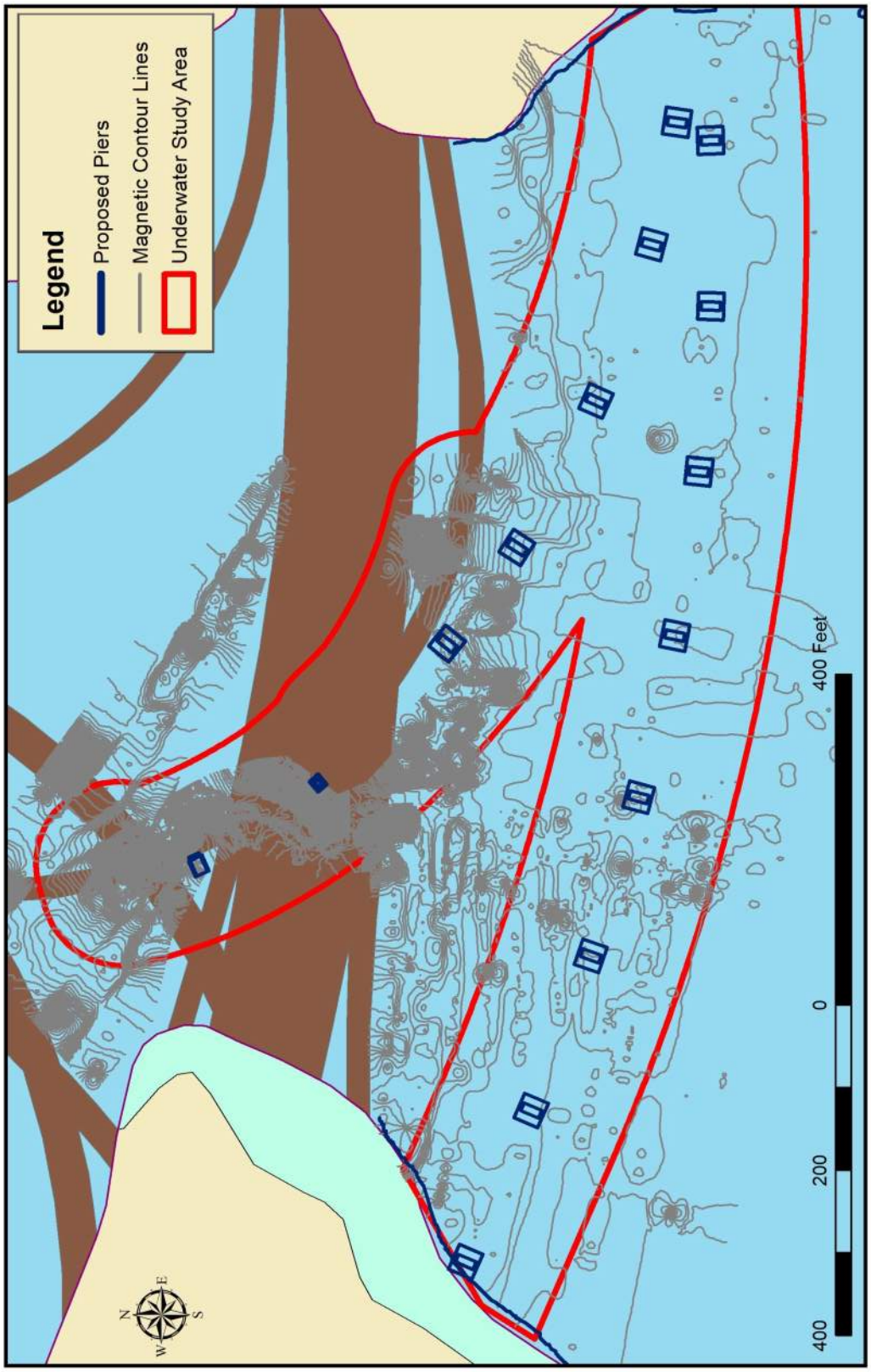

Figure 24. Magnetic Contour Map.

Target	Characteristics	Intensity	Duration(ft)	X	Y	Assessment
1	Negative Monopolar	55	23	1418720.4	582728.2	Single, small, isolated object.
2	Dipolar	427	20	1418749.5	582896.2	Single, medium, isolated object.
3	Negative Monopolar	47	10	1418758.4	582939.0	Single, small, isolated object.
4	Positive Monopolar	51	10	1418761.4	582952.2	Single, small, isolated object.
5	Positive Monopolar	30	16	1418763.7	582998.2	Single, small, isolated object.
6	Negative Monopolar	23	3	1418758.2	582952.2	Single, small, isolated object.
7	Positive Monopolar	89	20	1418752.8	582899.5	Single, small, isolated object.
8	Positive Monopolar	10	10	1418741.3	582823.8	Single, small, isolated object.
9	Positive Monopolar	306	20	1418736.8	582728.5	Single, medium, isolated object.
10	Dipolar	92	26	1418735.2	582653.0	Single, small, isolated object.
11	Multicomponent	39	30	1418779.8	582716.3	Group of small isolated objects.
12	Multicomponent	368	43	1418774.2	582821.2	Group of medium isolated objects
13	Dipolar	18	26	1418836.3	582681.5	Single, small, isolated object.
14	Dipolar	14	33	1418835.4	582724.1	Single, small, isolated object.
15	Multicomponent	18	39	1418850.1	582803.2	Group of very small isolated objects.
16	Positive Monopolar	161	20	1418849.0	582852.4	Single, small, isolated object.
17	Positive Monopolar	47	16	1418842.0	582872.0	Single, small, isolated object.
18	Positive Monopolar	13	23	1418877.5	582899.0	Single, small, isolated object.
19	Dipolar	59	26	1418882.6	582813.8	Single, small, isolated object.
20	Negative Monopolar	25	3	1418948.2	582966.2	Single, small, isolated object.
21	Negative Monopolar	40	13	1418952.8	582907.2	Single, small, isolated object.
22	Negative Monopolar	63	7	1418952.1	582641.4	Single, small, isolated object.
23	Negative Monopolar	51	20	1419045.7	582860.0	Single, small, isolated object.
24	Positive Monopolar	52	16	1419069.3	582683.3	Single, small, isolated object.
25	Negative Monopolar	489	13	1418671.9	582992.9	Medium, isolated object.
26	Positive Monopolar	295	16	1418567.2	582980.8	Medium, isolated object.
27	Negative Monopolar	244	13	1418662.9	582953.3	Medium, isolated object.
28	Dipolar	1589	20	1418637.9	582900.3	Large, isolated object, short intensity.
29	Negative Monopolar	238	7	1418701.0	582865.6	Medium, isolated object.
30	Positive Monopolar	436	13	1418670.4	582763.2	Medium, isolated object.
31	Positive Monopolar	73	33	1419241.7	582605.1	Single, small, isolated object.
32	Dipolar	110	59	1419691.2	582611.7	Medium, isolated object.
33	Positive Monopolar	80	49	1419568.0	582691.1	Single, small, isolated object.
34	Positive Monopolar	72	23	1419324.4	582725.1	Single, small, isolated object.
35	Negative Monopolar	46	39	1419587.1	582717.7	Single, small, isolated object.
36	Dipolar	123	30	1419718.5	582714.1	Medium, isolated object.
37	Negative Monopolar	154	33	1419214.9	582778.4	Medium, isolated object.
38	Negative Monopolar	90	30	1419322.7	582803.8	Single, small, isolated object.
39	Negative Monopolar	21	20	1419281.8	582573.2	Single, small, isolated object.
40	Positive Monopolar	8	16	1419461.9	582590.3	Single, small, isolated object.

Table 1. Magnetic Anomalies (Pink Highlights are Large Anomalies [>1000 Gammas] and Yellow Highlights are Multi-component Anomalies)

Target	Characteristics	Intensity	Duration(ft)	X	Y	Assessment
41	Positive Monopolar	12	16	1419599.9	582586.7	Single, small, isolated object.
42	Negative Monopolar	14	16	1419631.9	582623.5	Single, small, isolated object.
43	Negative Monopolar	8	16	1419375.9	582621.2	Single, small, isolated object.
44	Dipolar	15	23	1419267.1	582645.0	Single, small, isolated object.
45	Positive Monopolar	10	10	1419224.3	582650.7	Single, small, isolated object.
46	Negative Monopolar	10	20	1419256.8	582664.5	Single, small, isolated object.
47	Negative Monopolar	30	20	1419516.3	582653.8	Single, small, isolated object.
48	Multicomponent	22	36	1419660.5	582666.8	Group of small isolated objects.
49	Dipolar	8	10	1419318.5	582695.4	Single, small, isolated object.
50	Negative Monopolar	15	3	1419265.8	582704.1	Single, small, isolated object.
51	Multicomponent	37	7	1419255.9	582703.9	Group of small isolated objects.
52	Dipolar	60	39	1419321.1	582725.0	Single, small, isolated object.
53	Dipolar	22	79	1419580.6	582717.6	Single, small, isolated object.
54	Negative Monopolar	5	7	1419669.4	582706.4	Single, small, isolated object.
55	Dipolar	77	131	1419813.8	582857.3	Single, small, isolated object.
56	Negative Monopolar	13	16	1419217.1	582827.7	Single, small, isolated object.
57	Positive Monopolar	12	26	1419220.0	582844.2	Single, small, isolated object.
58	Dipolar	24	26	1419272.3	582855.2	Single, small, isolated object.
59	Dipolar	79	36	1419442.7	582868.8	Single, small, isolated object.
60	Negative Monopolar	74	43	1419271.9	582874.9	Single, small, isolated object.
61	Multicomponent	65	49	1419218.8	582900.0	Group of small isolated objects.
62	Negative Monopolar	90	16	1418873.6	583371.5	Single, small, isolated object.
63	Positive Monopolar	85	13	1418863.5	583384.4	Single, small, isolated object.
64	Negative Monopolar	153	30	1418932.9	583363.0	Medium, isolated object.
65	Negative Monopolar	74	33	1418646.4	582660.9	Single, small, isolated object.
66	Multicomponent	84	56	1418063.2	582766.2	Group of small isolated objects.
67	Dipolar	327	36	1418270.0	582764.2	Medium, isolated object.
68	Negative Monopolar	47	13	1418421.5	582741.2	Single, small, isolated object.
69	Negative Monopolar	93	23	1418671.8	582700.8	Single, small, isolated object.
70	Multicomponent	456	49	1418681.1	582727.3	Group of medium isolated objects.
71	Dipolar	39	30	1418549.1	582757.2	Single, small, isolated object.
72	Positive Monopolar	47	26	1418348.0	582798.7	Single, small, isolated object.
73	Dipolar	156	39	1418699.8	582770.4	Medium, isolated object.
74	Negative Monopolar	50	16	1418692.5	582803.0	Single, small, isolated object.
75	Dipolar	91	23	1418659.6	582808.9	Single, small, isolated object.
76	Negative Monopolar	38	33	1418395.1	582894.9	Single, small, isolated object.
77	Negative Monopolar	22	7	1418523.4	582881.3	Single, small, isolated object.
78	Negative Monopolar	39	16	1418543.2	582878.5	Single, small, isolated object.
79	Multicomponent	111	39	1418622.2	582867.1	Group of medium isolated objects.
80	Negative Monopolar	32	23	1418675.0	582851.9	Single, small, isolated object.

Table 1. Magnetic Anomalies (Cont.) (Pink Highlights are Large Anomalies [>1000 Gammas] and Yellow Highlights are Multi-component Anomalies)

Target	Characteristics	Intensity	Duration(ft)	X	Y	Assessment
81	Positive Monopolar	76	16	1418707.0	582888.7	Single, small, isolated object.
82	Multicomponent	614	36	1418628.0	582900.1	Group of medium isolated objects.
83	Positive Monopolar	64	13	1418699.8	582921.3	Single, small, isolated object.
84	Multicomponent	272	30	1418672.6	582963.4	Group of medium isolated objects.
85	Multicomponent	209	39	1418573.7	582980.9	Group of medium isolated objects.
86	Negative Monopolar	29	16	1418366.3	583012.4	Single, small, isolated object.
87	Multicomponent	361	72	1418313.2	583037.5	Group of medium isolated objects.
88	Positive Monopolar	100	30	1418444.9	583017.5	Medium, isolated object.
89	Positive Monopolar	42	23	1418668.5	582999.4	Single, small, isolated object.

Table 1. Magnetic Anomalies (Cont.) (Pink Highlights are Large Anomalies [>1000 Gammas] and Yellow Highlights are Multi-component Anomalies)

Analysis of the magnetic gradiometer data suggests that the area has likely been used as a dump site for a long period of time. This is based upon the fairly even distribution of magnetic anomalies throughout the area. The magnetic anomalies are consistent with a variety of small to medium sized objects that have been scattered throughout the area. The large number of discreet objects the gradiometer was able to detect is due in part to the sensors' relatively proximity to the ground surface. In this case, the sensors were approximately three and six feet above the ground/bottom surface respectively. Since a magnetometer is a proximity sensor, the closer you are to a ferrous object the greater the distortion of the earth's magnetic field, hence larger intensity readings. To properly interpret the size of the objects detected, proximity is a critical value to estimate (Briener 1973). Analysis of the data determined that majority of the anomalies are exaggerated in magnitude and compressed in duration. The fact that most of the anomalies have short durations is a strong indication that the anomalies are magnified due to the proximity of the sensor to the source of the magnetic anomaly. Visual survey of the areas confirmed that there is a lot of ferrous junk that has been deposited in the areas such as shopping carts and concrete chunks with steel pipe and rebar.

Two areas, however, stand out on the maps of the magnetic data. Those areas are along the west and east sides of the historic channel and both are oriented north-south. The area to the west measures approximately 300' x 400' while the area to the east measures approximately 150' x 350'. Those areas have significantly higher densities of magnetic anomalies. Visual survey of those areas reveals a variety of modern debris and junk on the surface and no indications of historic resources. Nonetheless, magnetometer data and visual inspection of the areas cannot rule out the possibility that the density of magnetic signatures in these areas is not due to buried submerged cultural resources, such as abandoned ships hulls or other articulated features. The areas with higher densities of magnetic anomalies have been outlined on the magnetic anomalies map (Figure 26).

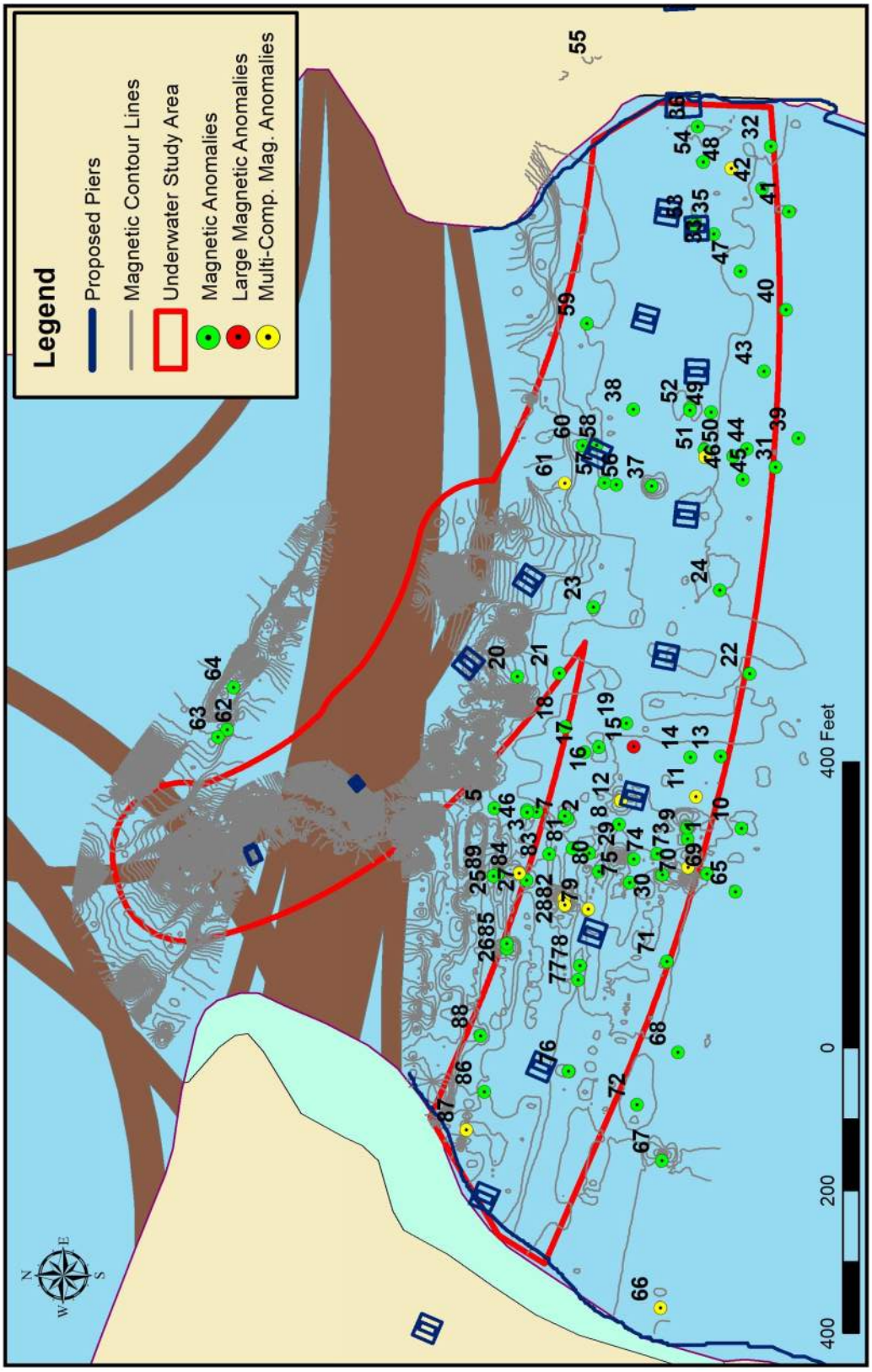

Figure 25. Magnetic Contour Map with Magnetic Anomalies.

