Documented Categorical Exclusion

WMATA Heavy Repair & Overhaul Facility Project

October 23, 2018

Contents

Introduction **1**

1. Detailed Project Description **1**

2. Location **2**

3. Resources of No Concern **8**

4. Affected Resources **9**

4.1. Traffic 9
4.2. Wetlands and Navigable Waterways 12
4.3. Floodplains 12
4.4. Hazardous Materials 15
4.5. Acquisitions and Relocations Required 16
4.6. Construction 16
4.7. Cumulative and Indirect Impacts 17

5. Conclusion **17**

6. References **18**

Appendices

Appendix A – Socioeconomic Resources
Appendix B – Historic and Cultural Resources
Appendix C – Natural and Biological Resources
Appendix D – Federal Consistency Determination
Appendix E – Noise and Vibration
Appendix F – Traffic
Appendix G – Air Quality Conformity
Appendix H – Hazardous Materials

Introduction

The Washington Metropolitan Area Transit Authority (WMATA) proposes the construction of a heavy repair and overhaul (HR&O) facility for Metrorail vehicles in Prince George's County, Maryland. The purpose of the project is to centralize Metrorail car heavy repair and mid-life overhaul activities at a single facility. The project will use Federal funds and the Federal Transit Administration (FTA) is the lead Federal agency. This Documented Categorical Exclusion (DCE) meets WMATA Compact requirements and complies with the National Environmental Policy Act (NEPA), as well as other requirements.

This document is organized as follows:

- Sections 1 and 2 provide a detailed project description and location.
- Section 3 briefly describes resources where no impacts would occur as a result of the project.
- Section 4 describes resources that would be affected by the project.
- Section 5 presents the conclusion.

1. Detailed Project Description

The proposed HR&O Facility site (project site) is 36.6 acres in area and will be located at 3636 Pennsy Drive in Prince George's County, Maryland. The project site, shown in **Figure 1**, consists of several properties with active light industrial uses, located along the western side of Pennsy Drive between Veterans Parkway and Ardwick-Ardmore Drive. The project site includes a connection to the Metrorail Orange Line between the Landover and New Carrollton Metrorail Stations Facility components include:

- Enclosed HR&O service bays to accommodate up to 40 rail cars;
- Rail car truck shop;
- Vehicle storage tracks to accommodate up to 24 rail cars;
- Bays for railcar repair;
- Traction power substation;
- Yard operations control tower;
- Roadway access and loading docks for heavy trucks;
- Stormwater management facilities;
- Employee parking; and
- Operations and administrative offices.

Current heavy repair and overhaul activities would be moved from the Brentwood Yard and the Greenbelt Yard. The HR&O facility would accommodate a total of approximately 370 employees across three shifts. The site concept plan is shown in **Figure 2.**

Access to the site would be provided via the existing roadway network. The site entrance would be along Pennsy Drive. Construction activities would be limited to the proposed site and would include:

- Demolition of existing structures;
- Excavation;
- Earth disturbance;
- New structures;
- New track; and
- Grading.

The proposed facility will provide operation and administrative offices, including WMATA's Car Track and Equipment Maintenance (CTEM) division and the Office of Track and Structures (TRST). It will also include space for the Rail Operations Control Center (ROCC) and the Maintenance of Way Center of Excellence (MOW CoE). These functions oversee operations of the rail (ROCC) and monitoring and repair of the railroad (MOW CoE).

2. Location

The location of the proposed HR&O facility is shown in an aerial view in **Figure 1** and on the U.S. Geological Survey quadrangle map in **Figure 3**. The site is currently occupied by an approximately 390,000 square-foot warehouse facility. The warehouse is surrounded on three sides by asphalted parking areas (**Figure 4** and **Figure 5**). The western end of the property encompasses the channelized Beaverdam Creek which is bordered by a narrow margin of secondary regrowth (**Figure 6**).

The site is located in an area of light industrial development, and the surrounding properties to the north, south and east are either developed for warehouse, industrial, or commercial uses, or are undeveloped lots (**Figure 7** and **Figure 8**).

No residential properties are located on or immediately adjacent the site. However, neighborhoods exist within a ¼ mile of the site. To the west of the project site, the neighborhoods of Hanson Oaks, West Lanham Hills, and Bellemead are separated from the project site by open space, existing rail lines (Metrorail, Amtrak, CSXT) and U.S. Route 50 (John Hanson Highway). To the east of the site, the neighborhood of Glenarden-Ward-1 is separated from the project site by secondary roadways and industrial properties. These neighborhoods are primarily minority (90 percent) and 20 percent of families are considered low-income. See **Appendix A**, Socioeconomic Resources, for more detailed analysis on land use, zoning, and minority and low-income populations.