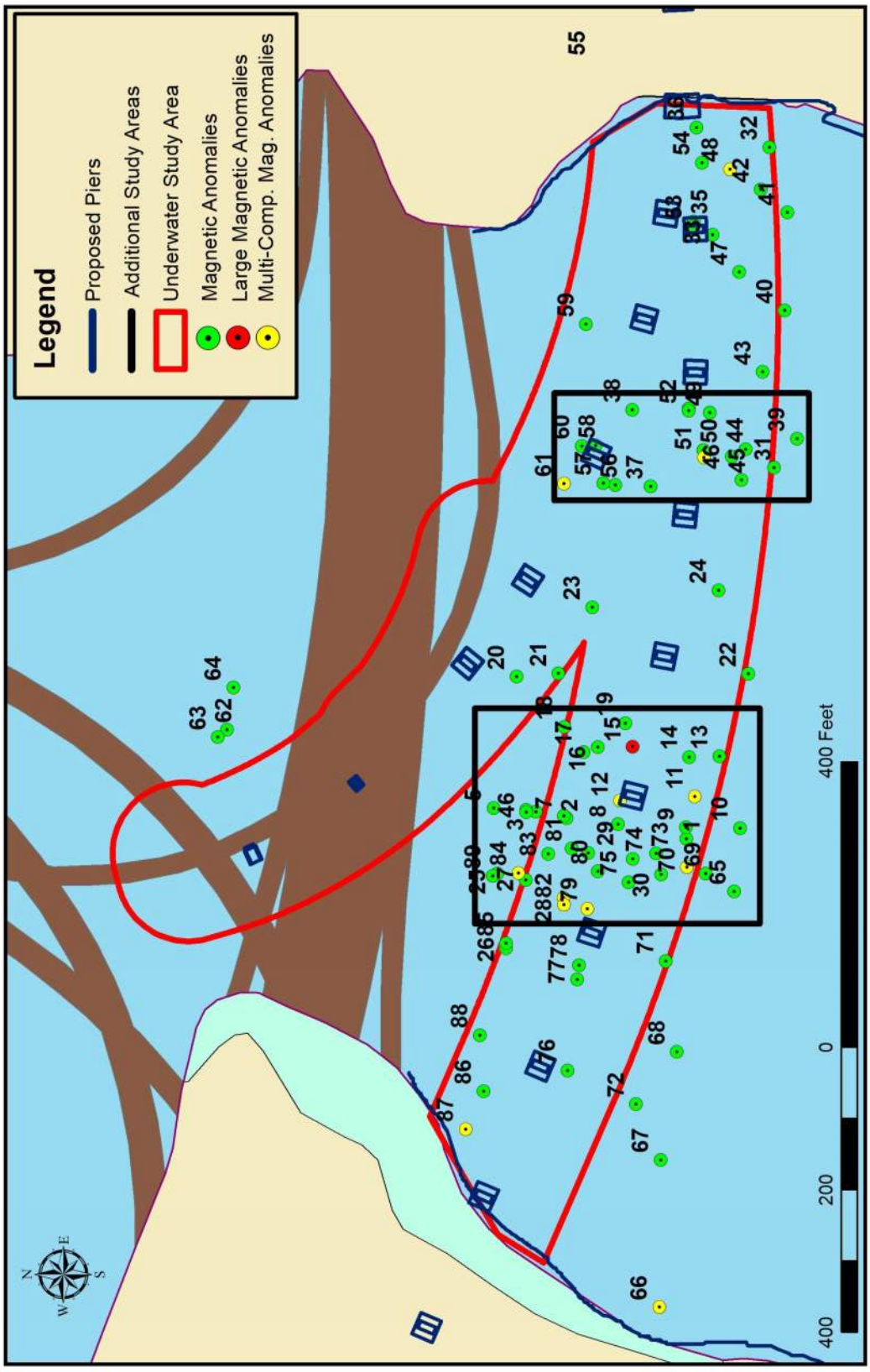

Figure 26. Magnetic Targets with Areas for Additional Investigation.

Summary and Recommendations

The Phase IA, underwater remote sensing investigation conducted by Geomar Research, LLC did not locate any evidence in the historic record or through visual and acoustic observations of submerged cultural resources near the proposed construction areas. The remote sensing survey, however, did identify 89 magnetic anomalies in the vicinity of the proposed construction site. Those anomalies, for the most part, are consistent with scattered junk that has likely been deposited in the area over time. Analysis of the magnetic data has identified two areas that have higher densities of magnetic anomalies in comparison to the rest of the area. Those areas correlate closely to the west and east sides of the historic channel (Figures 8 & 26). It is likely that for some unknown reason, ferrous materials have been deposited in those areas possibly due to their proximity to that historic channel. Additional Phase I investigations, are recommended in those areas to verify that vessel remains or other submerged cultural resource features / sites are not buried beneath the sediments in those locations. Geomar Research, LLC recommends hydraulic jet probing to determine if there are articulated structures in the vicinity of the magnetic anomalies in the two areas where there are higher densities of magnetic anomalies. If no articulated structures are identified during an additional investigation, then Geomar Research, LLC recommends monitoring during excavation or dredging activities to insure that the identified magnetic anomalies do not represent disarticulated submerged cultural resources.

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Appendix A

Professional Qualifications

of the

Principal Investigator

Jeffrey D. Morris
3235 Southern Pine Lane
Port Republic, Maryland 20676
(410) 586-8715 Home
(410) 610-2655 Mobile
(410) 495-7862 Office
jeff@azulmarresearch.com

EDUCATION:

Master of Arts Degree from East Carolina University's Program in Maritime History and Nautical Archaeology, July 2000. Master's thesis entitled "A Historic and Archaeological Investigation of the Chickahominy Shipyard Archaeological Site (44JC50)." On file East Carolina University, also available through University Microfilms (UMI).

Bachelor of Arts Degree from Towson State University, Towson, Maryland, May 1992. Majored in American History with a concentration on Maritime History. Original course of study was engineering.

Graduated from Atholton High School, Columbia, Maryland, May 1988.

CURRENT EMPLOYMENT:

Director/Owner/Senior Scientist: June 2003 to present, **Azulmar Research**, **LLC** Port Republic, MD. Azulmar Research provides marine remote sensing services, which include project planning and management, data collection and analysis, and systems development consulting services to government and commercial clients. Clients include **Science Applications International Corporation (SAIC)**, **Oceaneering International**, the **US Navy**, **Nauticos, LLC**, and the **Waitt Institute for Discovery (WID)**.

Director/Owner/Senior Scientist: June 2003 to present, **Geomar Research**, **LLC** Port Republic, MD. Geomar Research provides underwater archaeological services to government, commercial, and non-profit clients. Clients include the **Maryland Historic Trust, Great Lakes Exploration, LLC, Syenca Research,** The **Kahlid Bin Sultan Living Oceans Foundation,** and the **Maritime Archaeological and Historical Society.**

PREVIOUS EMPLOYMENT:

Senior Scientist: November 2002 to June 2003, **Nauticos Corporation/Oceaneering International**, Hanover, MD. Duties included data collection, analysis, and fusion; project management; systems development and testing; report preparation; research; new project development; new business development and marketing; and briefing development and presentation. In April 2003, Nauticos Corporation was purchased by Oceaneering International.

Senior Analyst: March 1997 to November 2002, **Naval Personnel Support Activity**, Washington, D.C. Duties included data collection, analysis, and fusion; project management;

systems development and testing; report preparation; research; and briefing preparation and presentation.

Consultant: March 1997 to 2002. Port Republic, Maryland. Contract archaeological and remote sensing data collection and analysis services for several organizations including **Nauticos Corporation**, **East Carolina University**, and the **Maryland Historic Trust**. Develop underwater historic research projects; sonar, optical, and navigation data analysis and fusion; project methodology development; archaeological standards development; at sea operations management and data collection; briefing development and presentation, as well as proposal and grant application development and writing.

Maritime Historian, Archaeologist, and Baltimore Office Manager: July 1994 to March 1997. **Tidewater Atlantic Research, Inc**., Washington, North Carolina. Directed and participated in 28 underwater and terrestrial historic resource projects. Duties included project management; methodology development; remote sensing survey management; remote sensing equipment operation and maintenance (acoustic, magnetic, and optical); data analysis and fusion; diving operations management; scientific diving; archaeological mapping; historic research; report preparation; proposal preparation; office management.

Archaeological Field Technician: Summers 1989 to 1991. **Greenhorne & O'Mara Inc**., Greenbelt, Maryland.

Survey Crew Rodman: Summers 1989 to 1990. **Greenhorn & O'Mara Inc**., Rockville, Maryland.

INTERNSHIPS:

Archaeologist and Maritime Historian: January to June 1992. **Maryland Historic Trust**, Interned under State Underwater Archaeologists Paul Hundley and Bruce Thompson. Duties included equipment maintenance, archival research, section 106 permit review, and fieldwork.

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APPENDIX C

I-95 Access Improvements Cultural Resources Assessment of Effects Technical Report

APPENDIX C

Determinations of Eligibility

MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes ___ no ___

Property Name: Baltimore and Ohio Rail Bridge over Key Highway Inventory Number: B-5311

Address: Rail Bridge over Key Highway Historic district: ___ yes X no

City: Baltimore Zip Code: 21230 County: Baltimore City

USGS Quadrangle(s): Baltimore East

Property Owner: CSX Transportation, Inc. Tax Department Tax Account ID Number: 5000PSC0010

Tax Map Parcel Number(s): 0000 Tax Map Number: 0050

Project: I-95 Access Improvements - Caton Ave to Ft Mc Henry Tunnel Agency: Maryland Transportation Authority

Agency Prepared By: Straughan Environmental, Inc.

Preparer's Name: Sarah Michailof Date Prepared: 11/6/2017

Documentation is presented in: I-95 Access Improvements Cultural Resources Evaluation and Assessment of Effects Technical Report

Preparer's Eligibility Recommendation: ___ Eligibility recommended X Eligibility not recommended

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G

Complete if the property is a contributing or non-contributing resource to a NR district/property:

Name of the District/Property: ___

Inventory Number: ___ Eligible: ___ yes Listed: ___ yes

Site visit by MHT Staff ___ yes X no Name: ___ Date: ___

Description of Property and Justification: *(Please attach map and photo)*

The railroad bridge that crosses the 1600 block of Key Highway was constructed circa 1930 by the Baltimore and Ohio Railroad (Haas 2013). It is located on Locust Point in South Baltimore, east of the CSX Riverside Yard (MIHP Number B-5267), north of the Interstate 95 overpass, and south and west of a recent development with apartments and retail stores called McHenry Row. The bridge connects the CSX Riverside Yard to the west with the North Locust Point Marine Terminal to the north and east, and accommodates four sets of railroad tracks. The bridge is an example of a reinforced concrete cast-in-place slab structure. This bridge type became popular in the 1910s and was common by the 1930s and 1940s (Parsons Brinckerhoff 2005).

The bridge consists of a 90-foot long continuous reinforced concrete span and a superstructure supported by three steel bents, each of which contains five steel beam columns. The bridge is supported by non-original concrete abutments that were likely constructed within the last few decades. Concrete parapets support a simple steel railing.

Property History

During the 1920s, the Baltimore and Ohio Railroad invested heavily in improvements that upgraded bridges to carry heavier

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ___ **Eligibility not recommended** ___

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

Reviewer, Office of Preservation Services **Date**

Reviewer, National Register Program **Date**

locomotives and eliminate at-grade crossings with roads, which were carrying increasing numbers of automobiles (Stover 1987). During the late nineteenth and early twentieth century, the Locust Point Branch Line generally followed the route of Wells Street in Riverside and Locust Point (Chesapeake Aircraft Co. 1927). In Riverside, in particular, there were multiple at-grade crossings with north-south oriented streets located west of Riverside Park. Once land reclamation was complete in the vicinity of the South Locust Point Marine Terminal, the Baltimore and Ohio Railroad shifted a portion of its rail line along Wells Street approximately 450 feet further south (Aero Services Corporation 1949). The shift eliminated most conflicts associated with at-grade road crossings. The Baltimore and Ohio Railroad constructed the bridge over Key Highway to maintain a connection between the Riverside Rail Yard to the Locust Point Marine Terminal along the new rail alignment.

Few modifications to the bridge have been made. At some point in the 1980s or 1990s, the original abutments were replaced with reinforced concrete abutments. The abutments include horizontal grooves as a decorative treatment, mimicking the pattern of rusticated blocks. Although a bridge inspection report was unavailable, the bridge appears to be in fair condition. The concrete has spalled on the underside of the deck and along the lower parapets, revealing reinforcing bars within the concrete.

Eligibility Assessment

The Baltimore and Ohio Rail Bridge over Key Highway is not eligible for the National Register of Historic Places. Although the bridge is associated with Baltimore and Ohio Railroad improvement programs to eliminate at-grade rail crossings, it is one of many bridges constructed by the Baltimore and Ohio Railroad and is not a distinguished example of the many concrete cast-in-place slab bridges constructed during this time period. In addition, the bridge no longer retains its original abutments. Neither the CSX Riverside Yard nor adjacent areas of CSX rail line are eligible for the National Register of Historic Places, and the bridge would not be a contributing element to a historic district. Therefore, the bridge is not eligible under Criterion A or C.

The bridge is not associated with the lives of important or significant persons, and it is therefore not significant under Criterion B.

The bridge is not anticipated to contribute to our understanding of human history and is therefore ineligible under Criterion D.

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MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

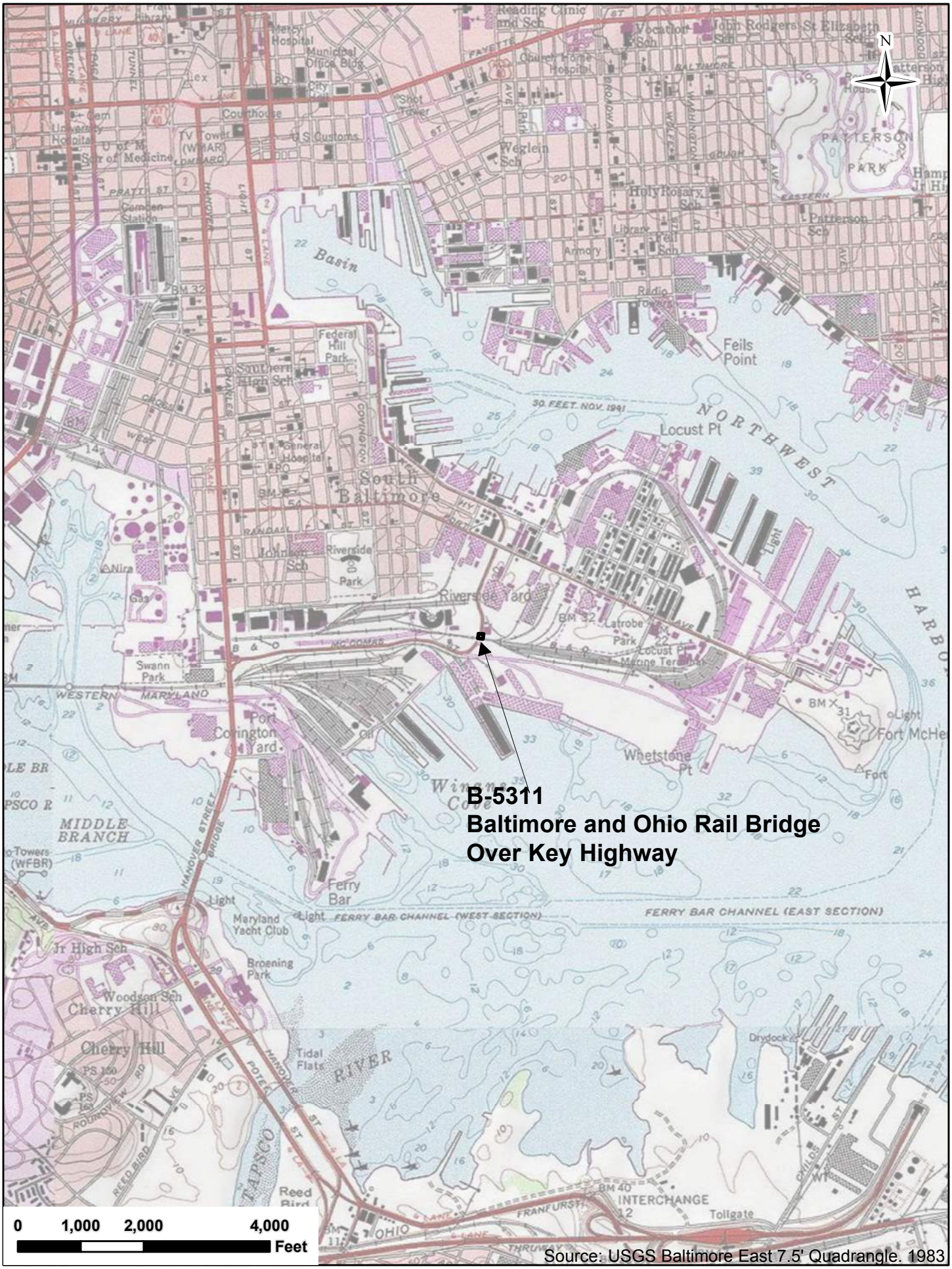
MHT Comments:

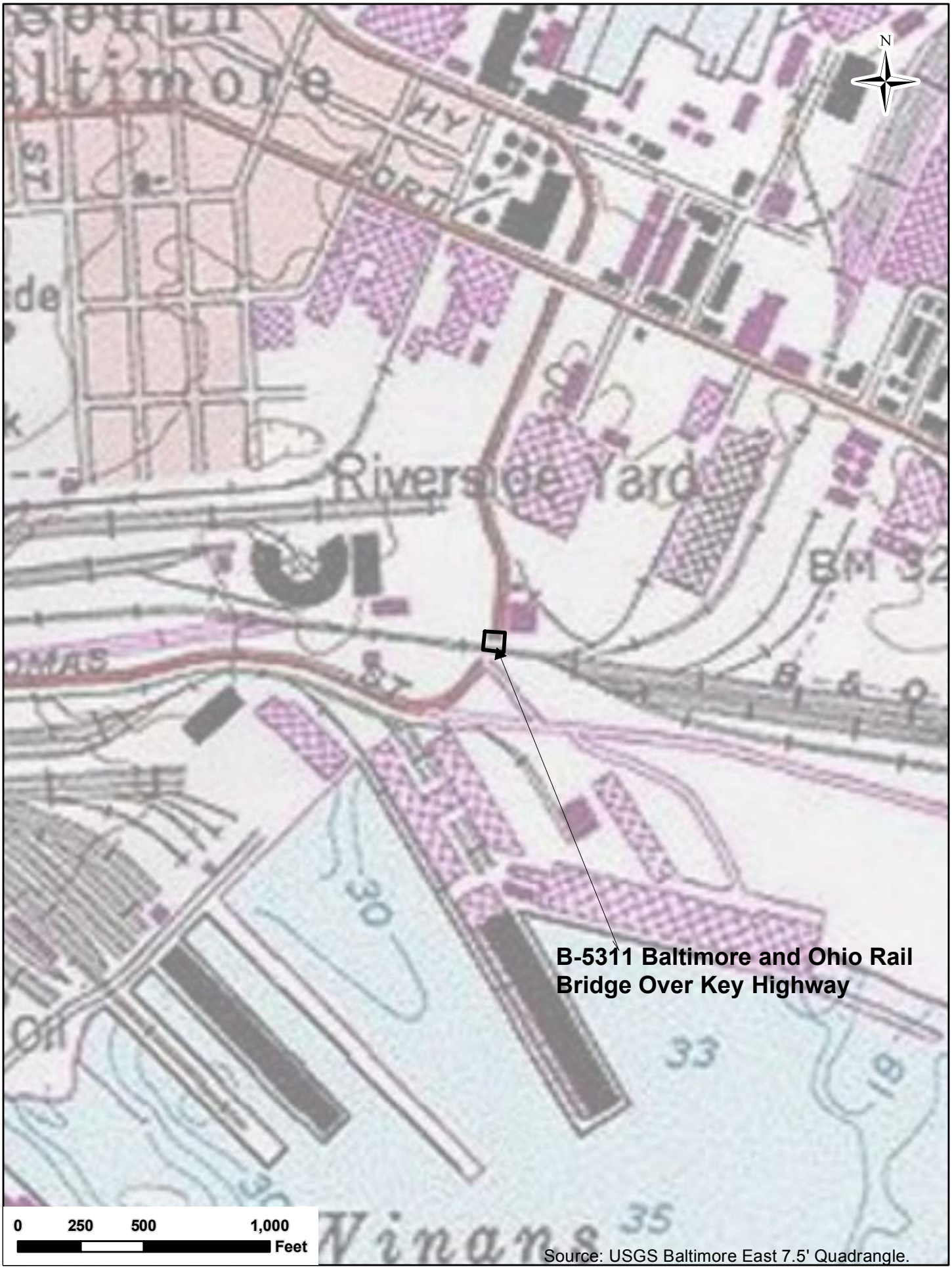
_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**


N
B-5311
Baltimore and Ohio Rail Bridge
Over Key Highway
0 1,000 2,000 4,000
Feet
Source: USGS Baltimore East 7.5' Quadrangle. 1983


N
Riverside Yard
BM 32
B-5311 Baltimore and Ohio Rail
Bridge Over Key Highway
0
250
500
1,000
Feet
Source: USGS Baltimore East 7.5' Quadrangle.