Figure 1: Project Location Map

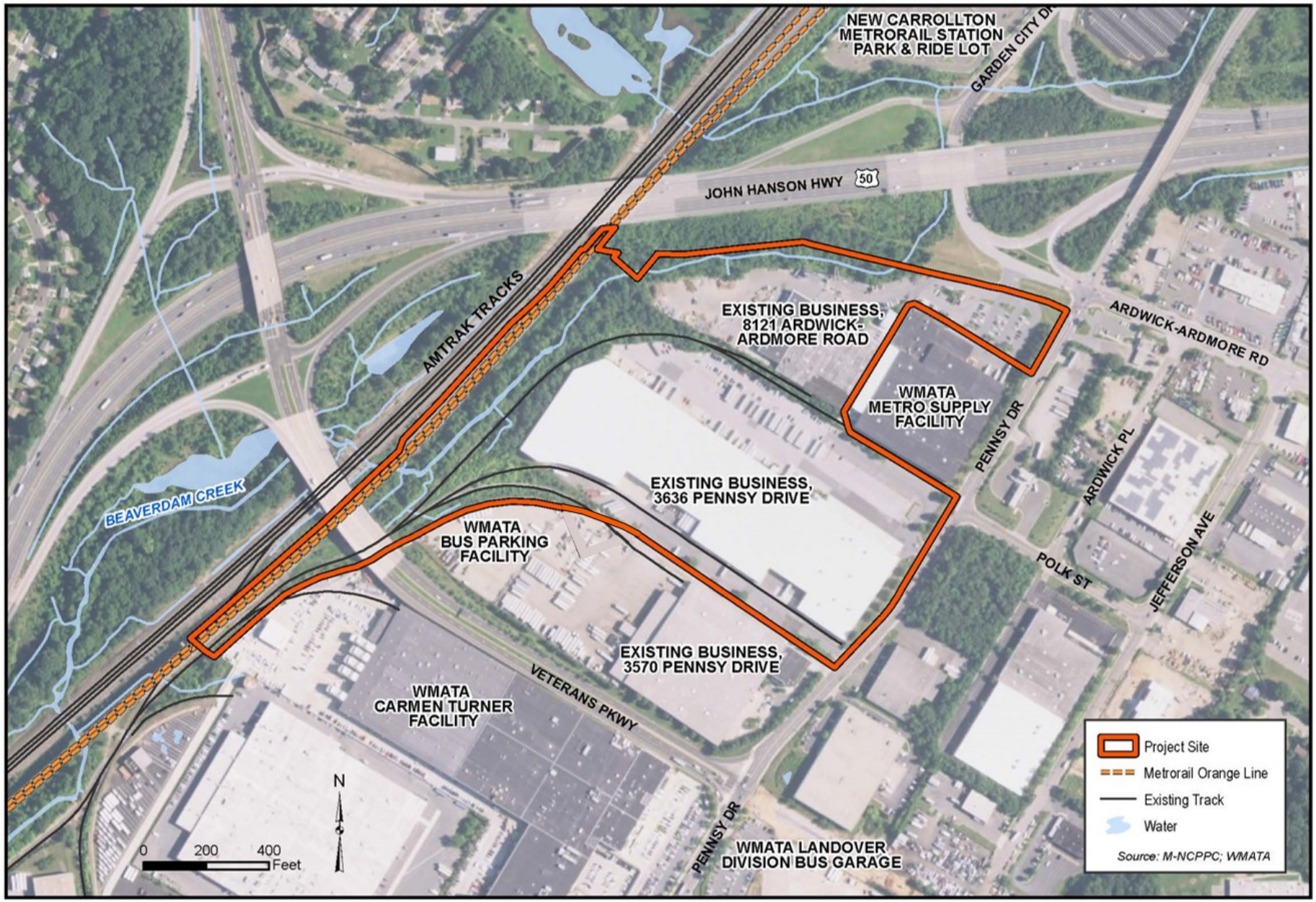


Figure 2: Site Concept Plan

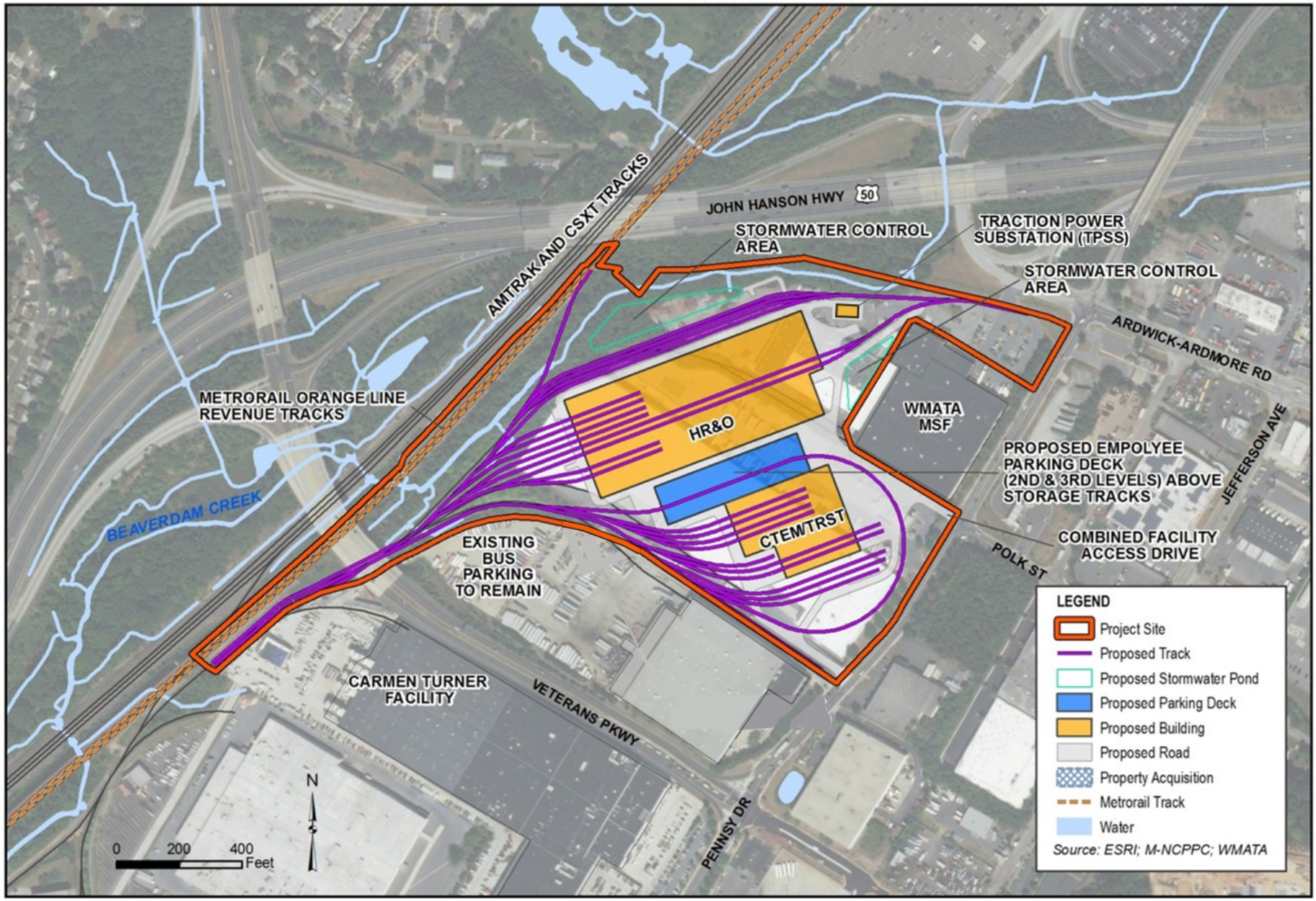


Figure 3: Project Location on USGS Quadrangle Map

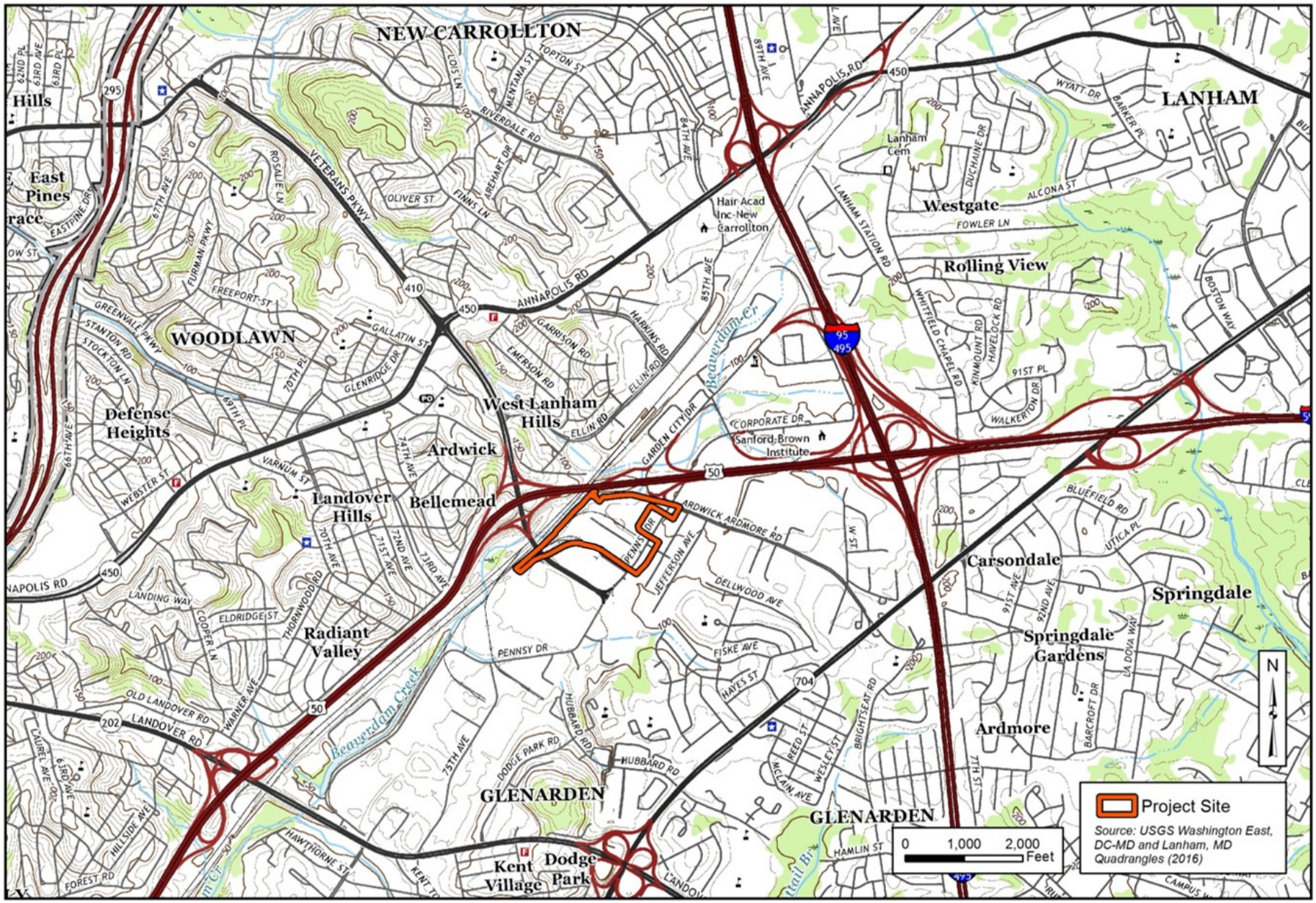


Figure 4. 3636 Pennsy Drive, south and east facades.

Figure 5. Southern edge of 3636 Pennsy Drive.

Figure 6. Wooded area bordering Beaverdam Creek at western edge of property; corner of warehouse visible on right.

Figure 7. Property across Pennsy Drive to the east; undeveloped woodlot visible on left.

Figure 8. Partial view of warehouse adjacent to 3636 Pennsy Drive to the north (on the right)

3. Resources of No Concern

WMATA reviewed readily available information to identify the presence of resources within a ¼-mile radius of the project site. The following summarizes resources that would not be affected by the proposed project:

- **Land Use and Zoning:** The proposed project is consistent with existing land use which supports industrial uses for the project site. WMATA is exempt from zoning regulations in Prince George's County. **Figures A-1 and A-2** in **Appendix A**, Socioeconomic Resources, show the land uses and existing zoning designations within and near the project.
- **Parklands:** There will be no direct, indirect, or temporary construction effect to any park. A portion of Dodge Park, shown in **Figure A-3 in Appendix A**, is located within the ¼-mile study area.
- **Community Disruption and Environmental Justice (EJ):** No impact to neighborhoods and community facilities would occur, and no disproportionate or adverse impacts to minority and low-income populations (collectively "EJ populations") will occur, as further described in **Appendix A**.
- **Historic and Cultural Resources:** Based on research and coordination with the Maryland Historic Trust (MHT), no historic architectural resources listed or eligible for listing on the National Register of Historic Places (NRHP) or the Maryland Inventory of Historic Properties (MIHP) are present within the identified area of potential effect (APE). No previously identified archaeological site (prehistoric or historic) exists within the project site. See **Appendix B** for coordination with MHT.
- **Natural and Biological Resources:** Based on the Official Species List from the U.S. Fish and Wildlife Service (USFWS), no federally listed threatened or endangered species or critical habitat is found within the project site. According to the State of Maryland and Maryland Bird Conservation Partnership (MBCP), no other ecologically sensitive resources, such as essential fish habitat and bald eagle nests, have been

documented in or near the project site. See **Appendix C** for the self-certification package submitted to the USFWS Chesapeake Bay Field Office (CBFO).

- **Water Quality:** The project will adhere to applicable permit requirements, as described in **Appendix C**. As such, the proposed project will have no or negligible impacts on water quality.
- **Air Quality:** The project is included in a conforming Transportation Improvement Program (TIP); thus, it is considered in compliance with the transportation conformity rule on a regional level and no further regional emission impact analysis is required for any regional pollutants. As described in **Appendix G**, *Air Quality Technical Memorandum*, no hot spot analysis for PM2.5 or CO is warranted for this project, and it can be reasonably concluded in the absence of a detailed hot spot dispersion modeling analysis that the project would not result in any significant localized CO hot spot impacts.
- **Prime and Unique Farmlands:** None of the soils underlying the project site are classified by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) as prime farmland (NRCS 2018). As such, no impacts to prime and unique farmlands will occur.
- **Visual and Aesthetics:** There are no visually sensitive resources or scenic vistas within a ¼-mile radius of the project site; therefore, no impacts to visual or aesthetic resources will occur.
- **Coastal Zone:** The proposed project is located in Prince George's County, which is within Maryland's designated coastal zone. WMATA has determined that the proposed project would be consistent to the maximum extent practicable with the applicable enforceable policies of Maryland's Coastal Zone Management Program. A Federal Consistency Determination addressing the consistency or applicability of Maryland's enforceable coastal zone management policies with the proposed project is included in **Appendix D**.
- **Noise and Vibration:** As described in the *Noise and Vibration Technical Memorandum* in **Appendix E**, no exceedance of the FTA Category 2 (residential areas) *moderate* or *severe* impact criteria or WMATA noise impact criteria would occur as a result of the project. In addition, no exceedances of the FTA impact criterion or WMATA impact criterion for vibration are expected as a result of the project.
- **Safety and Security:** Current safety and security measures are contained in WMATA's System Safety Program Plan (SSPP). WMATA's SSPP identifies the procedures and design features that are intended to ensure the safety and security of employees and patrons of the WMATA system. In addition, WMATA design criteria specify that the design of facilities be consistent with National Fire Protection Association (NFPA) 130, which is an industry standard intended to ensure the safety of passengers and employees in the event of an emergency. WMATA ensures compliance with its safety and security procedures and policies through training, coordination, and periodic audits.