Northern elevation of Baltimore and Ohio Rail Bridge over Key Highway, facing southwest. Image file: B-5311_2017-10-10_01.TIF

Southern elevation of Baltimore and Ohio Rail Bridge over Key Highway, facing northwest. Image file: B-5311_2017-10-10_02.TIF

Detail of bent on Baltimore and Ohio Rail Bridge over Key Highway, facing west.
Image file: B-5311_2017-10-10_03.TIF

Pier detail of Baltimore and Ohio Rail Bridge over Key Highway, facing west.
Image file: B-5311_2017-10-10_04.TIF

MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes ____
no ____

Property Name: Rowhouses Inventory Number: B-5310

Address: 201-213 W. McComas Street Historic district: ____ yes X no

City: Baltimore Zip Code: 21230 County: Baltimore City

USGS Quadrangle(s): Baltimore East

Property Owner: West McComas Street Homes, LLC Tax Account ID Number: 23101050009

Tax Map Parcel Number(s): 0000 Tax Map Number: 0023

Project: I-95 Access Improvements - Caton Ave to Ft Mc Henry Tunnel Agency: Maryland Transportation Authority

Agency Prepared By: Straughan Environmental, Inc.

Preparer's Name: Sarah Michailof Date Prepared: 11/6/2017

Documentation is presented in: I-95 Access Improvements Cultural Resources Evaluation and Assessment of Effects Technical Report

Preparer's Eligibility Recommendation: ____ Eligibility recommended X Eligibility not recommended

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G

Complete if the property is a contributing or non-contributing resource to a NR district/property:

Name of the District/Property: ____

Inventory Number: ____ Eligible: ____ yes Listed: ____ yes

Site visit by MHT Staff ____ yes X no Name: ____ Date: ____

Description of Property and Justification: *(Please attach map and photo)*

The 200 block of West McComas Street in the South Baltimore community of Port Covington contains a strip of seven adjacent residential rowhouses in an area that is otherwise industrial in nature. The house numbers are 201, 203, 205, 207, 209, 211, and 213, and the row of houses are located in the southwest quadrant of the intersection of McComas Street and Race Street. The rowhouses were individually owned following construction in 1905, and were all purchased by West McComas Street Homes, LLC in 2014. A large industrial building, most recently operated by Schuster Concrete and designated as the Lyon, Conklin and Company Building in the Maryland Inventory of Historic Properties (MIHP Number B-1055) is located south of the rowhouses and spatially dominates the block. Another industrial building, currently operated as a commercial business (Downtown Dog Resort and Spa) is located on the opposite (north) side of the street from the rowhouses. Swann Park, a city park that contains athletic fields, is located to the west, at the western end of West McComas Street.

The rowhouses are similar in form. Each Italianate-style rowhouse is two bays wide and three bays deep, except for the rowhouse at 209 W. McComas which has a rear addition that makes it four bays deep. Each rowhouse was constructed with six rooms and included a basement. The roof on each house is flat, and each rowhouse contains two chimneys along its east wall. Although Italianate rowhouses were losing popularity by the 1890s, the general form continued to be constructed into the twentieth century

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ____ **Eligibility not recommended** ____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

Reviewer, Office of Preservation Services **Date**

Reviewer, National Register Program **Date**

in Baltimore particularly for worker housing. Only the houses at 203, 209, and 213 West McComas appear to retain the original yellow brick used in construction. The houses at 201, 207, and 211 West McComas have had Formstone, or another type of simulated masonry veneer, applied over the original brick. The house at 205 West McComas appears to have been refaced with a brick veneer. On the front, north facing elevation of each rowhouse there is an entry door reached from marble (or brick, in the case of 201 and 213 W. McComas Street) steps on the first floor of the right bay. A large rectangular double hung picture window dominates the left bay. The second floor includes two double-hung windows, centered on each bay.

Decorative details originally included on the houses included an entablature composed of a dentilled cornice constructed of sheet metal with a neoclassical garland motif along the frieze. Stained glass transoms were likely included above the front door on each house, and may have been included above the picture window, although none remain on this row of houses. Marble or brick was used in the front steps, and marble was used in the lintels and sills to delineate the wall openings.

The decorative details have been removed on many of the houses. The entablature has been removed from house numbers 209, 211, and 213. At 209, a brick corbelled entablature has been applied. At 211 and 213, the entablatures have been removed and replaced with Formstone (211) or a strip of aluminum or vinyl siding (213). Stained glass only exists in the transom for house number 203. Other houses have clear glass, or the transom has been filled in with a wooden panel. Original double-hung windows have been replaced on most of houses with aluminum and vinyl double-hung windows.

Property History

The Locust Point peninsula, which includes Port Covington, received thousands of new residents during the late nineteenth and early twentieth centuries. Growth was the result of immigration from Europe and from neighboring rural areas in Maryland, Virginia, and Pennsylvania. Blocks of rowhouses were constructed to accommodate Baltimore's new residents, who came to the city for jobs in industry and the maritime trade. Huge changes were taking place on Locust Point in the early twentieth century to support industrial development of the peninsula. In 1904, the Western Maryland Railway completed a 95-acre rail terminal to connect its expanding rail network with Baltimore harbor on the south side of Locust Point. The terminal included 75 miles of track, two piers, a 600-foot long bulkhead, and a transfer bridge to move railcars (MHS 2016). It joined Baltimore and Ohio Railroad terminals further to the east and on the north side of Locust Point, which included the immigration pier and numerous grain and coal piers. New industries began operations, taking root primarily along the waterfront and rail lines on Locust Point. Construction of residential neighborhoods was limited to areas not claimed by industry, which generally included the interior and northern areas of the Locust Point peninsula.

The rowhouses in the southwest block of McComas and Race Streets were constructed by Charles Burdette in 1905 and sold later that year to various purchasers (Baltimore Sun 6/4/1905; Baltimore City Land Records Book RO 2814 Folio 35, for example). In addition to the seven rowhouses on the southwest block, Burdette also constructed 12 rowhouses on the southeast block of McComas and Race Streets. The rowhouses were developed during a time that large scale rowhouse developers often covered multiple blocks. In nearby Riverside, local building activity was dominated by James F. Morgan, Henry Westphal, and Theodore and H. Webster Cooke. Advertisements for rowhouses in the Baltimore Sun indicate that Charles Burdette was most prolific in West Baltimore, and the row of 19 houses on the south side of McComas Street may have been his only South Baltimore project (Baltimore Sun 2/21/1934).

These rowhouses were geographically isolated from the locations where most rowhouse residential development was taking place. Port Covington was generally the focus of industrial development, and most rowhouses in the vicinity of Port Covington were constructed north of Wells Street in Riverside. A 1927 aerial photograph indicates that rowhouses had been constructed as far south as Charles and Hanover Streets in the blocks north and south of McComas Street. By 1948, however, aerial photography

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

indicates that these two blocks of rowhouses had been razed for railyard expansion and road improvements. By 1948, construction of the Lyon, Conklin and Company Headquarters had required demolition of the twelve rowhouses on the southeast block of Race and McComas Streets, and the seven rowhouses on the 200 block of McComas Street were the only rowhouses left on Port Covington.

Eligibility Assessment

The rowhouses at 201-213 West McComas Street are considered not eligible for the National Register of Historic Places.

They are not considered eligible under Criterion A or B because they are not known to have any associations with persons or events significant to our past. Although they once existed in fairly close association with other blocks of rowhouses along Charles, Hanover, and McComas Street, these other rowhouse blocks were razed by 1948 to allow further development of industry and the remnant strip of rowhouses retains a weak association with the communities of worker housing that developed on the Locust Point peninsula at the turn of the twentieth century.

They are not considered eligible under Criterion C because they do not embody distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value. Rather, they are typical but relatively late examples of the Italianate rowhouses being built in residential neighborhoods adjacent to industrial districts.

The rowhouses were not evaluated under Criterion D.

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United States Geological Survey. 1983. Baltimore East 7.5’ Quadrangle.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**


B-5310 Rowhouses
201-213 W. McComas Street
N
0 1,000 2,000 4,000
Feet
Source: USGS Baltimore East 7.5' Quadrangle. 1983.

Source: USGS Baltimore East 7.5' Quadrangle. 1983.

North and east elevations of 201-213 W. McComas Street, facing southwest.
Image file: B-5310_2017-10-10_01.TIF

West elevation of 201-213 W. McComas Street, facing east.
Image file: B-5310_2017-10-10_02.TIF

North elevation of 201-207 W. McComas Street, facing south.
Image file: B-5310_2017-10-10_03.TIF

North elevation of 207-213 W. McComas Street, facing southwest.
Image file: B-5310_2017-10-10_04.TIF

MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes ____
no ____

Property Name: Gould Street Generating Station Inventory Number: B-5309

Address: 2105 Gould Street Historic district: X yes ____ no

City: Baltimore Zip Code: 21202 County: Baltimore City

USGS Quadrangle(s): Baltimore East

Property Owner: Constellation Power Source Generation, Inc. Tax Account ID Number: 24061053004

Tax Map Parcel Number(s): 0000 Tax Map Number: 0024

Project: I-95 Access Improvements - Caton Ave to Ft Mc Henry Tunnel Agency: Maryland Transportation Authority

Agency Prepared By: Straughan Environmental, Inc.

Preparer's Name: Sarah Michailof Date Prepared: 11/6/2017

Documentation is presented in: I-95 Access Improvements Cultural Resources Evaluation and Assessment of Effects Technical Report

Preparer's Eligibility Recommendation: X Eligibility recommended ____ Eligibility not recommended

Criteria: X A ___ B X C ___ D Considerations: ___ A ___ B ___ C ___ D ___ E ___ F ___ G

Complete if the property is a contributing or non-contributing resource to a NR district/property:

Name of the District/Property: ____

Inventory Number: ____ Eligible: ____ yes Listed: ____ yes

Site visit by MHT Staff ____ yes X no Name: ____ Date: ____

Description of Property and Justification: *(Please attach map and photo)*

The Gould Street Generating Station is an electrical generating power plant located on the Locust Point peninsula in South Baltimore, Maryland. The plant is located at 2105 Gould Street, and is bounded by East McComas Street and the Interstate 95 overpass to the north, a marina to the west, the Cruise Maryland Terminal to the east, and the Middle Branch of the Patapsco River to the south. The Gould Street plant complex includes multiple buildings constructed between 1905 and 1952 (Figure 1). The oldest building is a neoclassically styled red brick building constructed in 1905. The building most recently functioned as a coal preparation plant, but it is now vacant. Its front (or northwest elevation) faces Gould Street and is seven bays wide. From the front elevation, the building appears to be two adjacent buildings, with the southernmost three-bayed building being four bays deep and the northernmost four-bayed building being three bays deep. The fenestration gives the building the appearance of being a four stories high from the outside, but it is generally a single story on the inside, constructed to accommodate the large turbine generators and the plant's coal handling system. Neoclassical features include metal-framed, round arched windows separated by simply styled pilasters and a decorative concrete belt course at the first-floor level. Cornices with decorative concrete banding extend around the elevations above the third and fourth floor levels.

To the southwest of the coal preparation plant, a building similar in appearance was constructed in 1930. The brick building,

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Eligibility recommended ____ **Eligibility not recommended** ____

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identified as a switch house in the 1952 Sanborn maps, is also neoclassically styled (Figure 2). The building is three bays wide and four bays deep. On the front façade (northwest elevation), each of the three bays on the first and second floors is articulated with a metal-framed arched window, while windows on the third through sixth floors are generally rectangular in the wider central bay and square on the narrower bays on either side. On the side elevations, the windows follow the same fenestration pattern seen on the front façade although the windows on the first through third floors are bricked in. The rear two bays of the building extend four stories rather than six stories. The fenestration pattern on the rear elevation of the building is similar to the fenestration pattern seen on the first four floors on the front façade of the building.

The steam generating plant, which opened in 1927, was oriented to the river rather than Gould Street (King 1950), as coal was delivered by barge rather than rail. The large reinforced concrete building was constructed to hold two 35,000-kilowatt turbine-generator units, called Units 1 and 2. The plant is six bays wide and has the appearance of being two buildings. The west, three-bay wide half of the plant is the boiler house. It is five bays deep. The east, three-bay wide portion of the building (the generator house) is nine bays deep. The building is approximately 100 feet high, and two chimney stacks once extended an additional 70 or so feet from the center of the roof. The plant is Art Deco in style with soaring pilasters with a stepped pattern that stretch from the ground floor to the roof on the south, west, and east sides. Each of the three-bay wide building halves on the front elevation contains adjacent 55-foot tall windows separated by pilasters. Collectively, these two groupings of three windows give the appearance of being two large, arched windows. Above these large windows, the Art Deco emphasis on verticality continues with a series of decorative vertical lines that extend above a frieze line to the top of the cornice molding. Along the east and west elevations, each bay is separated by pilasters that extend from the ground floor to the roof line. Paired, rectangular windows are placed within each bay on the first floor. From approximately 15 feet above the ground surface to approximately 70 feet above the ground surface, each bay contains a 55-foot tall window opening. Although old photographs indicate the windows were once metal-framed, louvered windows, the window openings are currently boarded up.

On the rear elevation of the 1927 steam generating plant are a series of 1952 additions. A turbine room (containing Unit 3, a third steam generating turbine), coal bunker, and boiler room are enclosed in a very simply styled, modern reinforced concrete building. The building ranges in height from approximately 90 feet over the turbine and coal bunker rooms, to approximately 140 feet over the boiler room. Beyond this building is the precipitator, enclosed in open steel framing. The large metal precipitators remove particles from the smoke emitted by the boiler before it is sent through the iron chimney.

Beyond the three main buildings, the Gould Street Generating Station includes several accessory structures. Small utility and storage sheds, generally constructed of concrete block, are located in the parking area that abuts the waterfront. Two large metal tanks are located in the yard area west of the 1927 steam generating plant. Two electrical substations are located on the west side of the power plant property.

Property History

The Gould Street Generating Station was constructed by the Baltimore Electric Company in 1905 and occupied the easternmost of the two brick buildings on Gould Street. Coal was delivered by rail and conveyed to the plant which consisted of three 2,000-kilowatt, 60-cycle, 6,600-volt Westinghouse generators driven by steam turbines (King 1950). Energy generated by the plant was transmitted to a substation on Sharp Street. In 1906, the Baltimore Electric Company and all other existing small electric companies in Baltimore were absorbed by the Consolidated Gas Company, which became known as the Consolidated Gas Electric Light and Power Company. The new company concentrated the company's electric power in one plant, the Westport Power Plant. The Westport Plant, when constructed in 1906, was the largest reinforced concrete generating station in the world and considered to be the largest power plant in the south. By 1908, the Westport Plant produced one hundred percent of the company's electrical output, and the Gould Street plant was operated in reserve (Lione 2002; Turowski et al. 1983; Lowe 1928).

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Eligibility recommended _____ **Eligibility not recommended** _____

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During the 1920s, demand for gas and electricity had skyrocketed in Baltimore. The Gould Street Generating Station reopened in 1927 in a new and modern power plant oriented to the Middle Branch of the Patapsco River (Figures 3 through 5). The obsolete building constructed in 1905 became the new plant's coal pulverizing facility. At the time of its construction, the 1927 Steam Generating Plant was the first of Baltimore power plants (which included the Westport and Pratt Street Stations) to burn pulverized coal. Although constructed at the east end of the Maryland Railway Port Terminal, coal at the new plant was brought by barge rather than rail and transferred via a coal elevator to the coal conveyer and air blast system, which then transferred coal to the Coal Preparation Plant (including the pulverizing station) and boilers. A large coal yard was present to the west of the new power plant. A company official noted that the plant's boilers had a greater steaming capacity than had "ever before been attempted in a single unit (King 1950)." The boilers generated 750-degree stream generated at 450 pounds per square inch to the two 35,000-kilowatt turbine-generator units, which were 75 percent greater in size than the turbine-generator units at the Westport Plant (King 1950). Once both Units 1 and 2 came on line in 1928, total capacity for electricity generation was 213,000 horsepower at the Gould Street Generating Station. Capacity at the Westport and Pratt Street Stations, comparatively, was each 247,000 horsepower. A map of Consolidated Gas Electric Light and Power Company's facilities in 1928 is included in Figure 6.

The Consolidated Gas Electric Light and Power Company underwent additional system-wide expansion in the years following World War II to serve post-war industrial expansion. At the time, Bethlehem Steel's steel production plant at Sparrow's Point was the power company's largest client, and Baltimore's port was the second largest in the nation (Kummerow et al. 2016). The company invested $100 million in power plant expansion between 1948 and 1953. At Gould Street, Consolidated Gas Electric Light and Power Company funded a 100,000-kilowatt generating unit (Unit 3) which was constructed in 1952 in an addition on the rear elevation of the 1927 power plant. In 1955, Consolidated Gas Electric Light and Power Company was rebranded as Baltimore Gas and Electric.

In 1972, all three turbine-generator units were converted from burning coal to No. 6 oil (Maryland Public Service Commission 2007). The conversion happened ahead of Environmental Protection Agency regulations enforcing the 1970 passage of the Clean Air Act, and following growing environmental awareness of the effects of air pollution, and complaints by south Baltimore residents about the soot and greasy film left behind by the belching smoke stacks (Kummerow et al. 2016, Baltimore Sun 4/22/1970). In 1977, Units 1 and 2 were decommissioned as the new Calvert Cliffs nuclear power plant came on line. In 1996, the smokestacks for Units 1 and 2 were removed. In 2000, following deregulation of the energy industry in Maryland, all of Baltimore Gas and Electric's power generating stations were transferred to Constellation Generation Group which has a nationwide focus on power generation (Kummerow et al. 2016; Baltimore Sun 10/24/2000).

Constellation Generation Group currently operates Unit 3 at the Gould Street Generating Station as a limited duty plant that operates only during peak periods. It was shut down for five years in 2003, reopening in 2008 after being converted to run on natural gas.

Eligibility Assessment

The Gould Street Generating Station at 2105 Gould Street is considered locally significant and eligible for inclusion in the National Register of Historic Places as a historic district.

The generating station is considered significant under Criterion A because it is associated with the growth of the power generating industry in Baltimore and, with the Pratt Street Station, is one of only two remaining power generation plants in the city. The plant is also significant under Criterion A because it was the first plant to burn pulverized coal in Baltimore, and is an early example of the adoption of this practice nationwide. The burning of pulverized coal was a technical innovation quickly adopted by coal

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

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burning plants by mid-century. The area of significance under Criterion A is industry and engineering, with a period of significance that spans the time period that the plant operated and expanded operation. This includes the years from 1905 when the first plant was constructed until 1977 when Units 1 and 2 were decommissioned and power was primarily provided by plants outside of Baltimore.

The generating station is not eligible under Criterion B because it is not associated with the lives of persons significant in our past.

The generating station is considered eligible under Criterion C because the 1905 coal preparation plant and 1930 switch house embody distinctive characteristics of Neoclassical architecture and the 1927 steam generating plant embodies distinctive characteristics of Art Deco architecture. The periods of significance under Criterion C are 1905, 1927, and 1930.

The generating station is unlikely to contribute to our understanding of human history and is therefore ineligible under Criterion D.

Since switching to oil and then natural gas, plant operators have removed the coal elevator and coal conveying system, and the chimneys on the 1927 steam generating plant were razed in 1996. It is unknown whether the turbine generators and other equipment remain inside the building. The setting of the power plant has been moderately compromised in recent decades with a reduction in industries that once surrounded the plant and relied on power that the plant generated. However, the plant retains moderate integrity of location, materials, workmanship, feeling, and association. It continues in use as a power plant, although at reduced capacity in recent decades.

As a historic district, all buildings and structures that comprise the generating station contribute to the significance of the district. However, the 1952 additions to the steam generating plant and accessory structures including small utility sheds, the two metal tanks, and the electrical substations are considered features that lack individual distinction.

References

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Baltimore Sun. Baltimore Sun. Constellation, BGE’s Parent, splitting into 2 companies. October 24, 2000.

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Lione, Michael, Brian Michael. Westport Power Station Determination of Eligibility Form. Maryland Historical Trust. Accessed online at https://mht.maryland.gov/secure/medusa/PDF/Baltimore%20City/B-1062.pdf

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Maryland Public Service Commission. 2007. In the Matter of the Application of Constellation Energy Power Source Generation for a Certificate of Public Convenience and Necessity.

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Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

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Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

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United States Geological Survey. 1983. Baltimore East 7.5' Quadrangle.

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Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

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Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

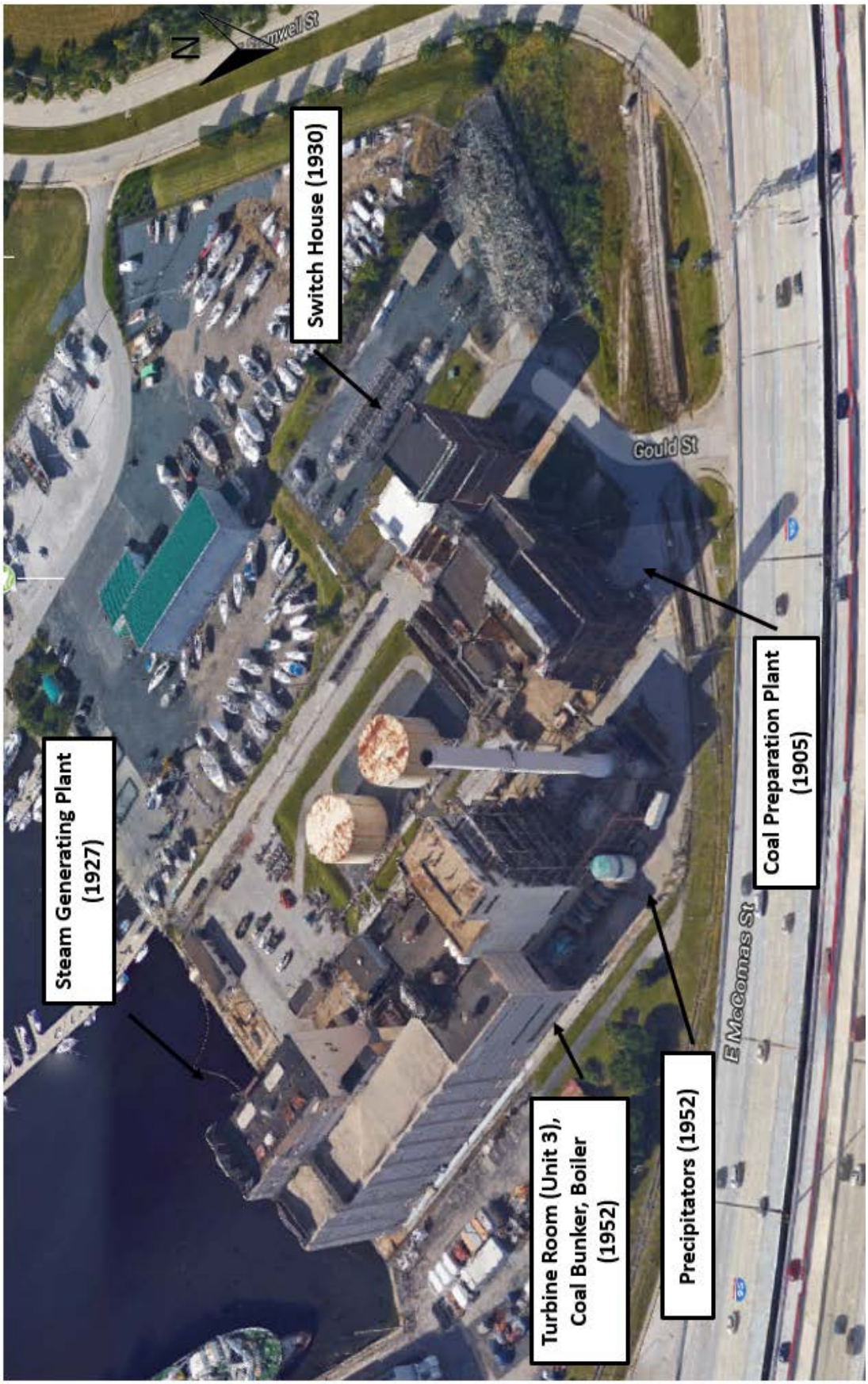


Figure 1. Current site plan of Gould Street Generating Station. (Imagery and Map Data ©2017 by Google.)

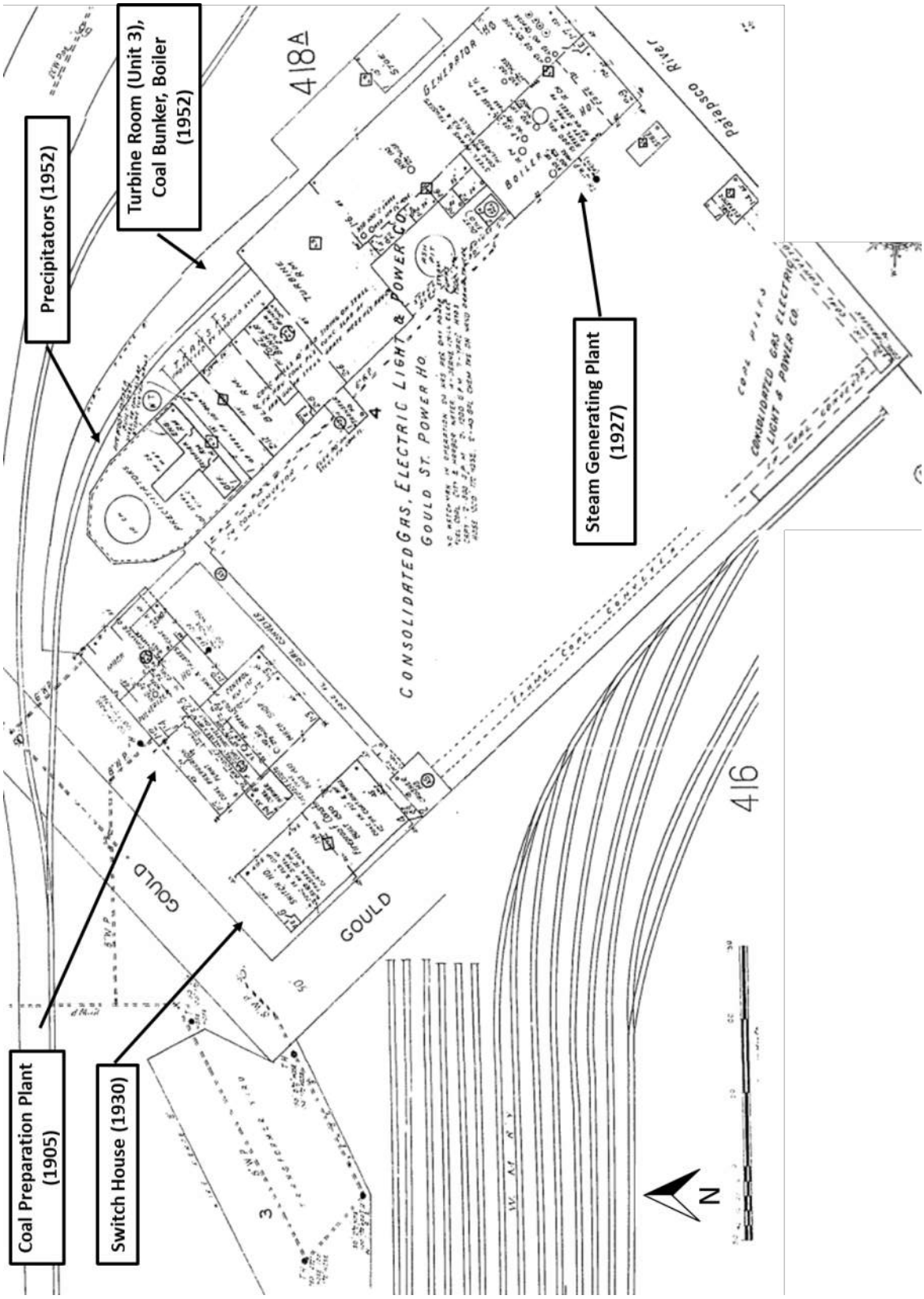


Figure 2. Site layout of Gould Street Generating Station in 1952 (Source: Sanborn Map Company 1952).

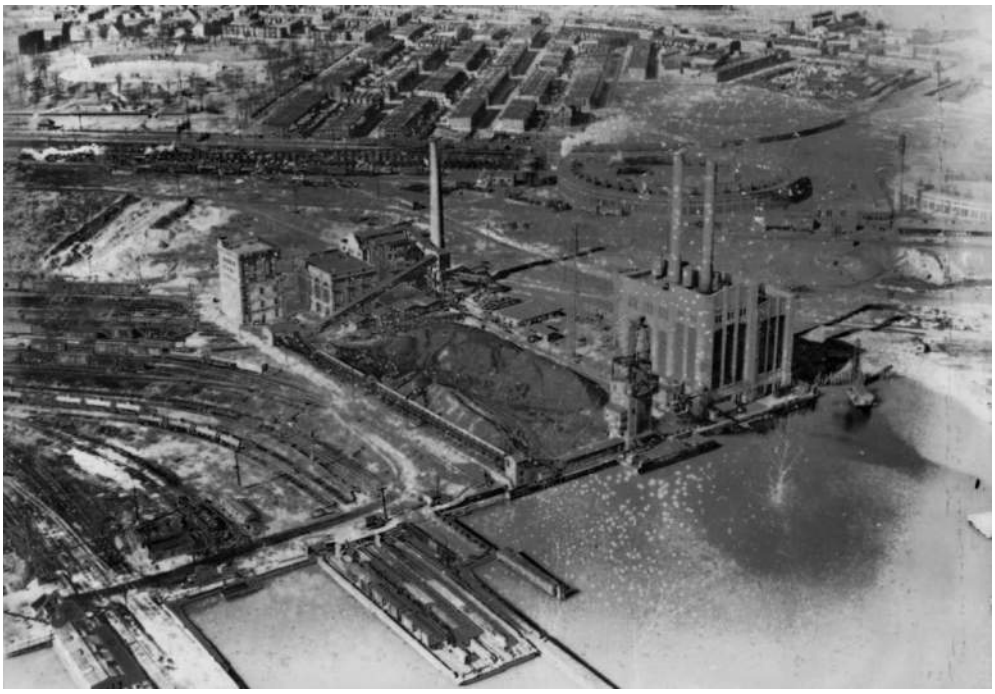


Figure 3. 1928 aerial view of the Gould Street Generating Station and surrounding area (Source: Baltimore Museum of Industry, Photograph N298).

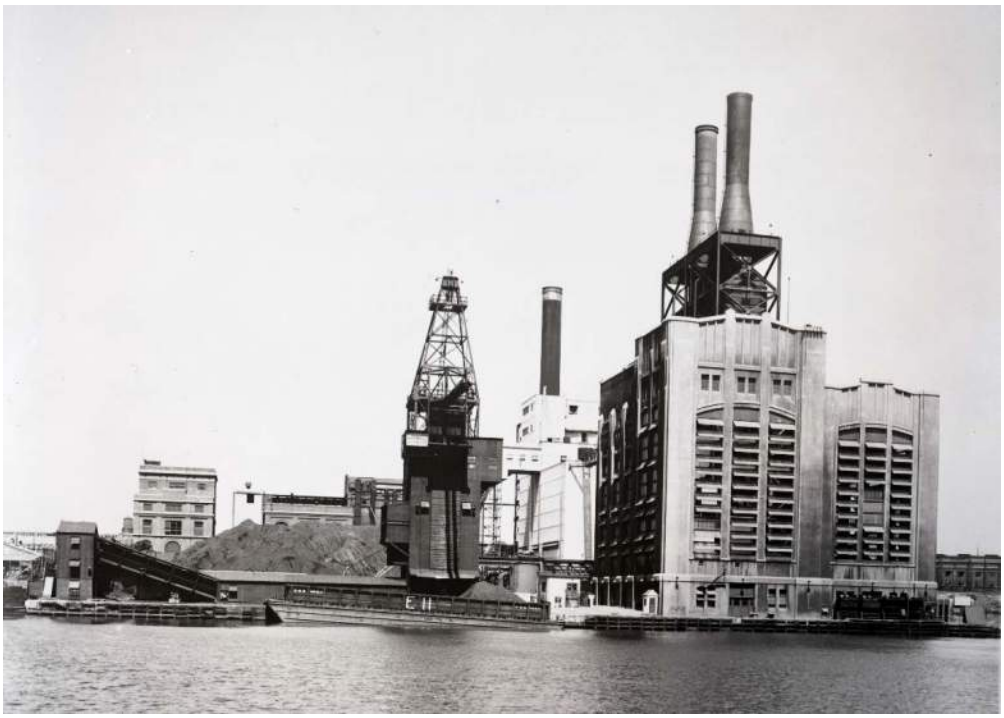
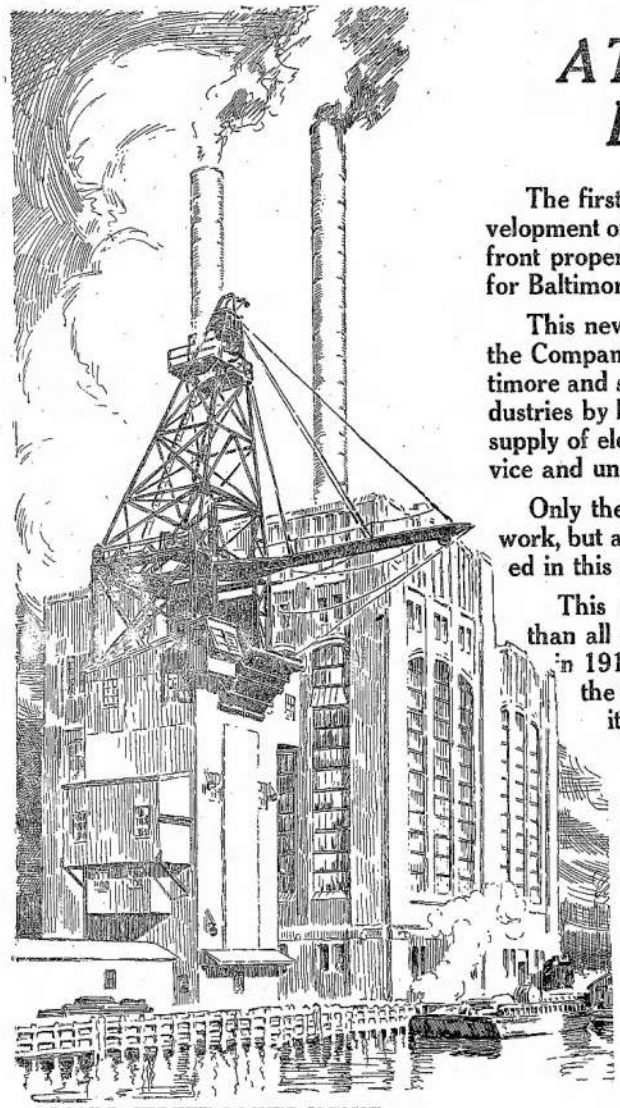


Figure 4. Gould Street Generating Station Steam Generating Plant in 1956 (Source: Baltimore Museum of Industry, Photograph 30626013).

THE SUN, BALTIMORE, MONDAY MORNING, APRIL 11, 1927. 5

THE NEW GOULD ST. POWER DEVELOPMENT

AT WORK FOR BALTIMORE



GOULD STREET POWER HOUSE

The first unit of the new $10,000,000 power development of the Consolidated Company on its water front property at the foot of Gould Street is at work for Baltimore.

This new and great source of power is a part of the Company's plan to attract new industries to Baltimore and stimulate the expansion of established industries by having available at all times an abundant supply of electricity with thoroughly dependable service and unusually low rates.

Only the first unit of the new power house is at work, but already about $4,000,000 has been invested in this plant.

This one unit can generate more electricity than all of the Company's generating equipment in 1910. The Gould Street Plant is laid out for the installation of generators having a capacity of 213,000 horse-power.

The new plant will be co-ordinated with the operation of the 247,000 horse-power plants of the Consolidated at Westport and Pratt Street and the 180,000 horse-power development of the Pennsylvania Water & Power Company on the Susquehanna River.

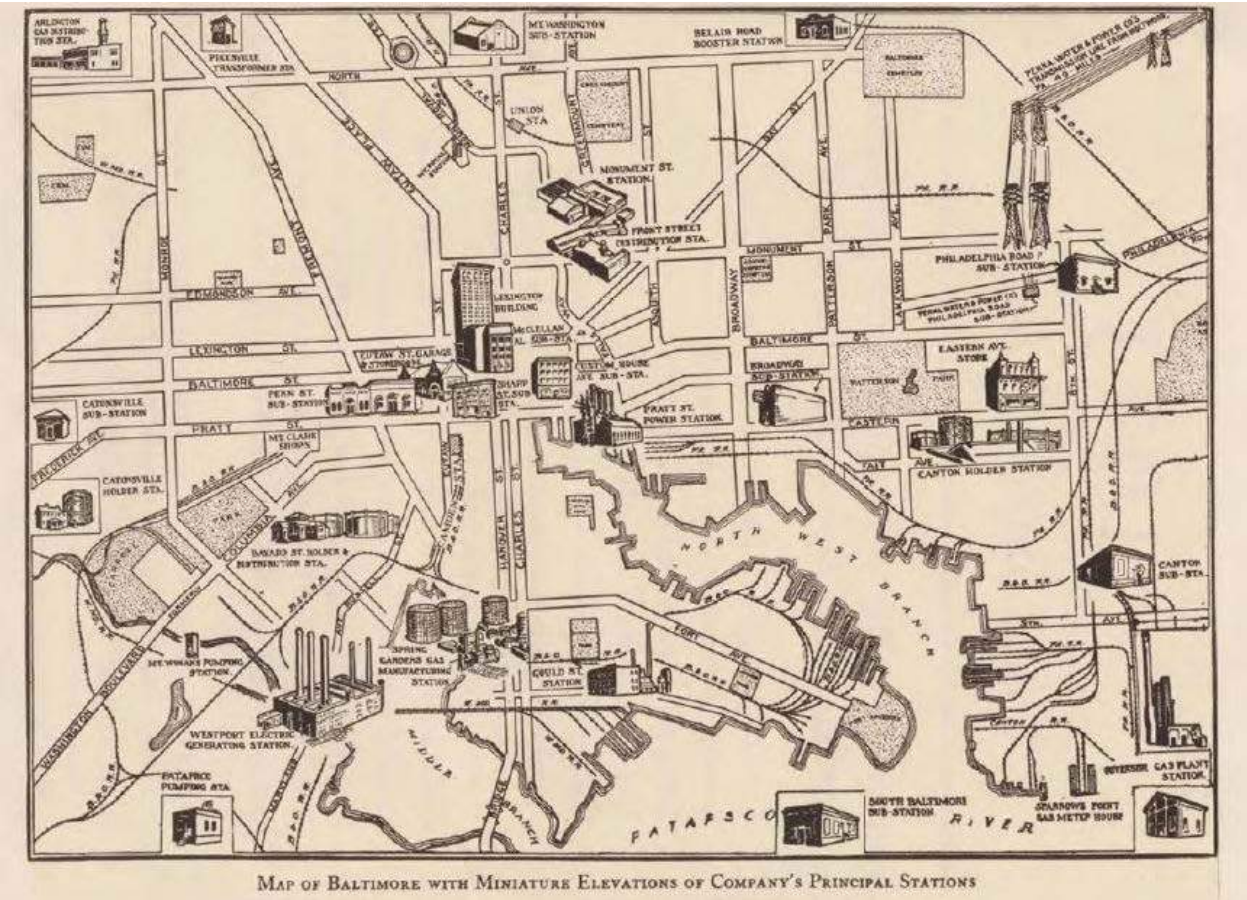
The Gould Street Power Development is a major item in the Company's program of helping Baltimore grow and keeping ahead of the growth.