4. Affected Resources

This section describes resources that would be affected by the proposed project.

4.1. Traffic

To evaluate the impact of the site-generated traffic on the roadway network, turning movement counts, including the proportion of heavy vehicles and peak hour factors, were gathered and reviewed at the following study intersections:

- Pennsy Drive and MD 410 Veterans Parkway (signalized);
- Pennsy Drive and Polk Drive (unsignalized);
- Pennsy Drive and Ardwick-Ardmore Road (signalized); and
- Pennsy Drive and Corporate Drive (signalized).

The locations of these intersections are shown in **Figure 9**. At each intersection, WMATA performed an analysis that considered the existing conditions and No Build and Build conditions for 2023 (opening

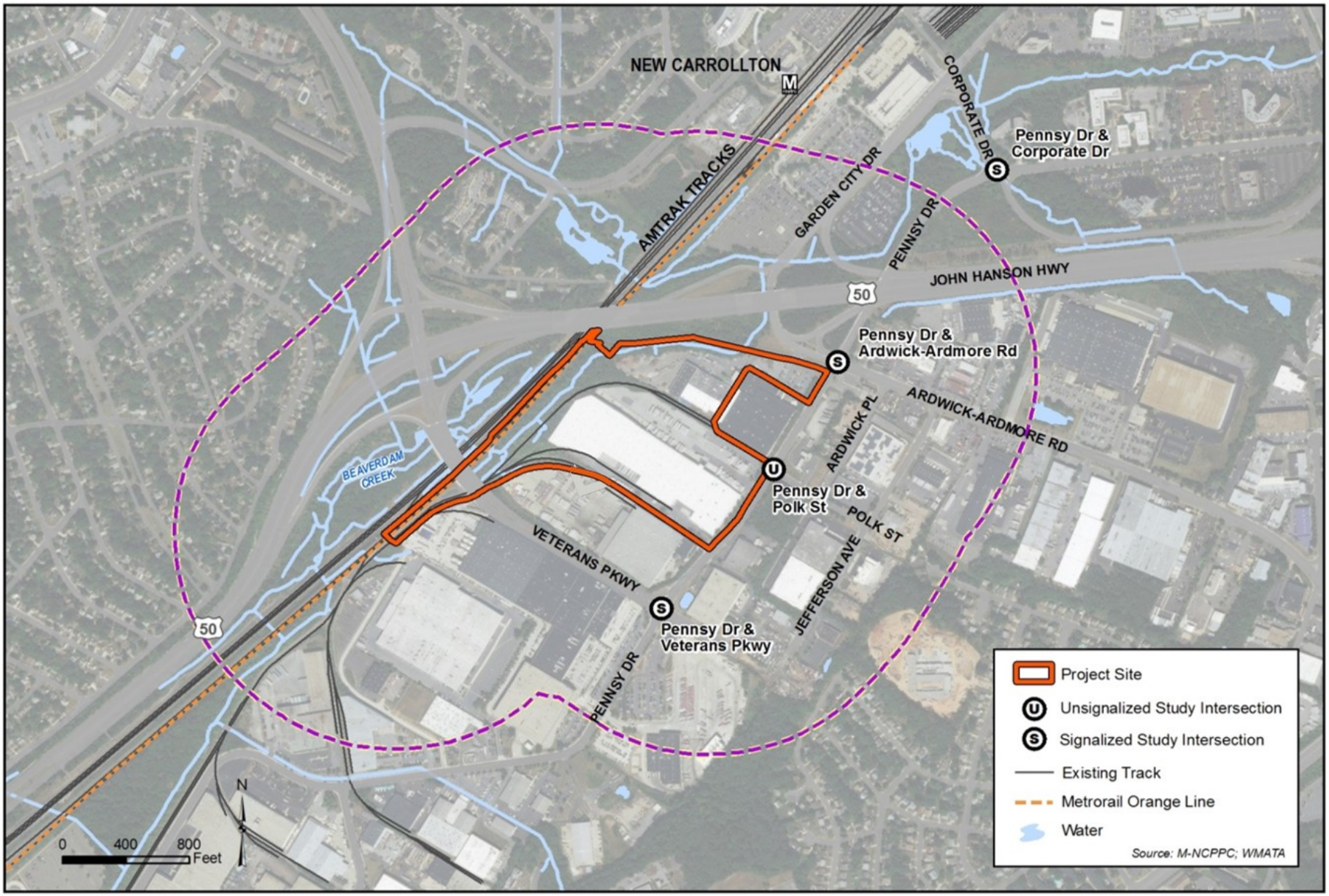
year) in terms of level of service (LOS). The analysis considered a range of employees (400, 500, or 600) over three shifts per day. The results of the analysis are shown in **Table 1**.

Table 1: LOS Analysis Results

Intersection (Control Method / Analysis Method)	Peak Hour	Existing LOS	2023 No Build LOS	2023 Build - 400 Employees LOS	2023 Build - 500 Employees LOS	2023 Build - 600 Employees LOS
Pennsy Dr and Veterans Parkway (signalized/CLV)	AM	A	A	A	A	A
	PM	A	A	A	A	B
Pennsy Dr and Ardwick-Ardmore Road (signalized/CLV)	AM	B	C	C	C	C
	PM	C	C	D	D	D
Pennsy Dr and Polk Street* (Unsignalized/HCM)	AM	D	E	F	F	F
	PM	D	E	F	F	F
Pennsy Dr and Corporate Drive (signalized/CLV)	AM	A	A	A	A	A
	PM	A	A	A	A	A

Source: *Transportation Technical Memorandum*, **Appendix F**.

Figure 9: Study Intersections



The unsignalized intersection of Pennsy Drive and Polk Street changes from LOS D in the existing condition to LOS F in 2023 under project conditions. However, without the project, the unsignalized intersection still changes from LOS D in the existing condition to LOS E in 2023 due to traffic growth. A signal warrant analysis was performed for the Pennsy Drive and Polk Street unsignalized intersection and the analysis showed that the intersection would not warrant a traffic signal based on the peak-hour volumes and minor street (stop-controlled) approach delay for 2023 . Vehicles from Polk Street and the HR&O facility are expected to experience a delay of approximately one minute in 2023 under project conditions.

All other intersections which are signalized would continue to operate at the current LOS or would operate at an LOS that would not require any mitigation. Refer to **Appendix F** for the *Transportation Technical Memorandum* that documents the traffic analysis for the project.

4.2. Wetlands and Navigable Waterways

Through adherence to applicable permitting requirements, any impact on wetlands and streams from the proposed project would be minor. The desktop analysis identified nine potential water features on-site—Beaverdam Creek and eight unnamed tributaries to Beaverdam Creek, totaling approximately 1,390 linear feet. New track segments included in the proposed project would cross Beaverdam Creek and at least two of its tributaries within the project site, as shown in **Figure 2**.

A review of data found that:

- Beaverdam Creek and its tributaries within the project site are not identified as navigable waterways in the U.S. Army Corps of Engineers' National Waterway Network (USACE 2018) or on navigational charts produced by the National Oceanic and Atmospheric Administration (NOAA) (NOAA 2018).
- No wetlands, including WOUS and Waters of the State of Maryland, are identified within the proposed project site on maps produced by the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) or the State of Maryland (MERLIN Online), respectively (USFWS 2018a; State of Maryland 2018).
- Several roadside ditches observed via aerial photography do not show evidence of being jurisdictional in nature. No wetland signatures were identified through analysis of aerial photography within the project limits.

On-site field investigations will occur during final design and prior to construction activities to confirm the absence of jurisdictional wetlands. Based on this information, WMATA would determine the extent of temporary and permanent impacts on these resources and subsequently acquire all applicable Federal and/or state permits to impact them during the proposed project. Wetlands and waterways temporarily impacted by construction would be restored to a pre-construction condition following the completion of the proposed project. WMATA would adhere to avoidance, mitigation, and/or compensation measures specified in the permit(s) to minimize permanent impacts on wetlands and waterways resulting from the proposed project.