Good Public Service

THE GAS & ELECTRIC CO.

Telephone Plaza 8000

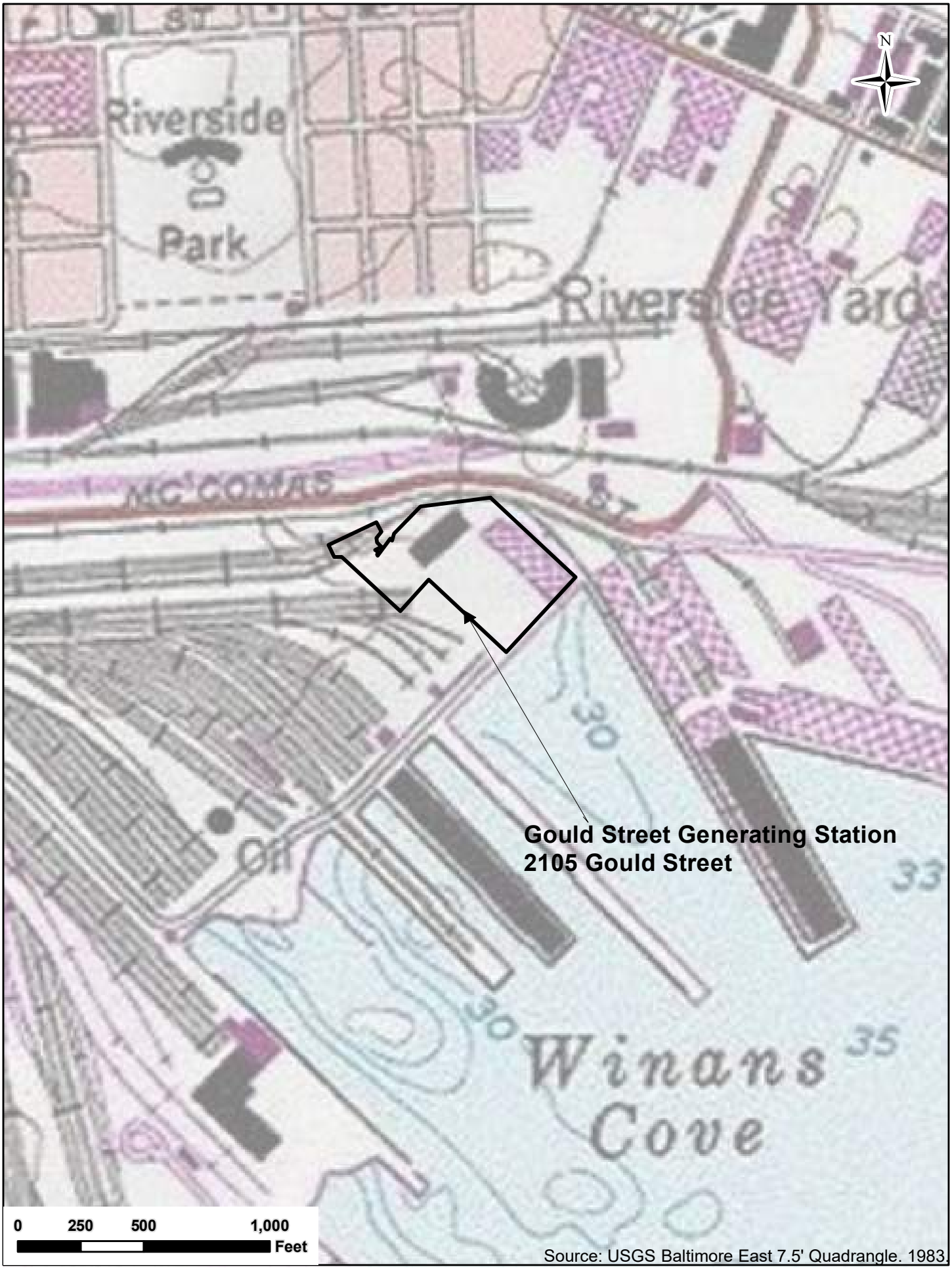
Figure 5. Baltimore Sun advertisement from April 1927 describing the then new Gould Street Generating Station.



MAP OF BALTIMORE WITH MINIATURE ELEVATIONS OF COMPANY'S PRINCIPAL STATIONS

Figure 6. Map of Baltimore with miniature elevations of the Consolidated Gas, Electric, Light, & Power Company's principal stations (Lowe 1928).


N
Gould Street Generating Station
2105 Gould Street
0
1,000
2,000
4,000
Feet
Source: USGS Baltimore East 7.5' Quadrangle.1983.



Source: USGS Baltimore East 7.5' Quadrangle. 1983.

North elevation of Gould Street Generating Station, facing south, showing 1905 coal preparation plant (left) and 1930 switch house (right). Image file: B-5309_2017-10-10_01.TIF

North elevation of Gould Street Generating Station switch house and electrical substation, facing south. Image file: B-5309_2017-10-10_02.TIF

Close-up of Gould Street Generating Station 1905 structure north elevation, facing south.
Image file: B-5309_2017-10-10_03.TIF

South and west elevation of Gould Street Generating Station Steam Generating Plant, facing northeast.
Image file: B-5309_2017-10-10_04.TIF

MARYLAND HISTORICAL TRUST
SHORT FORM FOR INELIGIBLE PROPERTIES

Property Name: Swann Park

Address: 201 W. McComas Street

City: Baltimore Zip Code: 21230 County: Baltimore City

USGS Quadrangle(s): Baltimore East

Tax Map Parcel Number(s): 0000 Tax Map Number: 0023

Project: I-95 Access Improvements - Caton Ave to Ft Mc Henry Tunnel Agency: Maryland Transportation Authority

Agency Prepared By: Straughan Environmental, Inc.

Preparer's Name: Sarah Michailof Date Prepared: 11/6/2017

Preparer's Eligibility Recommendation: X Eligibility not recommended

Complete if the property is a non-contributing resource to a NR district/property:

Name of the District/Property:

Inventory Number: Eligible: yes Listed: yes

Description of Property and Justification: *(Please attach map and photo)*

Swann Park is an 11-acre city-owned park located on Port Covington, an industrial area in south Baltimore. The Park is situated south of Interstate 95 on the east bank of the Middle Branch of the Patapsco River and north of the former Western Maryland Railway line. It is accessed via McComas Street, whose western end closes in a cul-de-sac at the Park entrance. The Park is almost entirely occupied by ball fields. A baseball field with dugouts and bleachers is on the eastern third of the Park; a soccer/football field is west of the baseball field, and further west, adjacent to the Middle Branch, are two softball fields. The ball fields are circled by an asphalt walking path, and a bathroom facility is located on the north side of the baseball field. The fields are equipped with flood lights to allow night games.

Property History

Swann Park was established by the Baltimore City Parks Board in 1900 to provide recreational opportunities for the residents of south Riverside and Port Covington. At the turn of the twentieth century, Baltimore and other large industrial cities were reconsidering the purpose of parks. While parks established in the nineteenth century focused on serenity, leisure, and natural beauty, by 1900, newly formed organizations such as the Public Park Athletic Association focused on the provision of athletic facilities and playgrounds. These organizations were established based on the philosophy of the playground movement, a progressive movement arising in the late nineteenth century which sought to provide relief to poor and immigrant communities from crowded urban conditions. In an era of growing automobile use, the streets became more and more dangerous places to play (Kessler 1989). A few parks were purchased in Port Covington and Riverside by the city at this time, including Swann Park, Latrobe Park, and Riverside Park.

The city's establishment of Swann and Latrobe Parks marked the influence of the playground movement in provision of parks by the Baltimore City Parks Board, and marked the beginning of a 30-year span in which many of the city's neighborhood and stream valley parks were established and playgrounds/parks sprung up all over the city. In 1904, the City directed the Olmsted Brothers,

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Eligibility recommended **Eligibility not recommended**

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the notable landscape architecture firm, to develop plans for Swann and Latrobe Parks, which are currently located in the Olmsted Archives at Fairsted, Frederick Law Olmsted National Historic Site. The design plans for Swann Park were not included in the Olmsted Brothers' Report upon the Development of Public Grounds for Baltimore and the proposed park improvements were not constructed (Kessler 1989). William Hiller, the Councilman who represented Ward 23 which included the Swann Park area, noted that there were more desirable areas along the Middle Branch waterfront that could have been developed into an ideal park (Baltimore Sun 5/21/1910). By 1926, the Olmsted Brothers, on making recommendations for the extension of parks in Baltimore, seem to have conceded to the implausibility of Swann Park being a significant park on the waterfront, noting that due to heavy industrialization, "…the opportunity for securing any considerable waterside park anywhere on the Patapsco River northwest of the line from Sparrows Point to Fort Armistead has now forever disappeared" (Baltimore City Department of Planning 2007).

Named for Thomas Swann, a former mayor of Baltimore and governor of Maryland, the Park had an inauspicious start. Few improvements were made during its early years – only modest grading, installation of a wooden fence, and construction of a stone bulkhead along the river. A 1910 newspaper article in the Baltimore Sun noted that it was strewn with trash and ash piles. A ballfield must have already existed on the property when the property was purchased by the city. It was described as "a rough, unattractive, ungraded field" with a sewage-polluted stream running through it. The newspaper article noted that no buildings had been erected on the park. By 1927, an aerial photograph documents that few improvements had been made - only one baseball field, with the batter's box situated in the northeast corner of the park (Chesapeake Aircraft Company 1927). Later twentieth century aerial photography indicates modest park improvements over the years. In the 1930s, Swann Park was the focus of the efforts of Franklin Delano Roosevelt's Work Progress Administration to improve city parks, receiving new bleachers and ball field improvements (Figures 1 and 2).

Southern High School (now Digital Harbor High School) and other local sports leagues have used the Park. In the 1960s, the Park's baseball fields were used by Leone's Boys Club, a nationally-acclaimed amateur team which produced major league baseball players including Reggie Jackson, Ron Swoboda and Tom Phoebus (Olesker 2008).

Toxic pollutants became a concern in the 1970s. The park was located south of the Allied Chemical Plant, which manufactured pesticides and other agricultural chemicals. Following the closing and demolition of the plant in 1976, the EPA tested soil in the park and found high levels of kepone (a pesticide ingredient that causes nerve damage). The Park was temporarily closed, reopening later in the year. In 2007, it became clear that high levels of arsenic were also found during 1976 testing, only coming to light decades later. The Park was closed in April 2007, and the Honeywell Corporation, present owner of the property containing the former Allied Chemical plant, completed remediation that resulted in construction of all new park facilities on clean soil. Reconstruction included four reconfigured ballfields to better fit the space available, installation of lights, a paved perimeter walking trail, and new bathrooms, bleachers, dugouts and other accessory structures (Baltimore Sun 5/22/2010).

Eligibility Assessment

Swann Park is considered not eligible for the National Register of Historic Places.

The park is considered not eligible under Criterion A. Although it was purchased in 1900 during a historically significant period of parks improvements in the City, the Baltimore City Parks Board did little to make improvements to the Park, such as playgrounds or athletic fields that were a hallmark of Progressive ideas of the period.

Improvements such as construction of a grandstand were made by the Works Progress Administration in the 1930s, and although those improvements could be considered historically significant, any Works Progress Administration improvements that lasted into the twenty first century were removed when the Park underwent remediation in 2007.

The Park is considered not eligible under Criterion B. In the 1960s, an amateur baseball team played games at Swann Park. The

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

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team produced major league baseball players. However, the association of these players with Swann Park was brief, and the 2007-2010 remediation and reconstruction of the ball fields in a different configuration than that which existed when these ball players played at Swann Park. Other than weak integrity of feeling because the Park is located in a similar setting as that which existed in the 1960s, the Park retains little integrity from the 1960s time period. The setting has been most notably altered by the construction of Interstate 95, prominent on the northern horizon of the Park, in the 1980s.

The Park is considered not eligible under Criterion C. Although the Olmsted Brothers, a noted landscape architecture firm, prepared a plan for improvements at Swann Park, the plan was never implemented. The current park design dates to the last decade, and does not embody distinctive characteristics of historically significant park design.

The Park was not evaluated under Criterion D, but demolition, remediation, and soil removal in 2007 likely would have destroyed any information potential contained at the site.

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United States Geological Survey. 1983. Baltimore East 7.5' Quadrangle.

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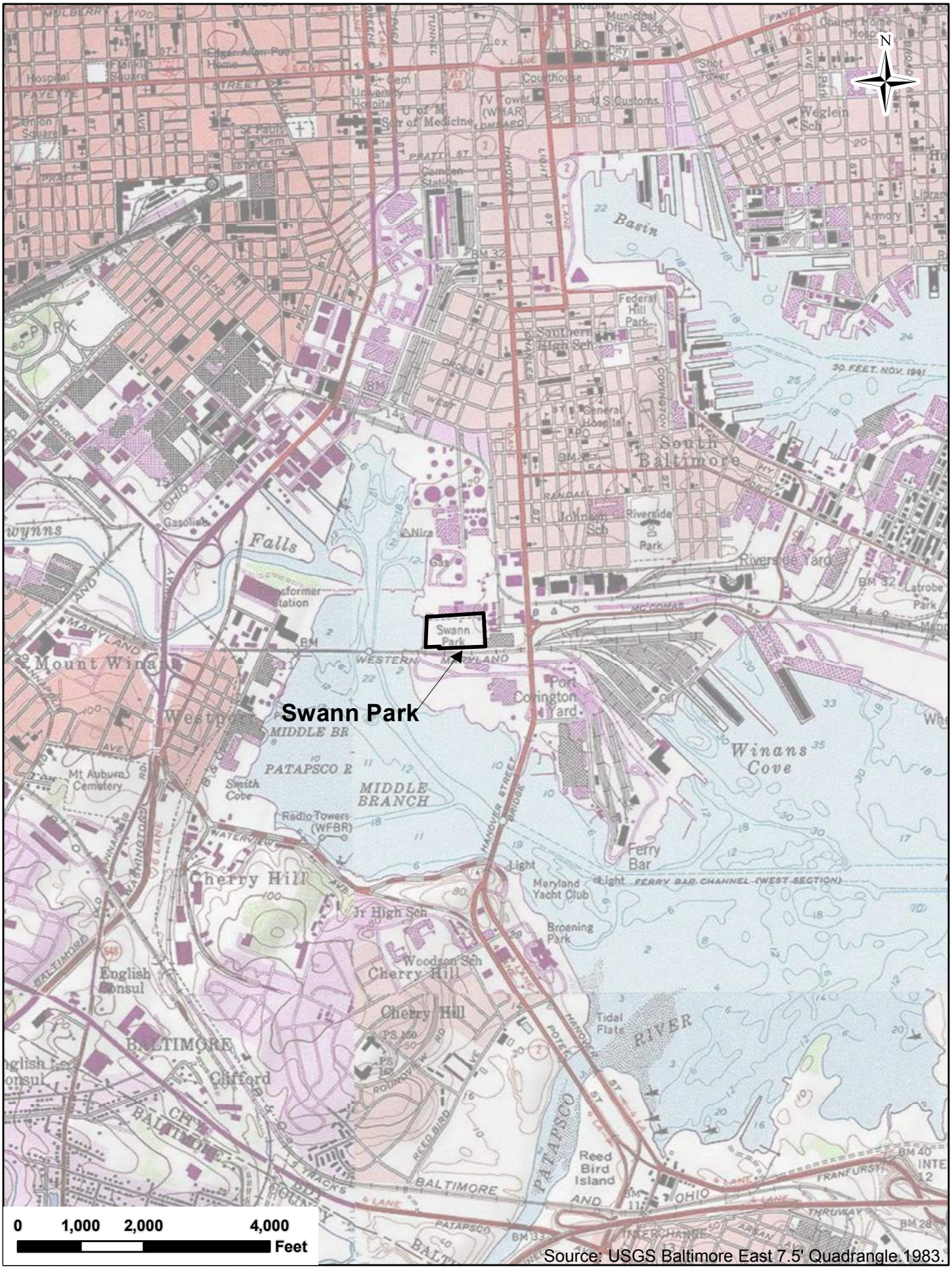
Figure 1. Works Progress Administration, Grandstand at Swann Park, April 21, 1936 (Source: University of Maryland Libraries Digital Collections)

Figure 2. Works Progress Administration, Construction of athletic fields at Swann Park, November 4, 1936 (Source: University of Maryland Libraries Digital Collections).



Source: USGS Baltimore East 7.5' Quadrangle.1983.

Source: USGS Baltimore East 7.5' Quadrangle. 1983.

Swann Park, facing west towards the river. Image file: Swann Park_2017-10-10 _01.TIF

MARYLAND HISTORICAL TRUST
SHORT FORM FOR INELIGIBLE PROPERTIES

Property Name: Warehouse and Distribution Facility

Address: 1915-1921 Annapolis Road

City: Baltimore Zip Code: 21230 County: Baltimore City

USGS Quadrangle(s): Baltimore East

Tax Map Parcel Number(s): 0000 Tax Map Number: 0025

Project: I-95 Access Improvements - Caton Ave to Ft Mc Henry Tunnel Agency: Maryland Transportation Authority

Agency Prepared By: Straughan Environmental, Inc.

Preparer's Name: Sarah Michailof Date Prepared: 11/6/2017

Preparer's Eligibility Recommendation: X Eligibility not recommended

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Name of the District/Property:

Inventory Number: Eligible: yes Listed: yes

Description of Property and Justification: *(Please attach map and photo)*

The warehouse and distribution facility at 1915-1921 Annapolis Road is a large rectangular one-story building (260 feet x 645 feet) on a six-acre lot in the Westport community of south Baltimore. The building was constructed in two phases in 1964 and 1970. A 1966 plat indicates that the building is framed in steel and set on a concrete slab. The exterior walls on the primary south and west elevations are brick set in a running bond. The south and west elevations include a limestone belt course that extends horizontally along the middle of these elevations. The south elevation is grouped into four bays. The three easternmost bays include a loading dock with three to four garage doors for truck access and one to two smaller pedestrian doors. The west elevation contains irregularly placed garage and pedestrian doors, with five garage doors and four pedestrian doors. The secondary north and east elevations are concrete block, painted white. The east elevation contains no window or door openings. Access restrictions and vegetation limited the visibility of the north elevation, but it also appears to have no window or door openings. The roof is a flat asphalt roof concealed by a low (approximately 6 inch) parapet. A metal street sign that includes information such as the street address and building tenants and set in a brick foundation is located on the north side of the driveway entrance to the building. The driveway entrance is located on the east side of Annapolis Road, on the south side of the building.