4.3. Floodplains

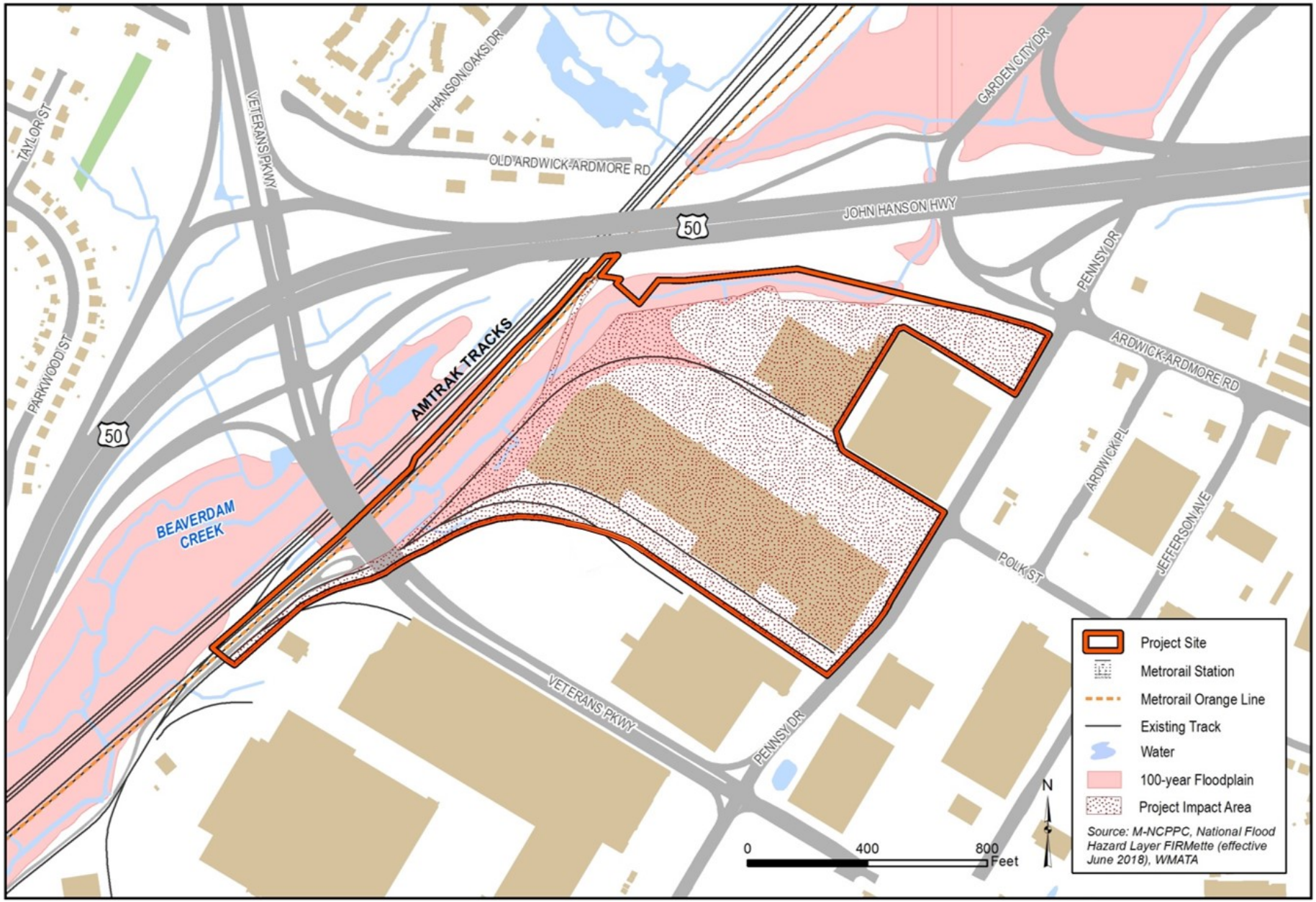
Construction of new tracks and facilities included in the proposed project would impact approximately 3 acres of the 100-year floodplain, (**Figure 10**). The Base Flood Elevation (BFE) of Beaverdam Creek within the project site is 74 feet (FEMA 2018).As proposed, the project would not change the BFE. Impacts on the floodplain from the proposed project would potentially include deposition of fill material

to support construction of new track segments and facilities, and the installation of one or more culverts to carry new track segments over Beaverdam Creek or its tributaries.

Before construction, WMATA would obtain authorization to impact the floodplain under a Joint Federal/State Permit for the Alteration of Any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland. WMATA would also coordinate with the Flood Management section of the Prince George's County Department of the Environment's Sustainability Division to ensure that development of the proposed project within the 100-year floodplain does not increase the floodplain elevation or flood volume further downstream. If necessary, WMATA would submit to FEMA a Letter of Map Revision Based on Fill (LOMR-F) to request that the flood hazard designation within the project site be officially changed on the applicable Flood Insurance Rate Map(s) (FIRM).

Elements of the proposed project to be built in the 100-year floodplain would be designed to ensure that no increases in the floodplain elevation or downstream flood volume occur. Thus, impacts on floodplains resulting from the proposed project would be negligible.

Figure 10: Waterways and Floodplains



4.4. Hazardous Materials

Five Recognized Environmental Conditions (RECs) were identified on the project site representing known or suspected presence of hazardous substances. The RECs are summarized in **Table 2. Appendix H** provides a detailed database search for identified RECs.

Table 2: Recognized Environmental Conditions within the Project Site

Map ID	Address	Description
A1	3636 Pennsy Drive Landover, MD 20785	Listed in the Emergency Response Notification System (ERNS). ERNS indicates that an oil spill or hazardous substance release has been documented at this location.
A2	3636 Pennsy Drive Landover, MD 20785	This property is registered as a Small Quantity Generator (SQG)[2] of hazardous waste in accordance with the Resource Conservation and Recovery Act (RCRA).
A3	3636 Pennsy Drive Landover, MD 20785	OCPCASES – Registered tank release/cleanup.
A4	3636 Pennsy Drive Landover, MD 20785	Underground Storage Tank; permanently closed.
A5	3636 Pennsy Drive Landover, MD 20785	FINDS/ECHO Database

Source: WMATA HR&O EDR Radius Map Report, June 11, 2018.

Construction of the proposed project would involve excavation, grading, and other earth disturbance across the majority of the site. RECs identified at the project site have the greatest potential risk to be disturbed during construction activities and potentially exposing workers to contamination. If left unaddressed, RECs could also pose risks after construction. Other RECs were identified within a 1-mile radius of the project site. While these RECs would not be disturbed during construction, they could be a source of onsite contamination.

As part of the property acquisition process, WMATA will conduct additional investigations of these RECs on the project site. Dependent on the findings/recommendations of the additional investigations, remediation of hazardous substances exceeding applicable regulatory thresholds on the project site would be conducted as necessary prior to project implementation to ensure the safety of workers on the site during the proposed project's construction and operational phases.

Hazardous materials used during the operation of the proposed HR&O facility (e.g., petroleum-based fuels, oils, lubricants, and degreasers; solvents, paints, and thinners; and similar substances) would be used, handled, stored, and disposed of in accordance with applicable label instructions and regulatory requirements established by WMATA, the Occupational Safety and Health Administration (OSHA), U.S. Environmental Protection Agency (USEPA), and other applicable regulatory authorities.

Through adherence to established procedures and other applicable requirements, there would be no adverse impacts from hazardous materials during or following the implementation of the proposed project.

4.5. Acquisitions and Relocations Required

WMATA proposes to acquire three properties for construction of the HR&O facility: 3636 Pennsy Drive, 3570 Pennsy Drive, and 8121 Ardwick Drive. These properties are located within an industrial park with multiple tenants. Acquisition of these three properties will result in displacement of six tenants. WMATA will conduct the property acquisition process in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970.

4.6. Construction

Table 3 identifies impacts due to construction noise, utility disruption, and hazardous and contaminated materials. The table also identifies construction-related air and water quality impacts, safety and security issues, disruptions to traffic and access to property as well as measures to mitigate project impacts.

Table 3: Construction Impacts

Resource	Potential Impacts	Potential Mitigation Measures
Noise	Noise levels from construction vehicles and equipment may create a temporary nuisance, but sound levels are not expected to enter into a range that would be unsafe for human hearing.	Construction activities would follow the noise criteria specified in the Prince George's County Code (*Subtitle 19, Pollution, Division 2, Noise Control, Section 19-120*) and in Section 16.5 of the *WMATA Manual of Design Criteria*. WMATA will require the construction contractor to ensure noise levels will not exceed WMATA construction noise criteria.
Utilities	A 24-inch sanitary sewer line (buried 4.5 feet deep) and a 60-inch water main are located along the northern and western perimeter of the project site and may need to be relocated during construction.	For re-routing of any affected utilities, new segments of utility line would be built and installed up to the new connection points. During a short service disruption the old utility line would be connected to the new utility line. All utility re-routing would be conducted under compliance with applicable laws, codes and service agreements. Potential adverse effects could be avoided or minimized during later design phases of the project.
Hazardous and Contaminated Materials	RECs are most likely to be encountered during project construction. Other temporary construction impacts may relate to the following as detailed in **Appendix H**: • Contaminated Soil Excavation and Disposal • Contaminated Groundwater • Demolition or Renovation of Structures with Hazardous Material • Removal of Fluorescent Lights • Removal of Railroad Ties	WMATA will use BMPs, further detailed in **Appendix H**, to mitigate risks posed by potential residual contamination at RECs encountered during construction. WMATA will compile these BMPs into a Materials Management Plan (MMP) or equivalent document required as part of the design-build specifications prior to construction. WMATA will use appropriately trained and licensed personnel and contractors to conduct renovation or demolition work of hazardous materials in accordance with the MMP.
Traffic	Construction at the project sites is not expected to require the closing of any street or create a major interference in the traffic flow of the surrounding roadways.	None

Resource	Potential Impacts	Potential Mitigation Measures
Air Quality	• Air quality impacts from traffic congestion resulting from lane closures, detours, and construction vehicles accessing site. • Air quality impacts resulting from temporary construction activities are possible particularly on dry and windy days. • Direct emissions from construction equipment are not expected to produce significant adverse effects on local air quality, provided that all equipment is properly operated and maintained.	• "Good housekeeping methods", such as water sprays during demolition; wetting, paving, or landscaping exposed earth areas; covering dust-producing materials during transport; limiting dust-producing construction activities during high wind conditions; and providing street sweeping and tire washes for trucks leaving the site.
Water Resources and Quality	Site runoff from grading and other construction activities, erosion, and construction debris could enter water bodies within the site.	Wetlands and waterways temporarily impacted by construction would be restored to a pre-construction condition following the completion of the proposed project. Any impacts would be mitigated by proper erosion and sediment control techniques.
Safety and Security	Potential safety and security issues if unauthorized persons access the construction site.	The contractor must erect fencing around the construction zone to prevent trespassing.
Access/Staging	None. Access will be provided via existing roadways. Construction staging will occur on site.	None.

Acronyms: RECs = Recognized Environmental Conditions; BMPs = Best Management Practices

4.7. Cumulative and Indirect Impacts

Construction of the project would not, by itself, result in induced or secondary development that could result in indirect impacts. However, construction of the project would result in the loss of forest stands and an increase of impervious surface. The clearing of forested land, combined with other planned development within Prince George's County, could contribute cumulatively to an overall reduction in forested area within the county. The increase in impervious surface would result in additional stormwater runoff within the Beaverdam Creek subwatershed. As proposed, stormwater management would be provided on-site to help offset adverse effects. However, this increase in impervious surface due to the project, combined with other planned development within this watershed, could result in an overall net loss of pervious surface. This net loss and an increase in stormwater runoff could affect overall water quality within the watershed.

5. Conclusion

No significant impact has been identified. WMATA will comply with all applicable Federal and state laws.

6. References

Environmental Data Resources, Inc. (EDR). 2018. The EDR Radius Map Report: 3636 Pennsy Drive, Hyattsville, MD 20785, Inquiry Number 5327967.2s, June 11, 2018.

Federal Emergency Management Agency (FEMA). 2018. National Flood Hazard Layer FIRMette (FIRM Panel 24033C0134E effective 9/16/2016). Accessed on June 11, 2018 at https://msc.fema.gov/portal/search#searchresultsanchor.

Gardner, William M. 1976. An Archaeological Survey of the Washington Metropolitan Area Transit Authority's Rockville, Glenmont, New Carrollton and Addison Routes in Maryland. Report on file, Maryland Historical Trust, Crownsville, MD.

Historic Aerials, Inc. 1957, 1964, and 1979 aerial photographs. Accessed at http://www.historicaerials.com.

Maryland Bird Conservation Partnership (MBCP). 2018. MBCP Bald Eagle Nest Monitoring Program Map. Accessed on June 11, 2018 at https://www.google.com/maps/d/viewer?mid=1oEK2mnOwFEeST8eJYJGTTgXvGJI&ll=38.941950336674225%2C-76.87540464875445&z=16.

National Oceanic and Atmospheric Administration (NOAA). 2018. Navigational Chart 12880.

National Park Service. 2014. Defining Boundaries for National Register Properties. Accessed January 31, 2014 at http://www.nps.gov/nr/publications/bulletins/boundaries/bound1.htm.

Natural Resources Conservation Service (NRCS). 2018. Custom Soil Resource Report for Prince George's County, Maryland. Retrieved on June 11, 2018 at https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

Prince George's County Planning Department. 2018. GIS Open Data Portal. Accessed on June 5, 2018 at http://gisdata.pgplanning.org/opendata/.

Prince George's County, Maryland. 2018. Code of Ordinances. Accessed on June 11, 2018 at http://www.pgparks.com/1002/Zoning-Ordinance-Use-Tables.

State of Maryland. 2018. Maryland's Environmental Resource & Land Information Network (MERLIN). Accessed on June 12, 2018 at https://gisapps.dnr.state.md.us/MERLIN/index.html.

United States Army Corps of Engineers (USACE). 2018. Navigation Data Center. Accessed on June 8, 2018 at http://www.navigationdatacenter.us/data/datanwn.htm.

United States Census Bureau. 2018. ACS 5-Year Estimates 2012-2016. Accessed on June 8, 2018 at https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml.

United States Fish and Wildlife Service (USFWS). 2018a. National Wetlands Inventory (NWI). Accessed on June 12, 2018 at https://www.fws.gov/wetlands/data/mapper.html.

USFWS. 2018b. Official Species List. Retrieved on June 11, 2018 at https://ecos.fws.gov/ipac/project/7DZBKLWDTBDAPB5B563PCVJDEA.

United States Geological Survey (USGS). 2016. Washington East, DC-MD and Lanham, MD Quadrangles. Retrieved at https://nationalmap.gov/.

Appendices

Appendix A – Socioeconomic Resources

Supplemental Technical Analyses

Land Use and Zoning

The proposed project is consistent with existing land use and zoning. The designated land use and zoning support light industrial uses for the project site. No variances are expected. WMATA will submit a Mandatory Referral package to Prince George's County during subsequent phases of project development.

The study area for these resources is a ¼-mile area around the project site. Existing land use and zoning were assessed using Maryland-National Capital Park and Planning Commission (M-NCPPC) GIS data for Prince George's County and aerial photography of the study areas. Existing land uses within the study areas were confirmed by field observations.

Figure A-1 shows the existing land uses within ¼-mile study area. Land use for the project site and its vicinity is predominantly industrial. Transportation uses and limited commercial, institutional, residential, and forest uses also exist within a ¼ mile of the project site. Uses immediately adjacent to the site are primarily light industrial and institutional, with forested areas along Beaverdam Creek and transportation rights-of-way along the railroad and U.S. Route 50 corridor. Several of the institutional properties in the project vicinity are owned and operated by WMATA; these properties include the Metro Supply Facility, Carmen Turner Facility (training and maintenance), and Landover Bus Division Garage. The proposed project is therefore compatible with adjacent land uses.

Figure A-2 shows the existing zoning designations within and near the project. The project site is zoned Light Industrial, I-1 by Prince George's County. WMATA is exempt from zoning regulations in Prince George's County.

Figure A-1: Existing Land Use

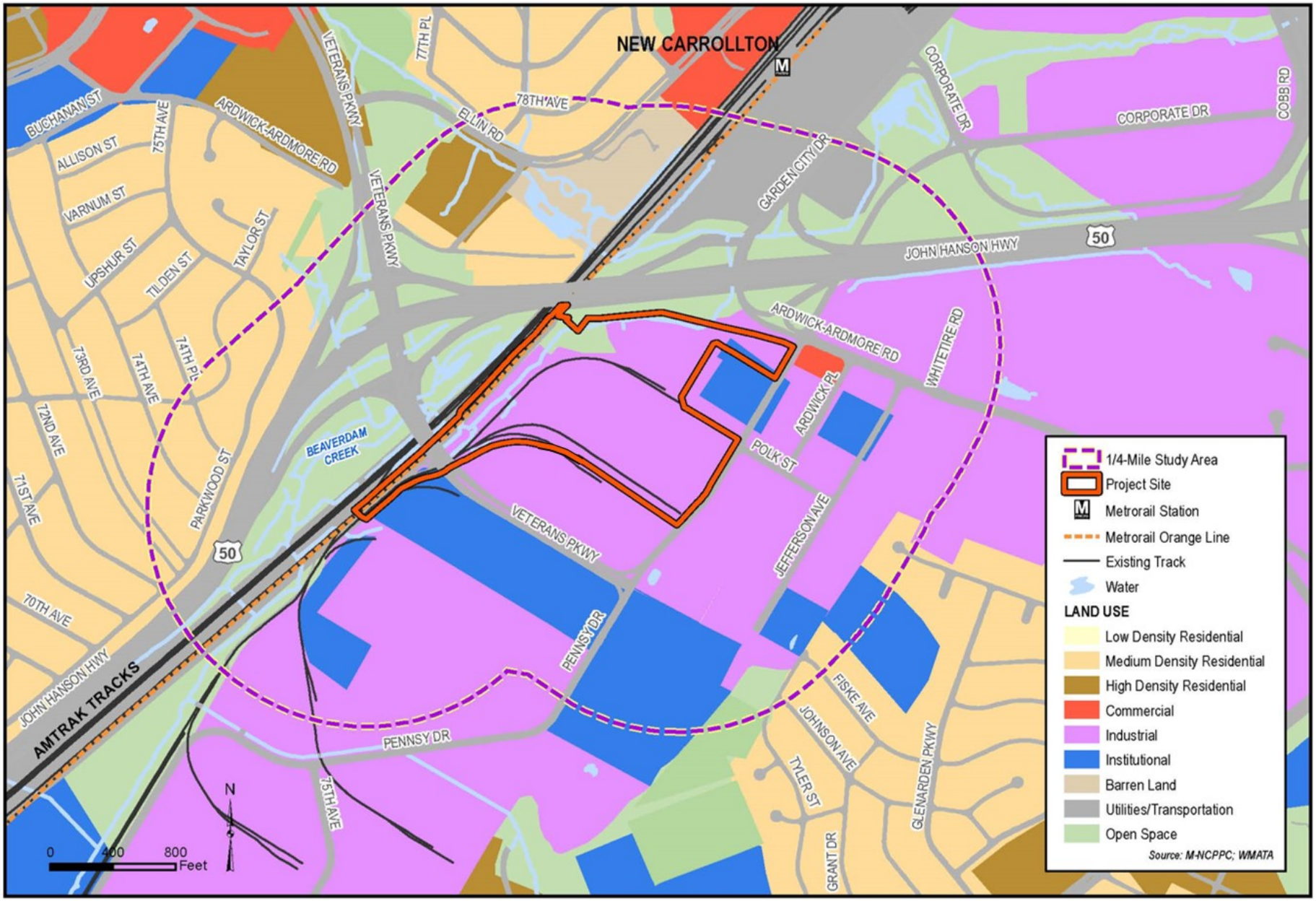
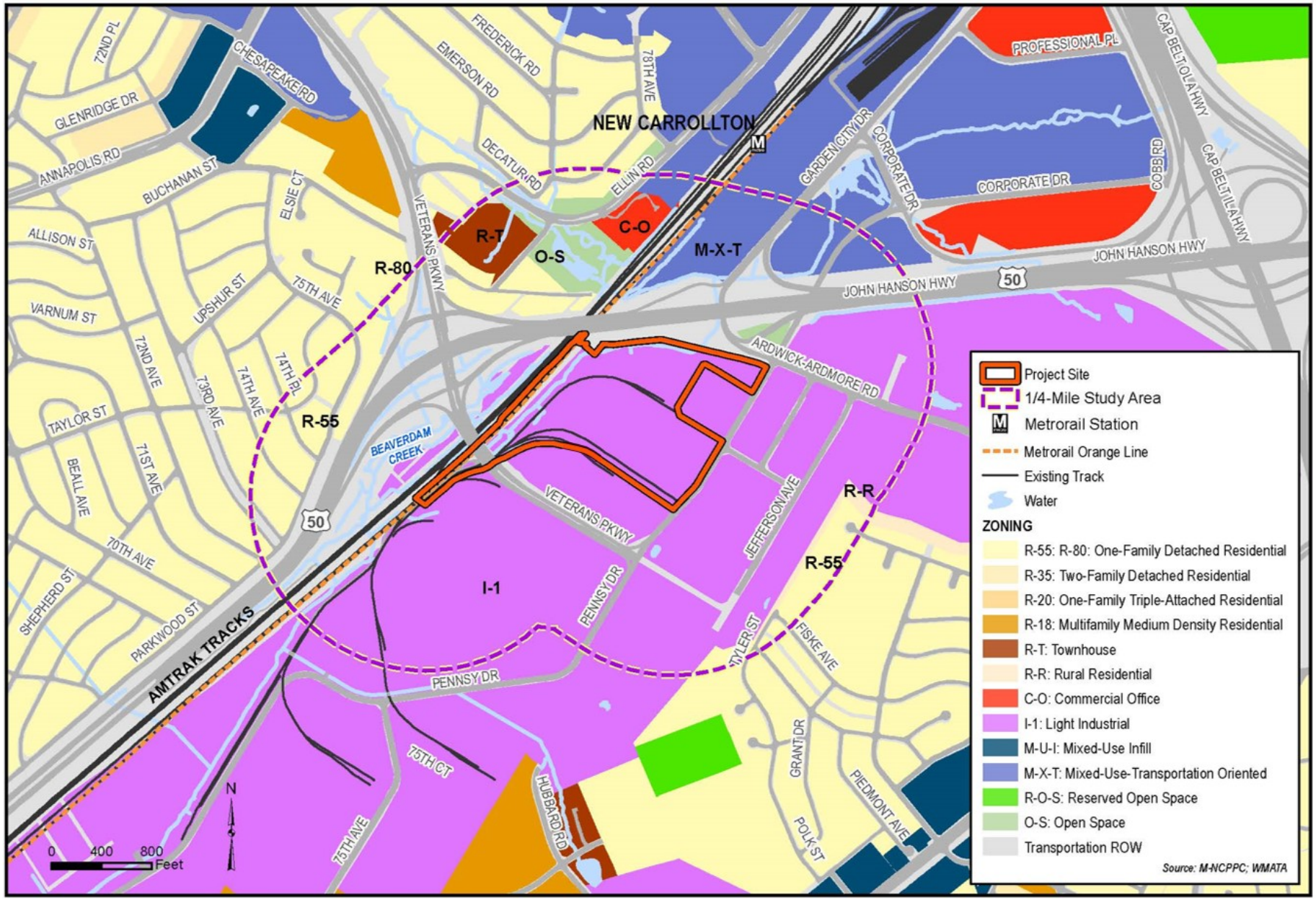