Property History

The building at 1915-1921 Annapolis Road was constructed as the Mid-City Industrial Center by the Essjay Company, a Baltimore real estate development company, as leasable warehouse and manufacturing space with multiple units of 20,000 to 120,000 square feet (Baltimore Sun 8/23/1964). The site, on the southern periphery of Baltimore and near several new and soon to be constructed interstates - Maryland Route 295 (Baltimore-Washington Parkway), Interstate 695 (the Baltimore Beltway), and Interstate 95 in Baltimore County. The Mid-City Industrial Center was one of several warehouse/distribution facilities constructed in southwest Baltimore able to access the new interstate highway system and its connections to city arterial roadways for shipping and receiving freight.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended **Eligibility not recommended**

MHT Comments:

Reviewer, Office of Preservation Services **Date**

Reviewer, National Register Program **Date**

The east half of the Mid-City Industrial Center was constructed in 1964 for tenants American Excelsior Corporation and the Baltimore Luggage Company. Each company occupied 40,000 square feet. By 1970, the other half of the building was constructed. It appears that the building has generally been leased by three to four companies at a time with spaces of varying square footage.

Eligibility Assessment

The warehouse and distribution facility at 1915-1921 Annapolis Road is considered not eligible for the National Register of Historic Places.

The facility is not considered eligible under Criterion A or B because it is not known to have any associations with persons or events significant to our past.

The facility is not considered eligible under Criterion C because it does not embody distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value.

The facility was not evaluated under Criterion D.

References

Baltimore City Circuit Court. Mid City Industrial Center, Section II, 1919 Annapolis Road. Plat Book JFC, p. 2025, MSA C2828-4917. Accessed online at www.plats.net on April 27, 2017.

Baltimore City Circuit Court. Mid City Industrial Center, Block 7419. Plat Book JFC, p. 2025, MSA C2828-4916. Accessed online at www.plats.net on April 27, 2017.

Baltimore Sun. 8/23/1964. Excelsior Building Planned.

Baltimore Sun. 8/23/1964. Industrial Center is Planned.

United States Geological Survey. 1983. Baltimore East 7.5' Quadrangle.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

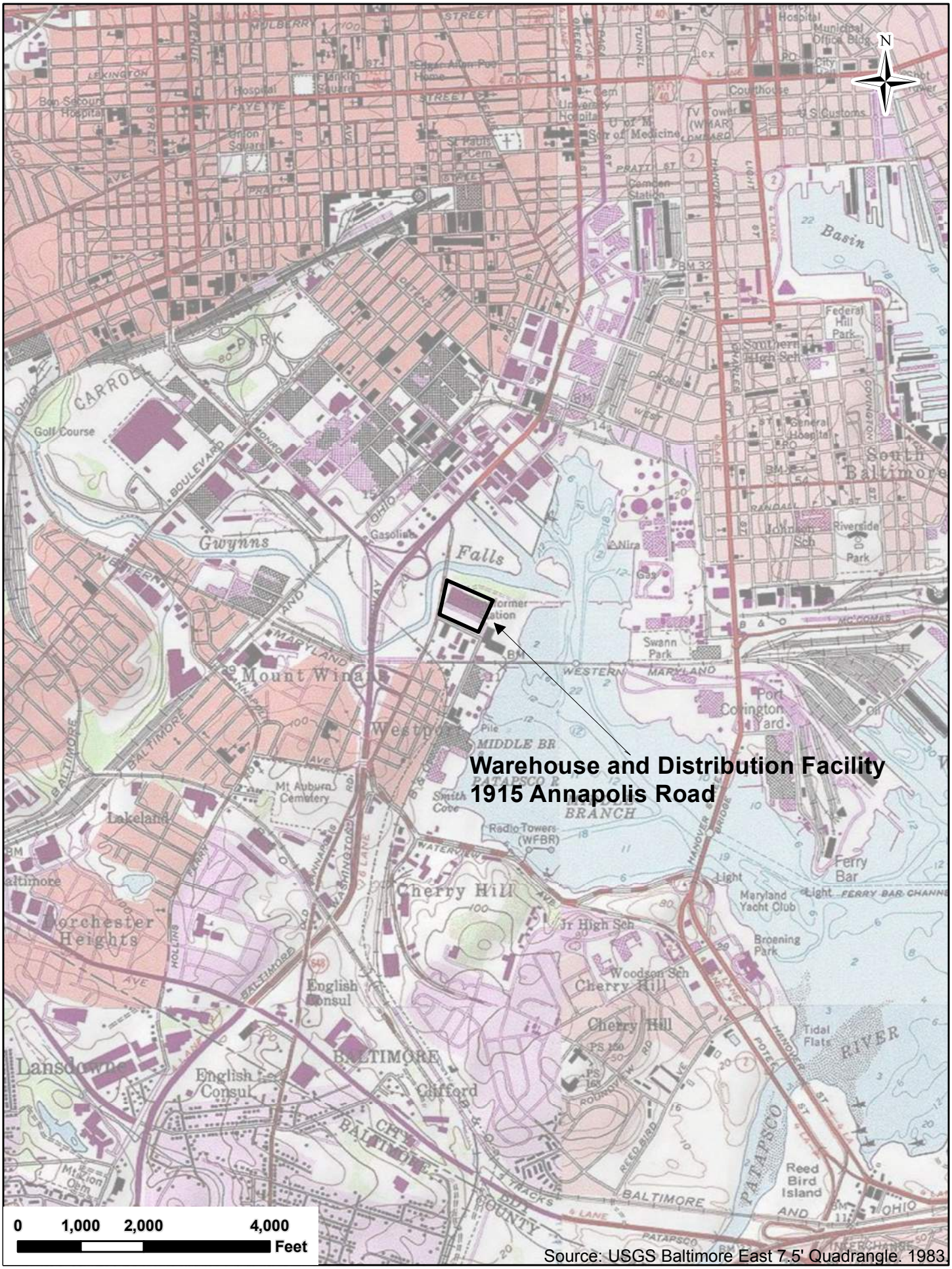
MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**


N
Warehouse and Distribution Facility
1915 Annapolis Road
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1,000
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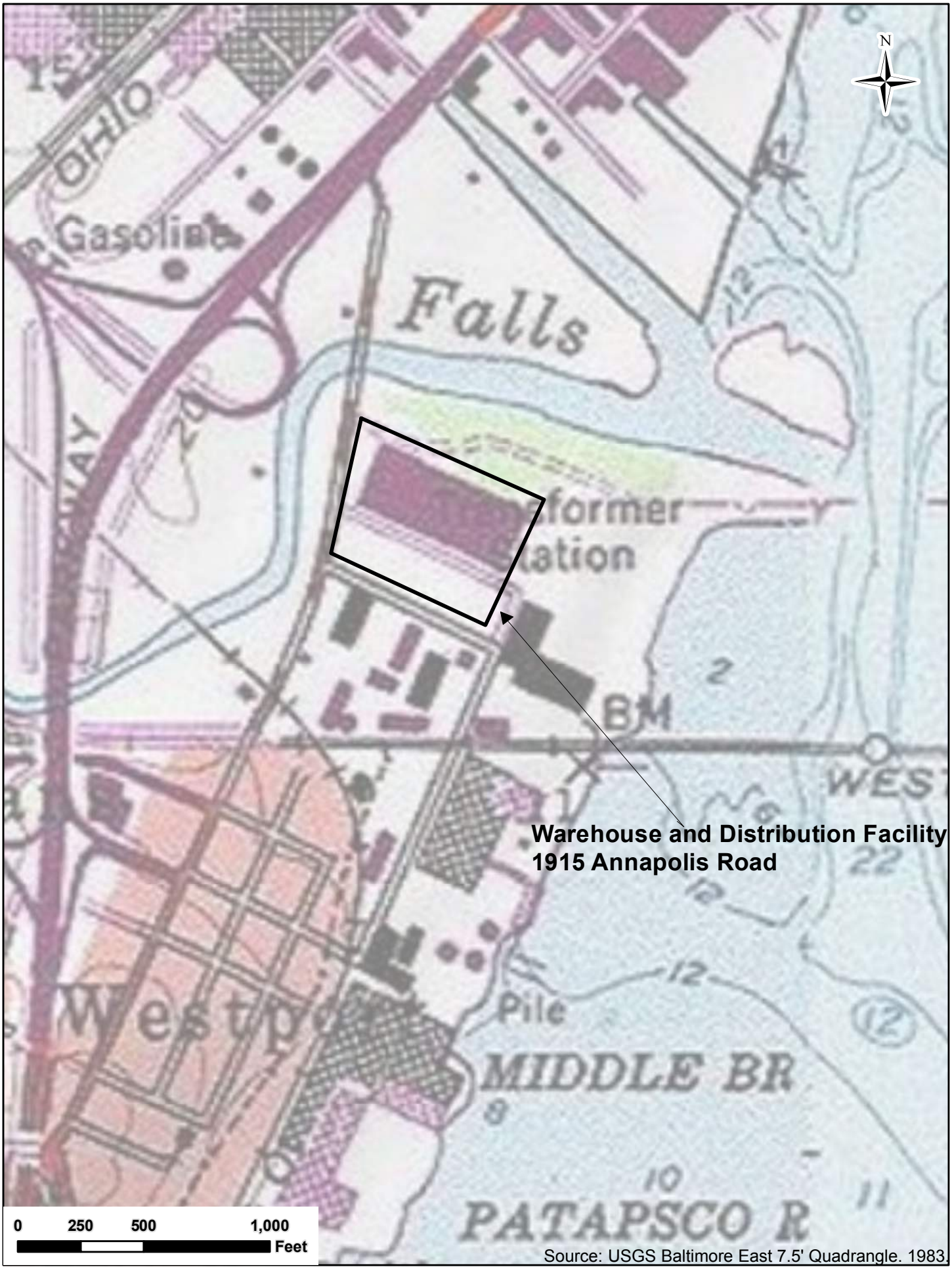
Feet
Source: USGS Baltimore East 7.5' Quadrangle. 1983.



Source: USGS Baltimore East 7.5' Quadrangle. 1983.

South and west elevations of the Warehouse and Distribution Facility at 1915-1921 Annapolis Road, facing north. Image file: Warehouse and Distribution Center_2017-10-10_01.TIF

South and partial west elevations of the Warehouse and Distribution Facility at 1915-1921 Annapolis Road, facing northeast. Image file: Warehouse and Distribution Center_2017-10-10_02.TIF

South and east elevations of the Warehouse and Distribution Facility at 1915 Annapolis Road, facing northwest. Image file: Warehouse and Distribution Center_2017-10-10_03.TIF

MARYLAND HISTORICAL TRUST
SHORT FORM FOR INELIGIBLE PROPERTIES

Property Name: Warehouse

Address: 1001 E. McComas Street

City: Baltimore Zip Code: 21230 County: Baltimore County

USGS Quadrangle(s): Baltimore East

Tax Map Parcel Number(s): 0000 Tax Map Number: 0024

Project: I-95 Access Improvements - Caton Ave to Ft Mc Henry Tunnel Agency: Maryland Transportation Authority

Agency Prepared By: Straughan Environmental, Inc.

Preparer's Name: Sarah Michailof Date Prepared: 11/6/2017

Preparer's Eligibility Recommendation: X Eligibility not recommended

Complete if the property is a non-contributing resource to a NR district/property:

Name of the District/Property:

Inventory Number: Eligible: yes Listed: yes

Description of Property and Justification: *(Please attach map and photo)*

Two warehouses owned by the Transoceanic Cable Ship Company are located at 1001 East McComas Street on the Locust Point peninsula at Port Covington in South Baltimore, MD. The southern warehouse (constructed in 1988) is located on Pier 7 and the northern warehouse (constructed in 1929) is located on Pier 8 of the former McComas Street Terminal, a shipping facility constructed by the City of Baltimore and originally operated by the Western Maryland Railroad.

The southern warehouse on Pier 8 replaced Pier Shed 8 of the McComas Street Terminal between 1988 and 1994. It is a long and narrow, two-story metal sided building and is rectangular in plan with a metal front-gabled roof. It is 735 feet long and 70 feet wide. Centered on each elevation is a large metal sliding door to allow passage of freight and equipment. On the north and south elevations of the building, these doors are approximately 15 feet wide. On the east and west elevations, these doors are approximately 30 feet wide. There are corresponding entrance doors for pedestrians adjacent to the freight doors, and at the northwest and southeast corners of the building. The east elevation of the building includes 11 low window openings, equally spaced along the length of the façade. The front-gabled roof is clad in sheet metal.

The northern warehouse on Pier 7 is the same building as the West Marginal Warehouse identified in a 1929 photograph of the McComas Street Terminal (Baltimore Sun 10/18/1929). Like the warehouse to the south, this building is also long, narrow, and rectangular in plan. It is 625 feet long by 80 feet wide. All exterior siding materials have been replaced with metal siding. The warehouse is two levels in height. A vehicle ramp leads to a second level vehicle parking and storage structure that is centered on the east elevation of the building and allows vehicle access through a metal sliding freight door. Other entrances to the building include irregularly placed metal freight doors (two along the north elevation and two along the east elevation). Windows are irregularly placed along the east and west elevations. The front-gabled roof is clad in sheet metal.

Piers 7 and 8 extend into the Middle Branch on a solid filled structure with concrete and asphalt paved deck. The structure is approximately 1,700 feet long and 225 feet wide.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended **Eligibility not recommended**

MHT Comments:

Reviewer, Office of Preservation Services **Date**

Reviewer, National Register Program **Date**

Property History

The buildings on Piers 7 and 8 are the last remnants of the McComas Street Terminal, constructed by the City of Baltimore and originally leased by the Western Maryland Railway Company beginning in 1929. The Baltimore City Port Development Commission provided details for its plans for the terminal in the Baltimore Municipal Journal in April 1922. The Commission noted that the City-owned property south of McComas Street, with 2,400 feet of waterfront, was well-suited for use as an ocean terminal with ready access to Western Maryland Railway, Baltimore and Ohio Railroad, Harbor Belt Line, and Pennsylvania Railroad terminals (Baltimore City Port Development Commission 1922). The Commission further noted that the level of commerce in Baltimore in 1940 was anticipated to be 2.8 times the level of commerce observed in 1920, and that the terminal was needed to support the growth. The J.E. Greiner Company led a consultant team that designed and constructed the McComas Street Terminal between 1927 and 1929 (Baltimore Sun 10/18/1929).

The Terminal included a total of five buildings when constructed in 1929. Ships were unloaded at the West Marginal Warehouse on Pier 7, Pier Shed 8, or the South Marginal Wharf on Pier 9. Two other warehouses included Merchandise Warehouse A and an additional warehouse north of the South Marginal Wharf (Figure 1). The Western Maryland Railway could access these warehouses and sheds via rail. Photographs from the 1929 opening of the terminal show the West Marginal Warehouse and Pier Shed 8 and the rail and metal truss work that supported a crane way that allowed cargo transfers between trains, ships, and the warehouses (Figure 2; Baltimore Sun 10/18/1929).

In 1955, the City undertook improvements to the terminal, including pier additions. In 1957, the City transferred the McComas Street Terminal to the Maryland Port Authority (Baltimore City Land Records Liber JFC 355 Folio 400; Baltimore Sun 8/15/1957). By the 1970s, mergers within major railroads were resulting in the closing of duplicate rail facilities, and when the Western Maryland Railway was absorbed into the Baltimore and Ohio Railroad in 1973, their tenancy at the McComas Street Terminal ended.

Two of the structures that comprised the McComas Street Terminal - the Merchandise Warehouse A and the South Marginal Wharf on Pier 9 - were razed between 1974 and 1988 (STV/Lyon Associates 1988). The Maryland Port Authority opened the Cruise Maryland Terminal in this location in 2007 (Baltimore Sun 3/16/2013).

The warehouse on Pier 7 and pier shed on Pier 8 were purchased by Transpacific Communications in 1988, and then by Transoceanic Cable Ship Company in 1997. A 1988 plat indicates that Pier Shed 8 was razed and railroad tracks removed after 1988. At the same time, the metal truss work and rail of the craneway was removed from the West Marginal Warehouse and it underwent extensive exterior renovations that included reconfiguration of windows and installation of sheet metal exterior siding. Transoceanic Cable Ship Company has a subsidiary, TE Connectivity, that maintains a fleet of ships that install fiber optic communications cables on the seabed floor.

Eligibility Assessment

The two warehouses at 1001 East McComas Street are considered not eligible for the National Register of Historic Places.

The warehouses are considered not eligible under Criterion A. The northern warehouse is associated with the McComas Street Terminal, which was constructed to accommodate the growth of commerce in Baltimore and provide a needed ocean terminal. However, the current warehouse is the only remaining building of that terminal facility, and it has been heavily altered. The terminal was no longer needed because it became a duplicate facility; the Western Maryland Railway was absorbed into the Baltimore and Ohio Railroad by 1973, and the Baltimore and Ohio Railroad already operated the terminal facilities that it needed at Curtis Bay and other areas on the Patapsco River. The southern warehouse is not associated with the McComas Street Terminal,

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

and was constructed after 1988.

The warehouses are considered not eligible under Criterion B because they are not associated with the lives of individuals whose specific contributions to history can be identified and documented.

The warehouses are considered not eligible under Criterion C because they are not significant for their physical design and construction.

The warehouses were not evaluated under Criterion D.

References

Baltimore City Port Development Commission. April 7, 1922. "The Port Development Plan of Baltimore." Baltimore Municipal Journal: A Semi-Monthly Publication of Facts Issued by the City Government. Volume 10, Number 7.

Baltimore Sun. October 18, 1929. Formal Announcement: The Completion of the McComas Street Ocean Terminal.

Baltimore Sun. January 9, 1955. The Port of Baltimore.

Baltimore Sun. March 19, 1956. Provisions of the Port Bill.