Figure A-2: Existing Zoning



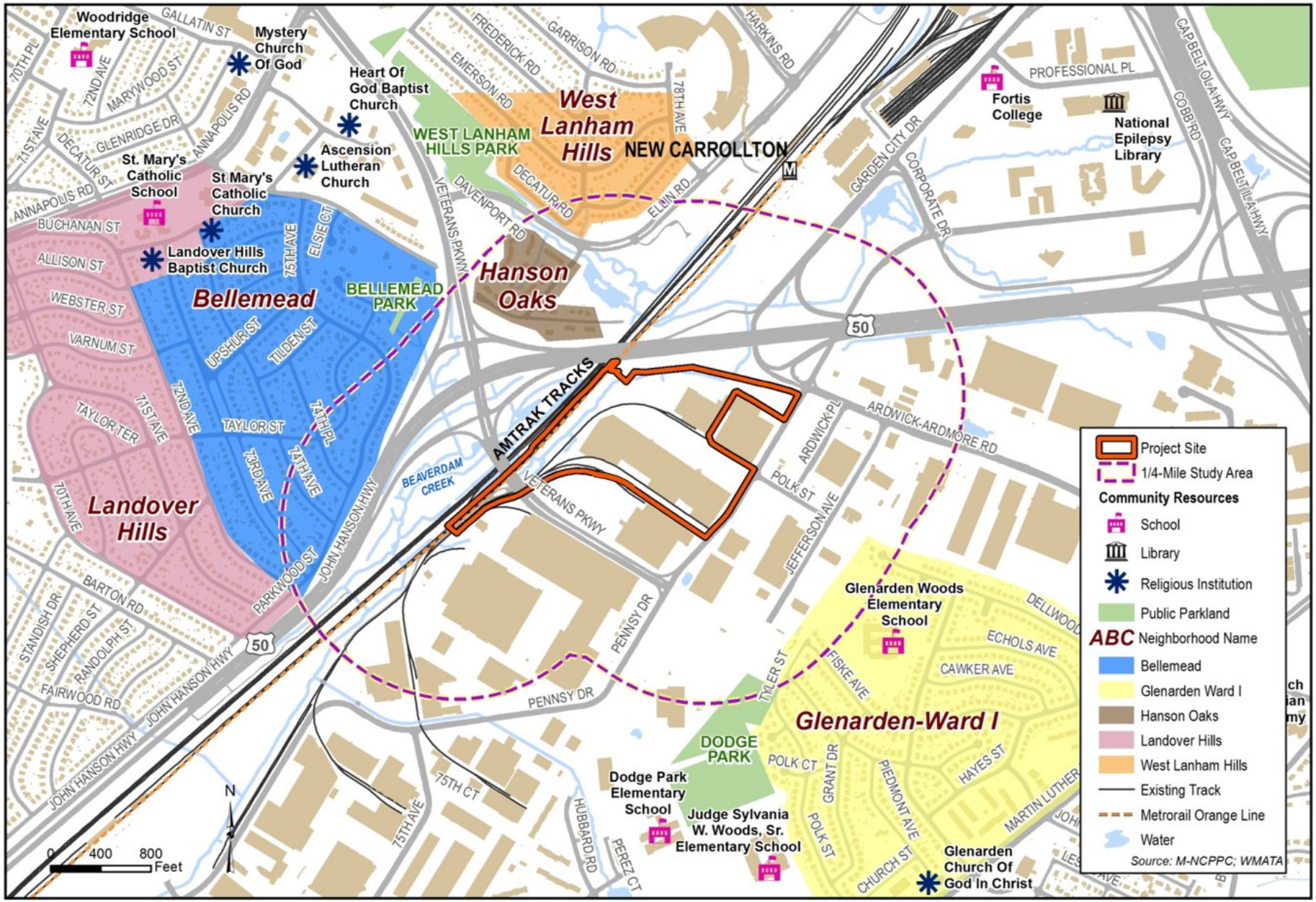
Neighborhoods, Community Facilities, and Parks

Neighborhoods and community facilities were identified using GIS data and information from M-NCPPC and aerial photography. Neighborhoods and community facilities within the ¼-mile study area are shown on **Figure A-3**. The following points of interest are within the ¼-mile study area:

- **Dodge Park**, provides for passive and active recreation (wooded areas, picnic area, and basketball court).
- **Glenarden Woods Elementary School**, which includes playing fields that fall within the study area.
- **Residential communities**, including Hanson Oaks, Glenarden-Ward I, West Lanham Hills, and Bellemead Neighborhoods. To the west of the project site, the neighborhoods of Hanson Oaks, West Lanham Hills, and Bellemead are separated from the project site by open space, existing rail lines (Metrorail, Amtrak, CSXT) and U.S. Route 50 (John Hanson Highway). To the east of the project site, the neighborhood of Glenarden-Ward-1 is separated from the project site by secondary roadways and industrial properties.

Due to the separation of the project site from these neighborhoods and facilities, no impact would occur.

Figure A-3: Neighborhoods, Community Facilities, and Parks



Environmental Justice

WMATA analyzed minority and low-income statistics at the Census block group-level using population and income data from the U.S. Census Bureau's American Community Survey (ACS) 5-Year Estimates (2012-2016). The presence of minority populations in the study areas was determined by whether the minority population in the block group exceeds 50 percent and by comparing the proportion of the study area population belonging to a minority group to the proportion of the population in the comparison areas belonging to a minority group. In accordance with FTA guidance, the presence of low-income populations in the study areas was evaluated by comparing the proportion of the study area population below 150 percent of the poverty line to the proportion of the population in the comparison areas below 150 percent of the poverty line.

Environmental Justice (EJ) populations were identified within a ¼-mile radius (study area) around the project site. In addition, two additional geographic areas were selected for comparison: Prince George's County and the WMATA Rail Service Area (comprising Prince George's County, Maryland; Montgomery County, Maryland; District of Columbia; Arlington County, Virginia; City of Alexandria, Virginia, City of Fairfax, Virginia, Fairfax County, Virginia; and City of Falls Church, Virginia).

As shown in **Table A-1,** the minority population for the study area is greater than 50 percent and both the minority and low-income population exceed the comparison areas. The two largest minority groups within the study area are Black/African Americans (60 percent) and Hispanics/Latinos (30 percent).

Table A-1: Minority and Low-Income Populations

Population Type	Study Area	Prince George's County	WMATA Rail Service Area
Total Population	1,112	897,693	4,130,742
Minority Population (Percent of Total Population)	1,042 (94%)	775,188 (86%)	2,463,551 (60%)
Population for whom poverty status is determined*	1,109	877,560	4,054,074
Low-Income Population (Percent of Population for whom poverty status is determined)	223 (20%)	141,888 (16%)	600,627 (14%)

*The population for whom poverty is determined does not equal the total population because poverty status was determined for all people except for unrelated individuals under 15 years old, and people in institutional group quarters, college dormitories, military barracks, and living situations without conventional housing.
Source: U.S. Census Bureau, ACS 5-Year Estimates 2012-2016.

While EJ populations exist within the study area, the census block group that contains the proposed project is primarily industrial and commercial property. There are no residential properties located on or adjacent to the project site. All residential areas are separated from the project site by either industrial/commercial properties or the active rail line (WMATA Orange line, Amtrak, and CSXT) and U.S. Route 50 (John Hanson Highway). Therefore, no disproportionate or adverse effects on EJ populations would occur as a result of the proposed project. In addition, most project-related effects would occur during the construction phase. Where there are construction-related impacts, WMATA has committed to apply Best Management Practices (BMP) and mitigation measures equally throughout the project.

Appendix B – Historic and Cultural Resources

Project Review Form and package submitted by FTA to MHT on 6/14/2018.

MHT determination of "No Historic Properties in the area of potential effect" signed 6/26/2018.

U.S. Department of Transportation
Federal Transit Administration

REGION III
Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia

1760 Market Street
Suite 500
Philadelphia, PA 19103-4124
215-656-7100
215-656-7260 (fax)

June 14, 2018

Mr. Tim Tamburrino
Preservation Officer
Project Review and Compliance
Maryland Historical Trust
100 Community Place
Crownsville, MD 21032

RE: Section 106 Consultation - WMATA Heavy Repair and Overhaul Facility
Prince George's County, Maryland

Dear Mr. Tamburrino:

The Federal Transit Administration (FTA), in partnership with the Washington Metropolitan Area Transit Authority (WMATA), is proposing construction of a new heavy repair and overhaul (HR&O) facility for Metrorail vehicles at 3636 Pennsy Drive in Landover, Maryland. The project will be a federal undertaking because FTA would provide financial assistance, and as such, FTA is initiating consultation with the State Historic Preservation Officer (SHPO), under Section 106 of the National Historic Preservation Act of 1966 and its implementing regulation found in 36 CFR Part 800. FTA requests your concurrence with the proposed Area of Potential Effect (APE) and the determination of "No Effect."

The purpose of the project is to centralize WMATA's Metrorail heavy repair and mid-life overhaul activities for vehicles at a single facility. The proposed site is 36.6 acres and currently consists of several properties with active light industrial uses, located along the western side of Pennsy Drive between Veterans Parkway and Ardwick-Ardmore Drive. The site is adjacent to the WMATA Metrorail Orange Line between the Landover and New Carrollton Metrorail Stations (see **Attachment 1**). Facility components to be constructed include:

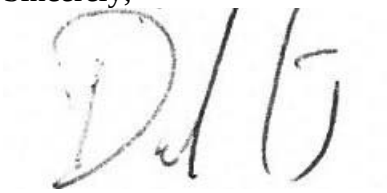
- Enclosed HR&O service bays to accommodate up to 40 rail cars;
- Rail car truck shop;
- Vehicle storage tracks to accommodate up to 24 rail cars;
- Bays for railcar repair;
- Traction power substation;
- Yard operations control tower;
- Roadway access and loading docks for heavy trucks;
- Stormwater management facilities;
- Employee parking; and
- Operations and administrative offices.

The proposed area of potential (APE) for archaeological resources is the limits of disturbance (LOD) of the project site and where new structures would be placed, plus a buffer area for potential design modifications and construction laydown areas. For architectural resources, the proposed APE includes the LOD area plus portions of the adjacent properties that are in the immediate viewshed

(see **Attachment 2**). Based on a review of the project area, no previously identified historic resources are located within the proposed APE at the proposed HR&O facility site. Therefore, no further investigation of above-ground resources is recommended. The project area is developed and disturbed and no additional archaeological survey is recommended at the proposed HR&O facility site. Information supporting this undertaking is provided in the included enclosures.

Via carbon copy, FTA is providing notification to the Maryland National Capital Park and Planning Commission (M-NCPPC) as a potential consulting party under Section 106. FTA requests your concurrence with the proposed APE and the determination of "No Effect" for the project. If you have any questions, please email me at daniel.koenig@dot.gov.

Sincerely,



Daniel Koenig,
Environmental Protection Specialist

cc:
Christine Osei, M-NCPPC

Enclosures:
Attachment 1: Project Review Form
Attachment 2: Project Description and Concept Design

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

Project Description, Pennsy Drive Heavy Repair and Overhaul Facility

The Washington Metropolitan Area Transit Authority (WMATA) proposes the construction of a new heavy repair and overhaul (HR&O) facility for Metrorail vehicles at 3636 Pennsy Drive in Landover, Maryland. The purpose of the project is to centralize Metrorail car heavy repair and mid-life overhaul activities at a single facility.

The Project will be funded with Federal funds; the Federal Transit Administration (FTA) is the lead Federal agency. A Documented Categorical Exclusion (DCE) will be prepared to meet WMATA Compact requirements and to comply with the National Environmental Policy Act (NEPA), as well as other requirements.

The proposed HR&O Facility site is 36.6 acres in area. The site consists of several properties with active light industrial uses, located along the western side of Pennsy Drive between Veterans Parkway and Ardwick-Ardmore Drive. The site is adjacent to the Metrorail Orange Line between the Landover and New Carrollton Metrorail Stations.

Facility components to be constructed include:
- Enclosed HR&O service bays to accommodate up to 40 rail cars;
- Rail car truck shop;
- Vehicle storage tracks to accommodate up to 24 rail cars;
- Bays for railcar repair;
- Traction power substation;
- Yard operations control tower;
- Roadway access and loading docks for heavy trucks;
- Stormwater management facilities;
- Employee parking; and
- Operations and administrative offices.

Current heavy repair and overhaul activities would be moved from the Brentwood Yard and the Greenbelt Yard. The new HR&O facility would accommodate a total of approximately 370 employees across three shifts.

Existing Facility

3636 Pennsy Drive is currently occupied by an approximately 390,000 square-foot warehouse facility, which is surrounded on three sides by asphalted parking areas (**Photographs 1 and 2**)[1]. The western end of the property encompasses the channelized Beaverdam Creek. The creek is surrounded by a narrow margin of secondary regrowth, no more than 200 feet wide (**Photograph 3**). The warehouse was constructed sometime between 1988 and 2002.

The property is located in an area of light industrial development, and the surrounding properties to the north, south and east are either developed for warehouse, industrial, or commercial uses, or

[1] See Figure 3 for the location and angle for each photograph in this document.

are undeveloped lots (**Photographs 4, 5 and 6**). As with the structure on 3636 Pennsy Drive, most of the buildings were erected sometime between the late 1980s and 2002.

Proposed APE, Pennsy Drive Heavy Repair and Overhaul Facility

Under the Code of Federal Regulations, 36CFR Part 800.16(d), the Area of Potential Effects (APE) is defined as the area in which properties eligible for listing on the National Register of Historic Places (NRHP) may be affected by an undertaking. These potential effects include activities that may cause direct effects (such as destruction of the property) and/or indirect effects (such as visual, audible, and atmospheric changes that affect the character and setting of the property). The APE may include areas that are outside the limits of the undertaking. Separate APEs were determined for archaeological and historic architectural resources (National Park Service 2014).

A site visit was conducted in November 2014 by a qualified cultural resource professional to determine the proposed APE for the project. A file search was also conducted at the MHT library for pertinent information regarding previously identified cultural resources within one mile of the property. The findings are presented below.

APE for Archaeological Resources
The proposed APE for archaeological resources (below-ground historic properties) is shown in **Figure 3**. The proposed APE for archaeology is coterminous with the limits of the "Project Site" as presented in **Figure 1** and is inclusive of all areas where new structures and facilities are proposed and includes a surrounding buffer area for possible future design modifications or construction laydown areas.

APE for Historic Architectural Resources
The APE for historic architectural resources (above-ground historic properties) can be more expansive than the archaeological APE, including properties outside the LOD that may be affected by visual or audible changes to the environment as a result of the project.

The proposed APE for historic architectural resources encompasses 3636 Pennsy Drive as well as portions of adjacent properties that are in the immediate viewshed of the proposed work (**Figure 3**). The APE considers the local topography, vegetation, and man-made structures that obscure the proposed work from the view. Existing obstructions include the screen of trees bordering Beaverdam Creek to the west and the elevated Amtrak rail line beyond it to the west and U.S. Route 50 to the north. The large warehouse structures adjacent to the property to the north and south also constrict the viewshed from 3636 Pennsy Drive, as does a screen of vegetation east of Pennsy Drive and north of Polk Street.

Maryland Historical Trust Research, Pennsy Drive Heavy Repair and Overhaul Facility

Background research was conducted at the MHT to determine previously identified historic architectural and archaeological resources. The findings are briefly summarized here.

Archaeological Resources

The APE has been subject to a previous archaeological survey, performed by Dr. William Gardner in 1978 for the original construction of WMATA's rail transit routes in Prince George's County. That survey not only failed to report any archaeological resources in the current APE, but noted that:

> For the most part the [New Carrollton] Metro line runs between the B&O railroad and the Pennsylvania railroad lines. For this reason, along most of this line the impacted areas are those that have already been disturbed by the two previously mentioned railroad lines (Gardner 1976:6-7).

The report continues:

> Beaverdam Creek itself has been disturbed. In many places, the course of the creek has been channeled into culverts and from the New Carrollton to Landover stations, is disturbed from original railroad construction and present grading efforts by Metro (Gardner 1976:7).

The results of a recent archaeological survey bordering the Beaverdam Creek approximately ½ mile south of the current project APE are relevant to the current study (Lawrence *et al.* 2014). That survey included excavating 126 STPs on approximately 18 acres of undisturbed upland adjacent to the creek, but failed to produce any significant archaeological remains.

Historic Architectural Resources

No historic architectural resources listed or eligible for listing on the NRHP or the Maryland Inventory of Historic Properties (MIHP) are present within the proposed APE. The closest recorded resource are the Ardwick Historic Community (PG:69-23) and the Town of Glenarden (PG:72-26). Ardwick is separated from the APE by U.S. Route 50 and has been determined not eligible for NRHP listing (Opinion 06/06/2012). Glenarden is situated 0.6 miles to the southeast and is also not eligible for NRHP listing (Opinion 04/17/2001). The next nearest recorded resource is a 1920/30s bungalow (PG:72-25) on Old Landover Road approximately 1.25 miles south of the APE; the property has been determined not eligible for listing on the NRHP (Opinion 09/28/1995).

Historic Map and Aerial Photographic Research, Pennsy Drive Heavy Repair and Overhaul Facility

Historic maps and aerial photographs were reviewed to determine whether any significant or potentially significant cultural activities or structures may have either taken place or stood within or immediately adjacent to the proposed APE for either archaeological or historic architectural resources. The results of that analysis are shown in **Figures 4** through **6**.

19th Century

Three mid- to late 19th-century maps were overlaid on current geographic information system (GIS) maps of the project study area and consulted for the presence of historic structures or other activities in or around the APEs: the 1866 Martenet map of Prince George's County, the 1873 Gray *et al.* topographical atlas map, and the 1886 United States Geological Survey (USGS) 15 minute quadrangle for Upper Marlboro-East Washington, DC (**Figure 4**)[2].

Two historic features are depicted in this map series in or near the APE: the Baltimore & Potomac Railroad (B&PRR) and the Ardwick-Ardmore Road. The B&PRR is the contemporary Amtrak alignment on the north side of the WMATA Orange Line and outside the proposed APE as the view is blocked by the Orange Line. No structures are depicted within the APE; of note is the fact that an unnamed tributary of Beaverdam Creek ran through the 3636 Pennsy Drive property.