STV/Lyon Associates. April 29, 1988. Final Plan, McComas Street Terminal, Part of the South Locust Point Marine Terminal. Plat Book SEB, page 3226. Accessed on plats.net: http://www.plats.net/pages/unit.aspx?cid=BC&qualifier=C&series=2829&unit=579&page=adv1&id=403662151

Western Maryland Railway. June 7, 1948. McComas Street Terminal, Port Covington, Baltimore, MD. Station Map. Plat Book MLP, page 53. Accessed on plats.net: http://www.plats.net/pages/unit.aspx?cid=BC&qualifier=C&series=2827&unit=1123&page=adv1&id=403662151

United States Geological Survey. 1983. Baltimore East 7.5' Quadrangle.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

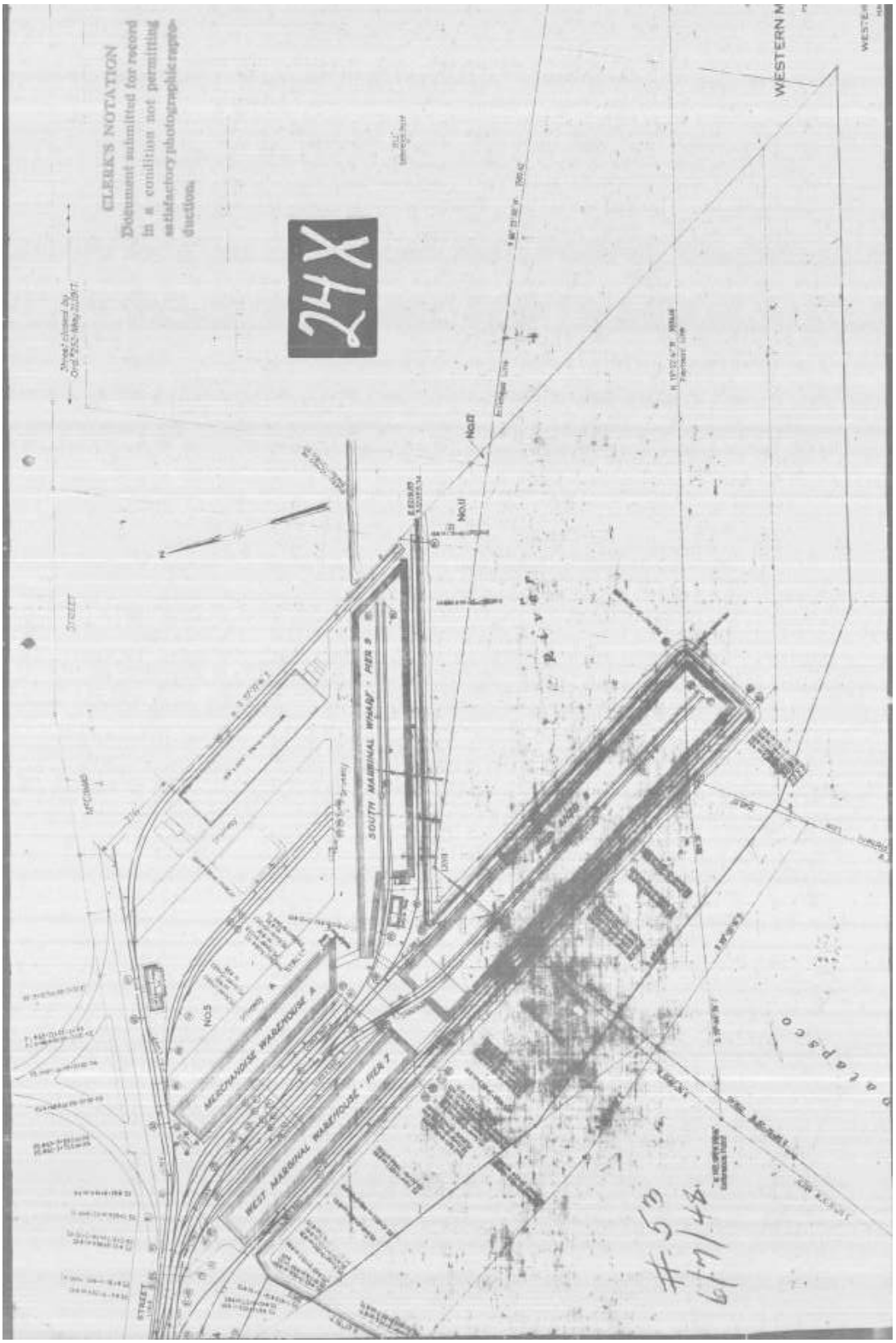


Figure 1. Station Map of McComas Street Terminal, Western Maryland Railway Company August 7, 1948

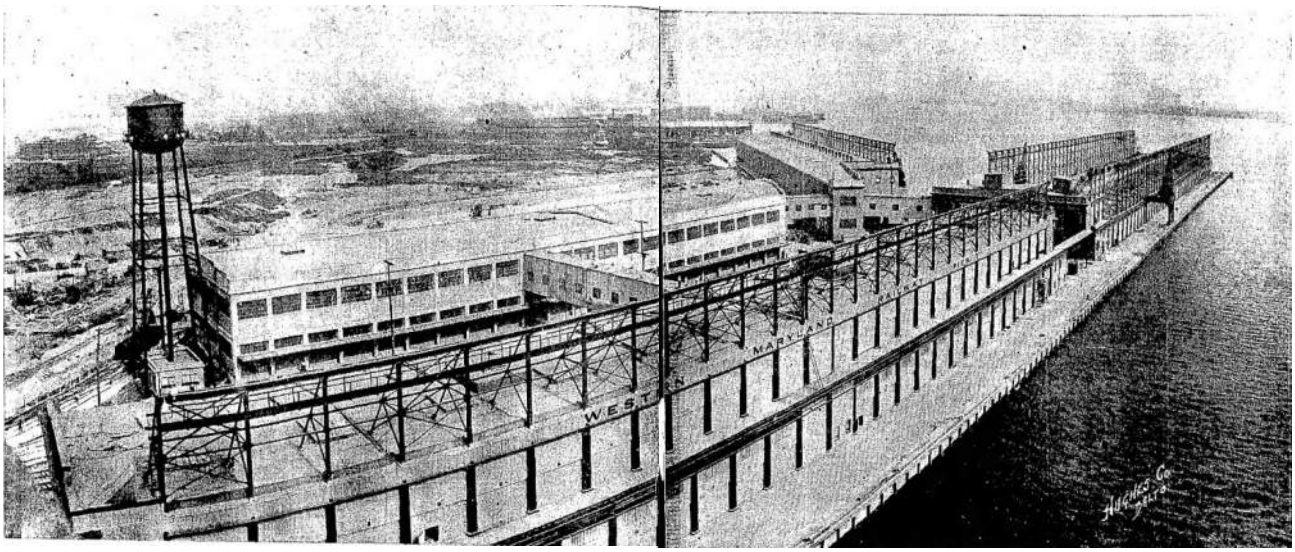


Figure 2. Photo from the Baltimore Sun (October 18, 1929) showing the McComas Street Terminal of the "Port of Baltimore." The West Marginal Warehouse – Pier 7 (the current northern warehouse operated by TE Connectivity) is in the foreground. Pier Shed 8 (now razed) with its metal trusswork associated with the crane way that allowed cargo transfer between ship and train, is visible in the background.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TE Connectivity
1001 E. McComas Street
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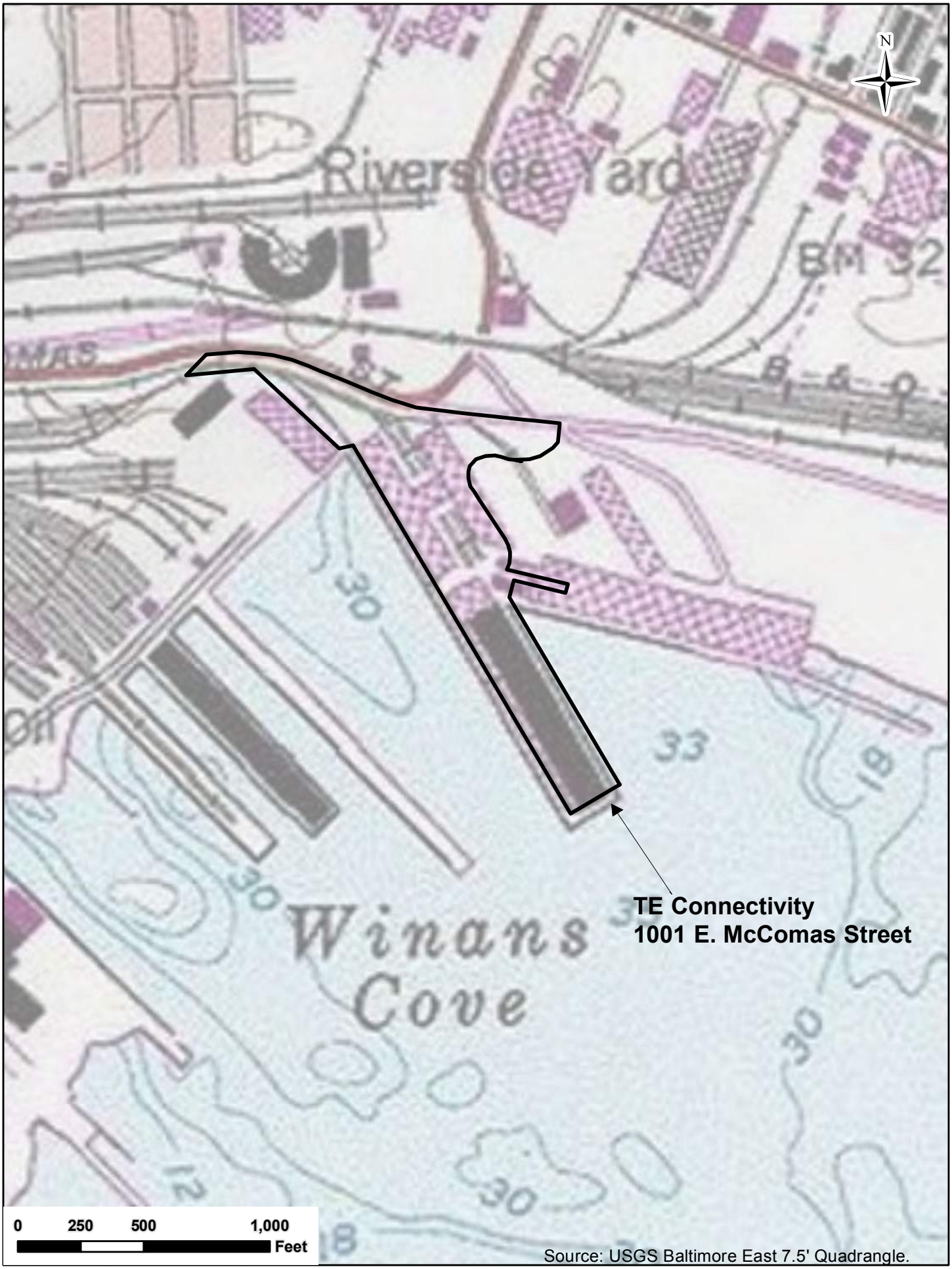
Feet
Source: USGS Baltimore East 7.5' Quadrangle.


N
Riverside Yard
BM 32
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33
18
30
Winans
Cove
30
12
30
8
TE Connectivity
1001 E. McComas Street
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1,000
Feet
Source: USGS Baltimore East 7.5' Quadrangle.

Western elevation of the south warehouse at 1001 E. McComas Street, facing southeast.
Image file: Warehouse_2017-10-10_01.TIF

North elevation of the northern warehouse at 1001 E. McComas Street, facing south towards the water.
Image file: Warehouse_10-10-2017_02.TIF

Western elevation of the northern warehouse at 1001 E. McComas Street, facing northeast. Image file: Warehouse_2017-10-10_03.TIF

Middle west elevation of the northern warehouse at 1001 E. McComas Street, facing east. Image file: Warehouse_2017-10-10_04.TIF

MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes ____ no ____

Property Name: Lyon, Conklin and Company Inventory Number: B-1055

Address: 2101 Race Street Historic district: ____ yes X no

City: Baltimore Zip Code: 21230 County: Baltimore City

USGS Quadrangle(s): Baltimore East

Property Owner: McComas Street 151, LLC Tax Account ID Number: 23101050016

Tax Map Parcel Number(s): 0000 Tax Map Number: 0023

Project: I-95 Access Improvements - Caton Ave to Ft Mc Henry Tunnel Agency: Maryland Transportation Authority

Agency Prepared By: Straughan Environmental, Inc.

Preparer's Name: Sarah Michailof Date Prepared: 11/6/2017

Documentation is presented in: I-95 Access Improvements Cultural Resources Evaluation and Assessment of Effects Technical Report

Preparer's Eligibility Recommendation: X Eligibility recommended ____ Eligibility not recommended

Criteria: X A ___ B ___ C ___ D Considerations: ___ A ___ B ___ C ___ D ___ E ___ F ___ G

Complete if the property is a contributing or non-contributing resource to a NR district/property:

Name of the District/Property: ____

Inventory Number: ____ Eligible: ____ yes Listed: ____ yes

Site visit by MHT Staff ____ yes X no Name: ____ Date: ____

Description of Property and Justification: *(Please attach map and photo)*

The Lyon, Conklin and Company Building was initially surveyed in 1983 for the Maryland Inventory of Historic Properties (MIHP) but was not assessed for eligibility to the National Register of Historic Places at that time. The MIHP form was completed by Leslie Barr and Dennis Zembala with the Baltimore Museum of Industry (BMI). This form incorporates and updates the BMI description.

The Lyon, Conklin, and Company Building, constructed in 1922, is a large metal building, rectangular in plan, with a brick office block that occupies most of a 2.5-acre parcel at 2101 Race Street in south Baltimore, MD on the west side of Port Covington. The building sits north of an abandoned Western Maryland Railway line, which once branched into the Railway's port terminal less than 500 feet east. When constructed, the plant was one of multiple late nineteenth and early twentieth century industrial complexes on Port Covington with the rail and freight infrastructure in place to support industry. Many of these complexes have been removed – such as the Allied Chemical Plant to the north and the rail terminal to the east. Interstate 95 passes the Lyon, Conklin and Company Building to the north, on a visually prominent overpass where the chemical plant once stood. A row of seven early twentieth century rowhouses occupy lots north of the building and Swann Park, which contains four ballfields, is located on the west side of the building.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ____ **Eligibility not recommended** ____

Criteria: ___ A ___ B ___ C ___ D **Considerations:** ___ A ___ B ___ C ___ D ___ E ___ F ___ G

MHT Comments:

Reviewer, Office of Preservation Services **Date**

Reviewer, National Register Program **Date**

The manufacturing space of the building is composed of three conjoined metal sheds with walls and roof primarily constructed of corrugated "Lyonore" metal alloy, a form of galvanized steel developed by the Lyon, Conklin and Company. Structural support for the gable-roofed sheds are provided by steel framing with roof support by Fink trusses. The sheds sit on a concrete foundation with a low brick wall that extends along the east and west elevations of the building. The roof truss has been modified to include north facing skylights that are formed by the projection of the south roof plane over the northern one. The skylight windows, however, appear to have been replaced with panels of sheet metal. Louvered steel-framed windows extend along all four exterior walls of the conjoined metal sheds, just below the roofline. The two southernmost sheds are the same dimensions - 466 feet long, 72.5 feet wide, and 48 feet high. As-built plans for the plant have not been located, but 1953 Sanborn fire insurance maps indicate that these sheds housed the machine and fabricating shops and contained warehouse space. Large metal track doors are centered on the east side of each shed.

The northernmost shed is approximately 120 feet shorter than the other sheds, and is punctuated by the brick office block. The shed is 345 feet long and 72.5 feet wide. West of the brick office block, the shed contained a 100-foot by 72.5 foot warehouse space. East of the office block, the shed contained a 175-foot by 72.5-foot space operated as a metal spinning and plating shop.

The brick office block is centered on the front and north elevation of the building. The four-story brick masonry structure has changed minimally since it was described by Barr and Zembala in 1983. The front façade is four bays wide, the full width of the northernmost shed. The exterior walls are solid masonry, composed of red brick walls with stone and brick trimwork. The formal entrance doors on the end bays of the first floor are neoclassically styled, featuring a pediment above each door. Stone work is also included in a belt course separating the first and second floors, in window sills, and as trim along the roof parapet. A small one-story penthouse, clad in brick, extends from the roofline on the east side of the office building. Barr and Zembala described the roof of the office building as having a red tile roof. There is currently no evidence of red tile – the roof is a flat asphalt roof that is concealed by the high parapet walls. On the first floor of the office block, the two center bays contain tunnel entrances concealed behind metal garage doors. The tunnel entrances extend approximately 75 feet the (the depth of the building) to the former fabricating shop, although the railroad track on the east entrance no longer enters into the building, and no longer connects to the former Baltimore and Ohio Railroad (current CSX) rail lines. Each bay of the second through fourth floors features paired, double hung aluminum or steel windows. The office space for Lyon, Conklin, and Company and Maryland Metal Building Company was housed here.

Three lean-to sheds are located on the south or rear elevation of the southernmost shed. The larger and easternmost of the three is a metal-sided and roofed structure that was identified as a woodworking shop on the 1953 Sanborn Fire Insurance Atlas. The functions of the other two sheds, also metal-sided and roofed, were not identified.

Property History

The Lyon, Conklin and Company, manufacturers of tinplate and metal goods, was founded in Baltimore in 1860 by William Lyon and became a copartnership between Lyon and Charles A. Conklin in 1876 (Baltimore Sun 11/20/1876). During the late nineteenth and early twentieth century, rail and port infrastructure along the Baltimore waterfront encouraged the development of industrial areas with a variety of manufactures, and the manufacture of metal goods was well represented. Lyon, Conklin and Company joined other companies on Locust Point such as the National Enameling and Stamping Company, Maryland's largest tinware manufacturer (Goold and Bird 2002). By 1922, during a period of rapid industrial expansion in Baltimore, the company opened a manufacturing location on West McComas Street in Port Covington. The plant occupied two city blocks, bounded by West McComas Street to the north, Donaldson Street to the south, Creek Alley to the west, and Clarkson Street to the east. The parcel was bisected by Race Street. Plant construction required the permanent closure of this street. The building design included a four-

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

story brick building at the terminal end of Race Street. A spur line of the Baltimore and Ohio Railroad that followed Race Street allowed delivery of sheet metal and other freight directly into garage bays set on the first floor of the building and into the fabricating shop. Plans for the industrial building were developed by the American Bridge Company, materials were manufactured by the Maryland Metal Building Company, and the building was constructed by George B. Monmonier & Son, General Contractors (Figures 1 and 2; Industrial Development and Manufacturers Record 1921).

Advertisements by the Maryland Metal Building Company that appeared in industry trade literature proclaimed that the building was a "Baltimore First" – the largest sectional metal building in the United States (Industrial Development and Manufacturers Record 1941). Other sales literature advertised buildings constructed by the Maryland Metal Building Company, which included warehouses, foundries, boiler houses, truck garages and railroad buildings (Maryland Metal Building Company 1925).

During World War II, the Maryland Metal Building Company supplied Lyonore metal manufactured at the McComas Street Plant for defense needs such as barracks and other military buildings.

The Maryland Metal Building Company went out of business in the 1960s, but Lyon, Conklin and Company continued to manufacture sheet metal at its McComas Street plant, eventually manufacturing metal ductwork for heating and air conditioning systems and other supplies (Baltimore Sun 1/18/1993).

In 2003, Lyon, Conklin, and Company left its McComas Street Building. The company continues in business as a subsidiary of Ferguson HVAC Lyon Conklin with 29 offices in the Mid-Atlantic region.

From 2003 until 2014, the building was owned by Schuster Concrete. In 2014, the building was sold to McComas Street 151 LLC. The building is currently vacant and the large metal sheds stand empty. They no longer contain sheet metal fabricating equipment.

Eligibility Assessment

The Lyon, Conklin and Company Building is eligible for listing on the National Register of Historic Places under Criterion A. The building is associated with the industrial growth of Baltimore, particularly in Port Covington following the Civil War. The company was one of the largest manufactures of tin products in the nineteenth century, but was not as large and diverse as National Enameling and Stamping Company. Nevertheless, it is one of only a few remnants of the tinplate manufacturing industry in Baltimore. It's area of significance is industry, and its period of significance is from 1922, when the McComas Street Plant opened, until 2003 when manufacturing at the plant ceased. The boundary for the National Register-eligible plant is defined as the parcel boundary.

The building is not eligible under Criterion B as it is not associated with individuals whose specific contributions to history can be identified and documented.

The building does not appear to be eligible under Criterion C. Although sale literature proclaimed the building to be the largest sectional metal building in the United States at the time of its construction, this statement has not been corroborated.

The building was not evaluated under Criterion D.

References

Baltimore Sun. 11/20/1876, Copartnership Notices.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

Barr, Leslie and Dennis Zembala. Lyon, Conklin and Company (B-1055). Maryland Historical Trust State Historic Sites Inventory Form.

Goold, Jennifer and Betty Bird. June 28, 2002. National Enameling and Stamping Company, B-1069. National Register of Historic Places Registration Form.

Industrial Development and Manufacturers Record, Volume 80: November 24, 1921. "Building Contracts Awarded: Metal-Working Plants."

Maryland Metal Building Company. 1925. The Maryland Metal Building: Portable Yet Permanent.

United States Geological Survey. 1983. Baltimore East 7.5' Quadrangle.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

Figure 1. Trade journal advertisement for the Lyon, Conklin, & Company (Industrial Development and Manufacturers Record, Volume 80, November 24. 1921.)

The Triumph of an Idea

EVER since the discovery of Lyonore Metal, Lyon, Conklin & Co. have been recommending this remarkable rust-resisting alloy for roofing, spouting and gutters—and it has always lived up to its reputation as a "lifetime" metal.

Naturally, when this company decided upon their new plant they insisted that it be of Lyonore Metal throughout—built the Maryland way, of interlocking units.

Now in course of erection, this building will cover 100,000 sq. ft. of floor space and will be the largest sectional metal building in the South. It will stand as an excellent example of the adaptability of Maryland buildings to the largest industrial needs.

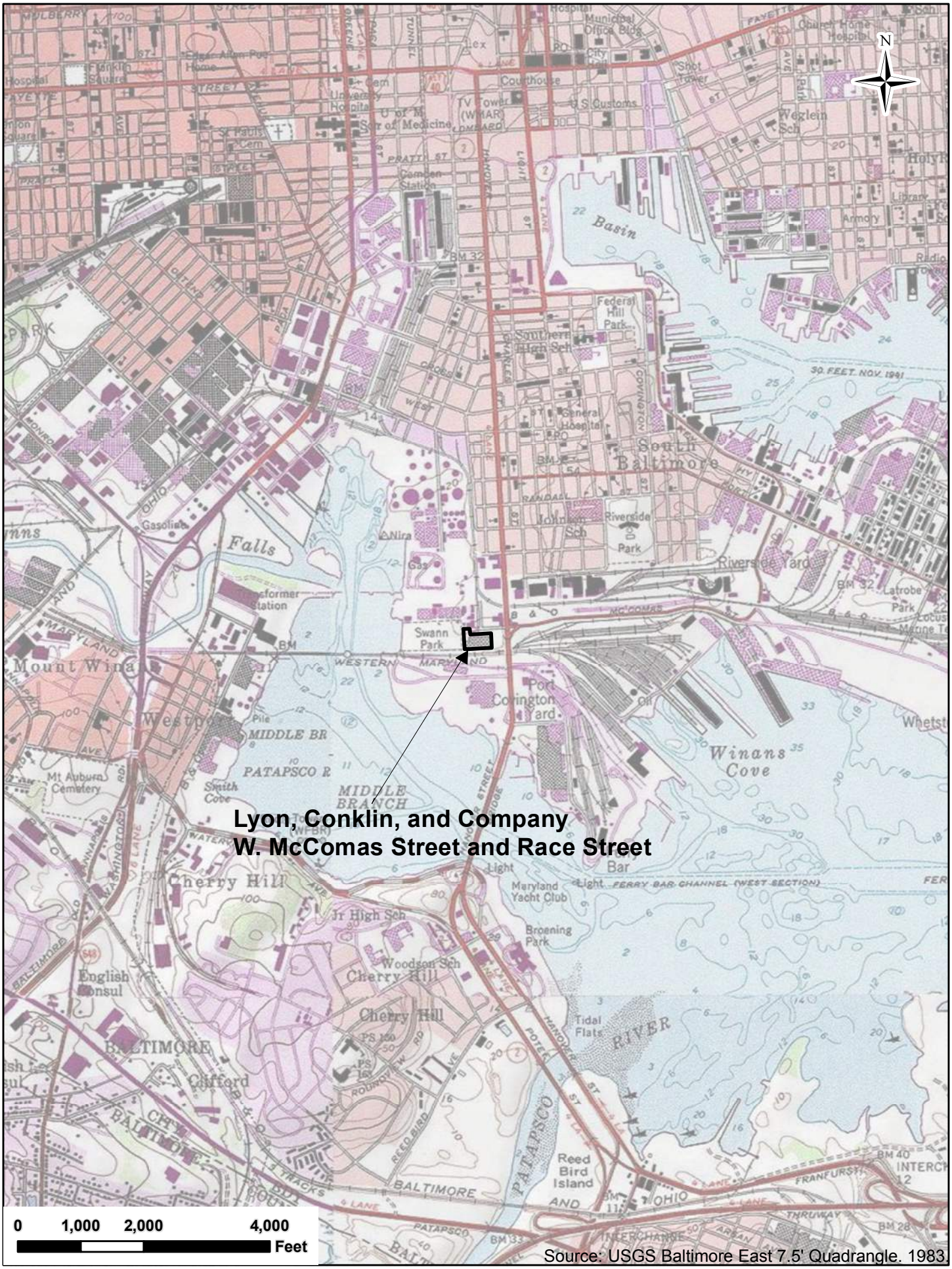
Let us figure on your plans.

MARYLAND METAL BUILDING COMPANY

Manufacturers
RACE & McCOMAS STS.

Phone SOuth 0082
BALTIMORE, MD.

Figure 2. Newspaper advertisement for Lyon, Conklin, & Company's signature Lyonore Metal. 1925.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Lyon, Conklin, and Company
W. McComas Street and Race Street
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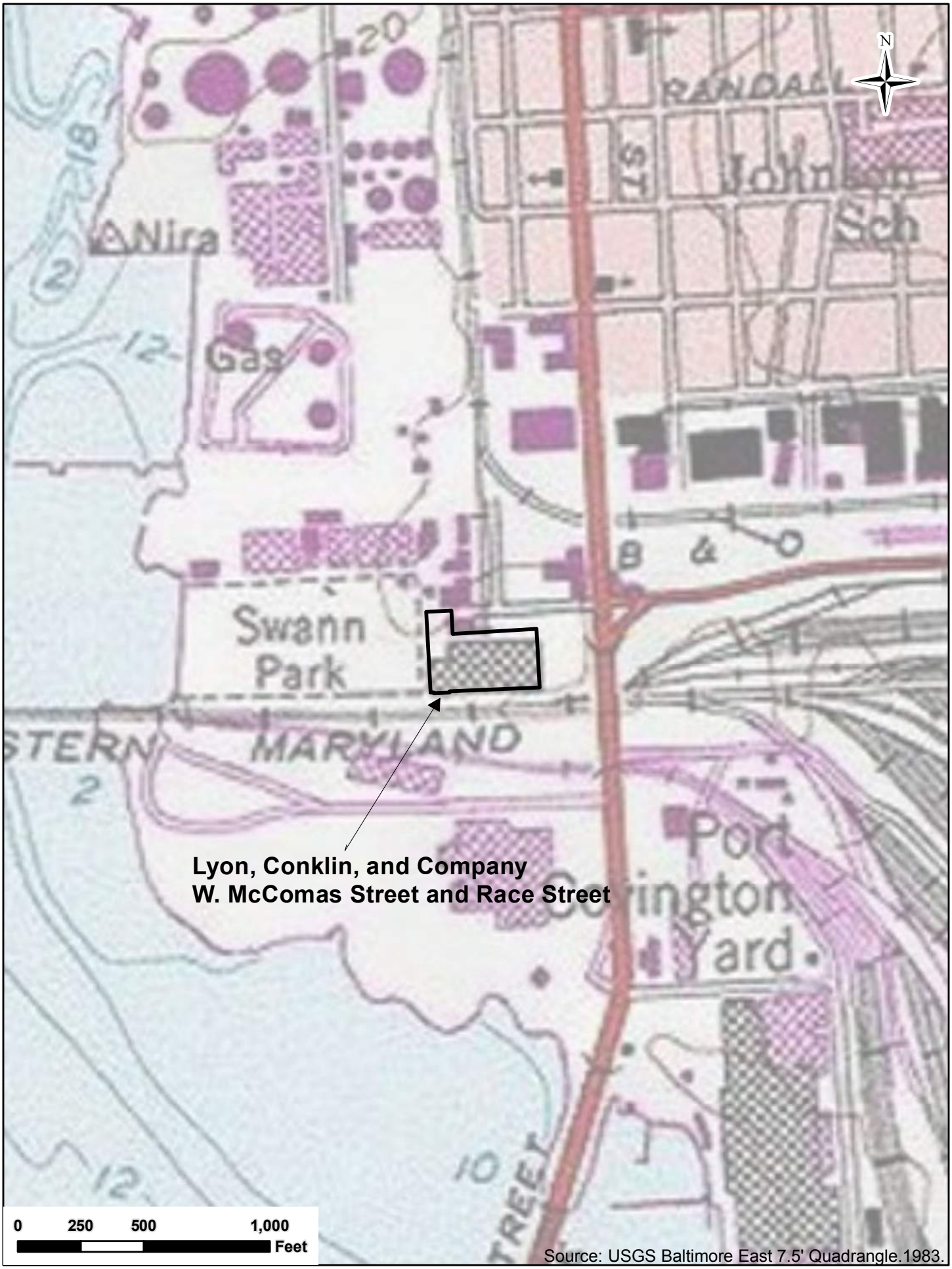
Source: USGS Baltimore East 7.5' Quadrangle. 1983.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Nira
Gas
Swann
Park
MARYLAND
Lyon, Conklin, and Company
W. McComas Street and Race Street
Yard
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Feet
Source: USGS Baltimore East 7.5' Quadrangle.1983.

North elevation of Lyon, Conklin & Company, facing southwest.
Image file: B-1055_2017-10-10_01.TIF

South and east elevations of Lyon, Conklin & Company, facing northwest.
Image file: B-1055_2017-10-10_02.TIF

West elevation of Lyon, Conklin & Company, facing northeast.
Image file: B-1055_2017-10-10_03.TIF

North elevation of Lyon, Conklin & Co. building showing the brick façade and
“Lyon, Conklin, & Co.” sign, facing southwest. Image file: B-1055_2017-10-10_04.TIF

North elevation of Lyon, Conklin & Co. building showing entrance to ‘Sales Office’, facing south.
Image file: B-1055_2017-10-10_05.TIF

MARYLAND HISTORICAL TRUST
SHORT FORM FOR INELIGIBLE PROPERTIES

Property Name: Storage Warehouse

Address: 200 W. McComas Street

City: Baltimore Zip Code: 21230 County: Baltimore City

USGS Quadrangle(s): Baltimore East

Tax Map Parcel Number(s): 0000 Tax Map Number: 0023

Project: I-95 Access Improvements - Caton Ave to Ft Mc Henry Tunnel Agency: Maryland Transportation Authority

Agency Prepared By: Struaghan Environmental, Inc.

Preparer's Name: Sarah Michailof Date Prepared: 11/6/2017

Preparer's Eligibility Recommendation: X Eligibility not recommended

Complete if the property is a non-contributing resource to a NR district/property:

Name of the District/Property: _____

Inventory Number: _____ Eligible: _____ yes Listed: _____ yes

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Description of Property and Justification: *(Please attach map and photo)*

The building at 200 West McComas Street, built circa 1921, is rectangular in plan, and approximately 120 feet wide and 125 feet long. It occupies a 28,367 square foot lot in Port Covington, a community in south Baltimore. It is north of the former Lyon, Conklin and Company Plant (Maryland Inventory of Historic Properties Number B-1055) and a strip of seven rowhouses, south of the Interstate 95 overpass, east of Swann Park, and west of Hanover Street, the major north-south route through Port Covington.

The building consists of three conjoined front-gabled sheds, constructed of concrete block on a concrete foundation. The front façade is three bays wide (one bay per shed) and clad in beige colored stucco panels. Decoration is provided by the inset stucco panels which are light reddish brown, and a roof coping of similar color. A low parapet wall, consisting of a simple arch shape (typical of the Mission Revival style) hides the gap between the south and central shed roofs. The front entrance is located off-center between the south and central bay and is accessed by climbing concrete stairs or a concrete ramp to the entrance landing. Three large eight-part aluminum framed windows (approximately six foot X eight foot) are located along the front façade north of the entrance door.

The northernmost shed is sided in gray ribbed metal siding and has no openings other than an off-set steel door. The south and west rear elevations consist of concrete block walls, and the south elevation is pilastered to provide structural support. The rear elevation features a shed-roofed porch supported by wooden posts and beams. The north elevation was not accessed because it is only visible from the secured yard of the Baltimore Gas and Electric Company's Spring Garden facility. The roof is composed of asphalt sheeting. A chimney extends from the wall in between the south and central sheds. No longer in use, the chimney serves as a pedestal for a statue of a dog, advertising the Dog Resort and Spa which occupies the building.

The interior has been outfitted for its use as a pet boarding and care facility.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

Property History

The industrial building at 200 West McComas Street was constructed by the Morton McI. Dukehart Company, a manufacturer of pumps and engines, circa 1921. The Company was originally headquartered on West Fayette Street. An account in the Iron Trade Review (1921) described the plant as a "small building…which when completed will be devoted to small jobbing work in iron castings." In 1929, the building was sold to the Kansas City Oxygen Gas Company (headquartered in Kansas City, Missouri) as a branch plant. The Kansas City Oxygen Gas Company was founded in 1913 as a manufacturer of compressed gas for medical and industrial uses, and operated branch plants in Chicago, St. Paul, Cincinnati, and Detroit in addition to its new Baltimore plant (Baltimore Sun 3/29/1928). The company's name changed to Puritan Compressed Gas Corporation in 1931 and it merged with a Los Angeles-based company in 1968 to become Puritan-Bennett. By the 1960s, the company was manufacturing specialized medical products such as respirator and ventilator systems for hospitals and high-altitude emergency equipment for airplanes (Baltimore Sun 8/18/1968). In 1979, Puritan-Bennett Corporation sold its plant on West McComas Street, acquiring new office, manufacturing and distribution space in Linthicum Heights and Halethorpe.

Two retailers are known to have operated in the building since 1979, including Marine Wholesalers, Inc. and the Downtown Dog Resort and Spa/Swan Harbor Animal Hospital. The latter moved into the space following extensive remodeling in 2008. In 2016, the building was purchased by 200 West McComas Street LLC, an entity associated with Sagamore Development Company.

Eligibility Assessment

The industrial building at 200 West McComas Street, currently operated as the Downtown Dog Resort and Spa, is not considered eligible for the National Register of Historic Places.

The building is not eligible under Criterion A because it has not made a significant contribution to the industrial development of Baltimore, which fueled the city's growth during the late nineteenth and early twentieth centuries. The building was initially associated with the Morton McI. Dukehart Company, local manufacturer of iron cast pump and pipe accessories. Although metal manufactories were significant contributors Baltimore's growth, the plant was a minor facility that remained in operation for only seven years. The Puritan-Bennett Corporation and its predecessors (the Kansas City Oxygen Gas Company and the Puritan Compressed Gas Corporation) operated a branch plant at the location, but these companies were headquartered in Kansas City, and had a more historically significant relationship with the development of Kansas City and less influence on the industrial development of Baltimore.

The building is not eligible under Criterion B because it is not associated with persons whose specific contributions to history can be identified and documented.

The building is not eligible under Criterion C because it is not significant for its physical design or construction, and has been heavily altered during its 2008 renovation. The building was constructed as two connected front-gabled sheds, a typical industrial design for the early twentieth century, with a third shed added during the 1960s. Extensive exterior and interior modifications have been done to the building since its construction, and it retains little integrity of materials and design since its conversion in use to pet boarding and care.

The building was not evaluated under Criterion D, as it is not anticipated to contribute important information that contributes to our understanding of history.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**

References

Baltimore Sun. 3/29/1928. “Kansas City Oxygen Gas Company Leases Dukehart Plant Here.”

Baltimore Sun. 8/18/1968. “Puritan Firm to Go Public.”

The Iron Trade Review. June 30, 1921. Here and There in Industry. Cleveland: The Penton Publishing Company.

United States Geological Survey. 1983. Baltimore East 7.5’ Quadrangle.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

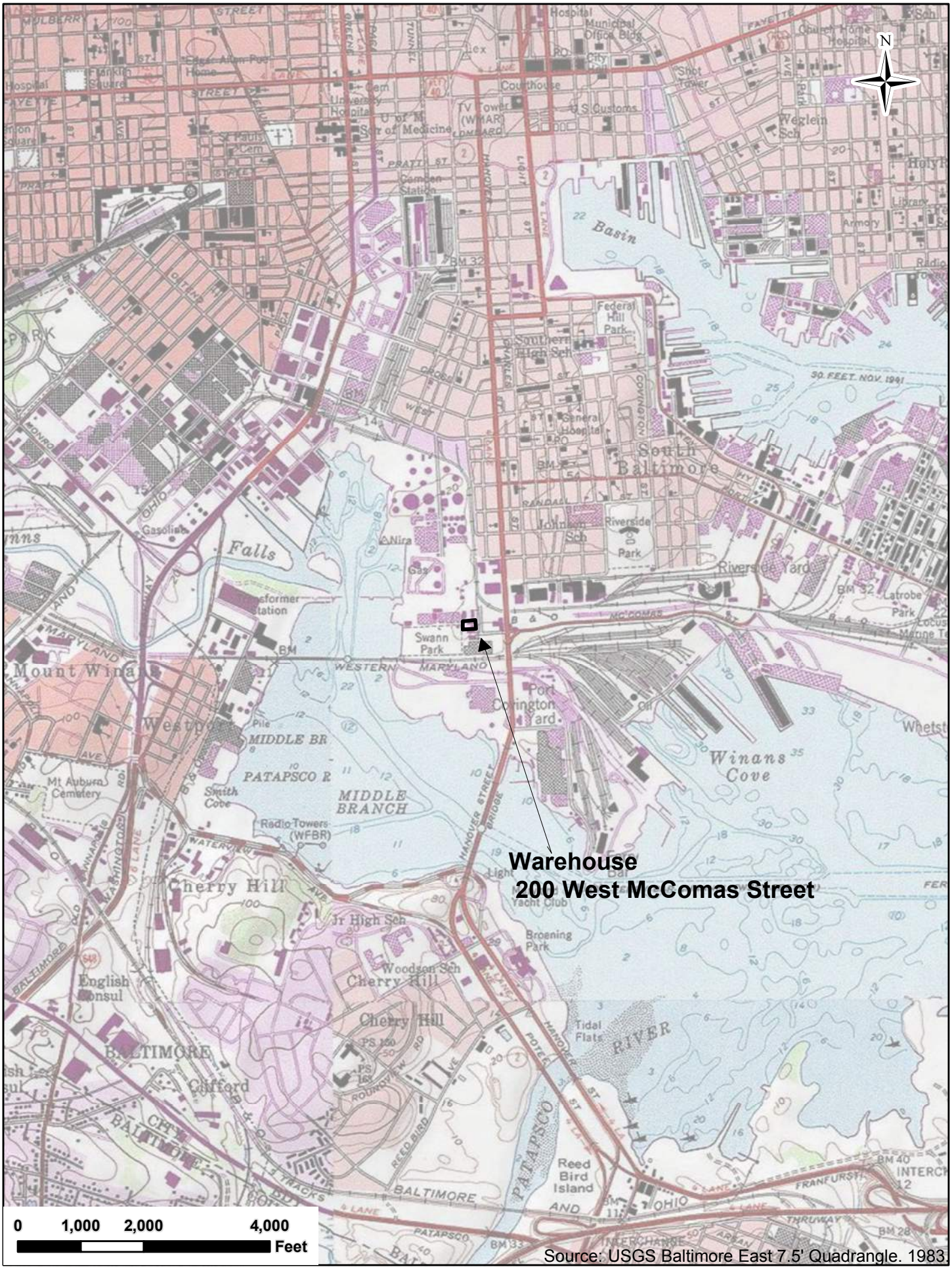
MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

_____ _____

Reviewer, National Register Program **Date**


N
Warehouse
200 West McComas Street
0 1,000 2,000 4,000
Feet
Source: USGS Baltimore East 7.5' Quadrangle. 1983.


N
Nira
Gas
Swann
Park
MARYLAND
Port
Covington
Yard
Warehouse
200 West McComas Street
0
250
500
1,000
Feet
Source: USGS Baltimore East 7.5' Quadrangle. 1983.

South and east elevation of warehouse at 200 McComas Street, facing northwest.
Image file: Storage Warehouse_2017-10-10_03.TIF

South and west elevations of warehouse at 200 West McComas Street, facing northeast.
Image file: Storage Warehouse_2017-10-10_02.TIF