Early and Mid-20th Century

Historic topographic quadrangles and photographs were reviewed for the period spanning the second and third quarters of the 20th century: the 1921 USGS Patuxent MD-DC 7.5 minute topographic quadrangle and two aerial photographs, one from 1957 (**Figure 5**). An aerial photograph from 1964 is particularly critical for evaluating the archaeological sensitivity of the proposed APE (**Figure 6**).

The 1921 topographic map depicts an undeveloped landform, with a farm lane paralleling Beaverdam Creek and its unnamed tributary in the APE, running to a farmhouse outside the APE. The Ardwick-Ardmore Road ran to the north of the APE; Pennsy Drive had not been established at this time. The 1957 aerial photograph depicts similar conditions; almost the entire APE was wooded and undeveloped (**Figure 5**). Conditions in and around the APE changed considerably by 1964. U.S. Route 50 had been established and almost the entire APE had been stripped of vegetation and graded for development (**Figure 6**). Building pads are discernable, but no structures erected in the APE by 1964. Pennsy Drive was also yet to be constructed. Beaverdam Creek had been re-routed and channelized in preparation for construction. The unnamed tributary stream seen near the southern end of the proposed APE for archaeology had either been completely filled or culverted by this time as it is not evident in the photograph.

Late 20th Century

By1979, much of the APE remained undeveloped with the exception of one building near the northern end of the proposed APE for archaeology (**Figure 7**). A few other buildings stood in the APE for historic architecture at that time, particularly two warehouse buildings at the southern end, south of what is now Veteran's Highway. These buildings would have been built between 1964 and 1979. Sometime between 1979 and 2002 the existing warehouse at 3636 Pennsy Drive was constructed, as were the remaining structures now standing in the APE for historic architecture.

[2] Due to issues of precision of the 1866 Martenet and 1873 Gray *et al.* maps, broad circles were employed on Figure 4 to indicate the approximate location of the project. The 1873 Gray *et al.* map depicts the B&PRR south of its true alignment.

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

Preliminary Determination of Effect, Pennsy Drive Heavy Repair and Overhaul Facility

No NRHP-eligible or potentially eligible properties are documented within the proposed APE for either above- or below-ground cultural resources. The buildings within the APE for historic architecture do not appear to meet the 50-year age criterion required for inclusion on the NRHP and in any case appear unlikely to be considered eligible under Criteria A, B, or C. For above-ground resources, the project is unlikely to affect National Register listed or eligible historic resources.

Historic aerial imagery has documented comprehensive landform modification throughout the proposed APE for archaeology. Not only was the land stripped and graded for the light industrial development it now hosts, but the Beaverdam Creek was rerouted and channelized. An unnamed stream that once flowed across the APE appears to have been infilled. Consonant with William Gardner's 1976 negative assessment of Beaverdam Creek's archaeological sensitivity and the recent negative results of the archaeological survey just to the south (Lawrence *et al.* 2014), the APE for archaeology is considered unlikely to hold intact archaeological deposits.

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

Sources

Gardner, William M.
1976 An Archaeological Survey of the Washington Metropolitan Area Transit Authority's Rockville, Glenmont, New Carrollton and Addison Routes in Maryland. Report on file, Maryland Historical Trust, Crownsville, MD.

Gray, Ormando W., S.J. Martenet and H.F. Walling
1873 Topographical atlas of Maryland: counties of Anne Arundel and Prince George. S. J. Martenet, Baltimore.

Historic Aerials, Inc.
1957 Aerial photograph. http://www.historicaerials.com
1964 Aerial photograph. http://www.historicaerials.com
1979 Aerial photograph. http://www.historicaerials.com

Lawrence, John W., Hilary Powell and Paul Schopp
2014 Phase I Archaeological Survey Report New Carrollton and Landover Yards Improvement Project, Prince George's County, Maryland. Report prepared for WMATA, on file at the Maryland Historical Trust, Crownesville, Maryland.

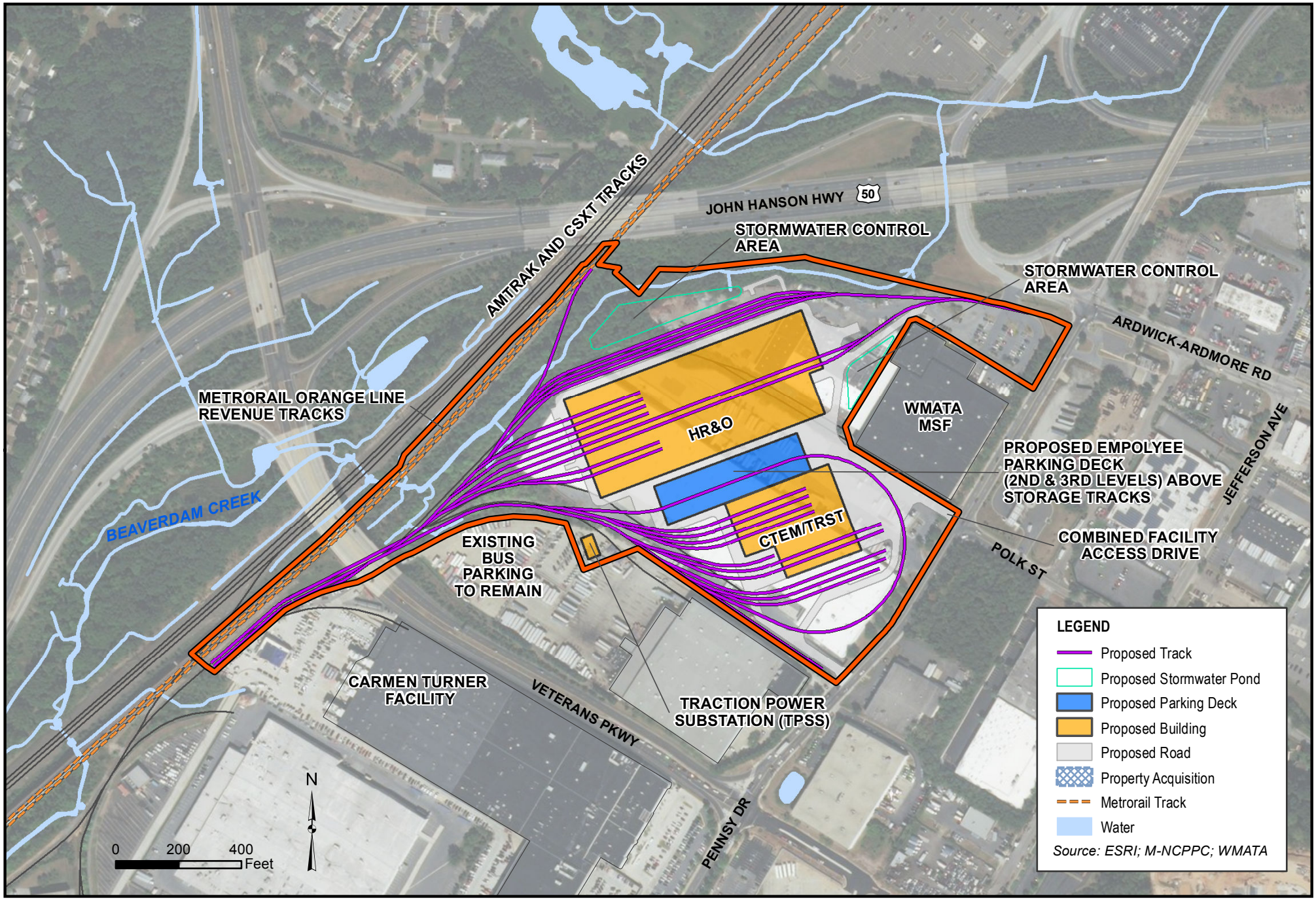
Martenet, Simon J.
1866 Prince George's. S.J. Martenet, Baltimore.

National Park Service
2014 Defining Boundaries for National Register Properties. http://www.nps.gov/nr/publications/bulletins/boundaries/bound1.htm (accessed 31 January, 2014)

United States Geological Society (USGS)
1886 Upper Marlboro-East Washington, DC, 15 minute topographic quadrangle.
1921 Patuxent MD-DC, 7.5 minute topographic quadrangle.

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

Figure 1. Project Site Location, Pennsy Drive Heavy Repair and Overhaul Facility


AMTRAK AND CSXT TRACKS
JOHN HANSON HWY
50
STORMWATER CONTROL AREA
STORMWATER CONTROL AREA
ARDWICK-ARDMORE RD
METRORAIL ORANGE LINE REVENUE TRACKS
HR&O
WMATA MSF
PROPOSED EMPOLYEE PARKING DECK (2ND & 3RD LEVELS) ABOVE STORAGE TRACKS
JEFFERSON AVE
BEAVERDAM CREEK
CTEM/TRST
EXISTING BUS PARKING TO REMAIN
COMBINED FACILITY ACCESS DRIVE
POLK ST
CARMEN TURNER FACILITY
VETERANS PKWY
TRACTION POWER SUBSTATION (TPSS)
PENNSY DR
N
0
200
400
Feet
LEGEND
Proposed Track
Proposed Stormwater Pond
Proposed Parking Deck
Proposed Building
Proposed Road
Property Acquisition
Metrorail Track
Water
Source: ESRI; M-NCPPC; WMATA

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

Figure 3. Proposed Area of Potential Effects and Photograph Locations

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

Photograph 1. 3636 Pennsy Drive, south and east facades. Nov. 12, 2014

Photograph 2. Southern edge of 3636 Pennsy Drive. Adjacent warehouse to the south is visible on left. Nov. 12, 2014

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

Photograph 3. Wooded area bordering Beaverdam Creek at western edge of property; corner of warehouse visible on right. Nov. 12, 2014

Photograph 4. Property across Pennsy Drive to the east, undeveloped woodlot visible on left. Nov. 12, 2014

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

Photograph 5. Partial view of warehouse adjacent to 3636 Pennsy Drive to the north (on the right), which would be taken by the proposed undertaking.

Photograph 6. View of northeastern limits of the proposed APE from Pennsy Drive and Polk Street

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

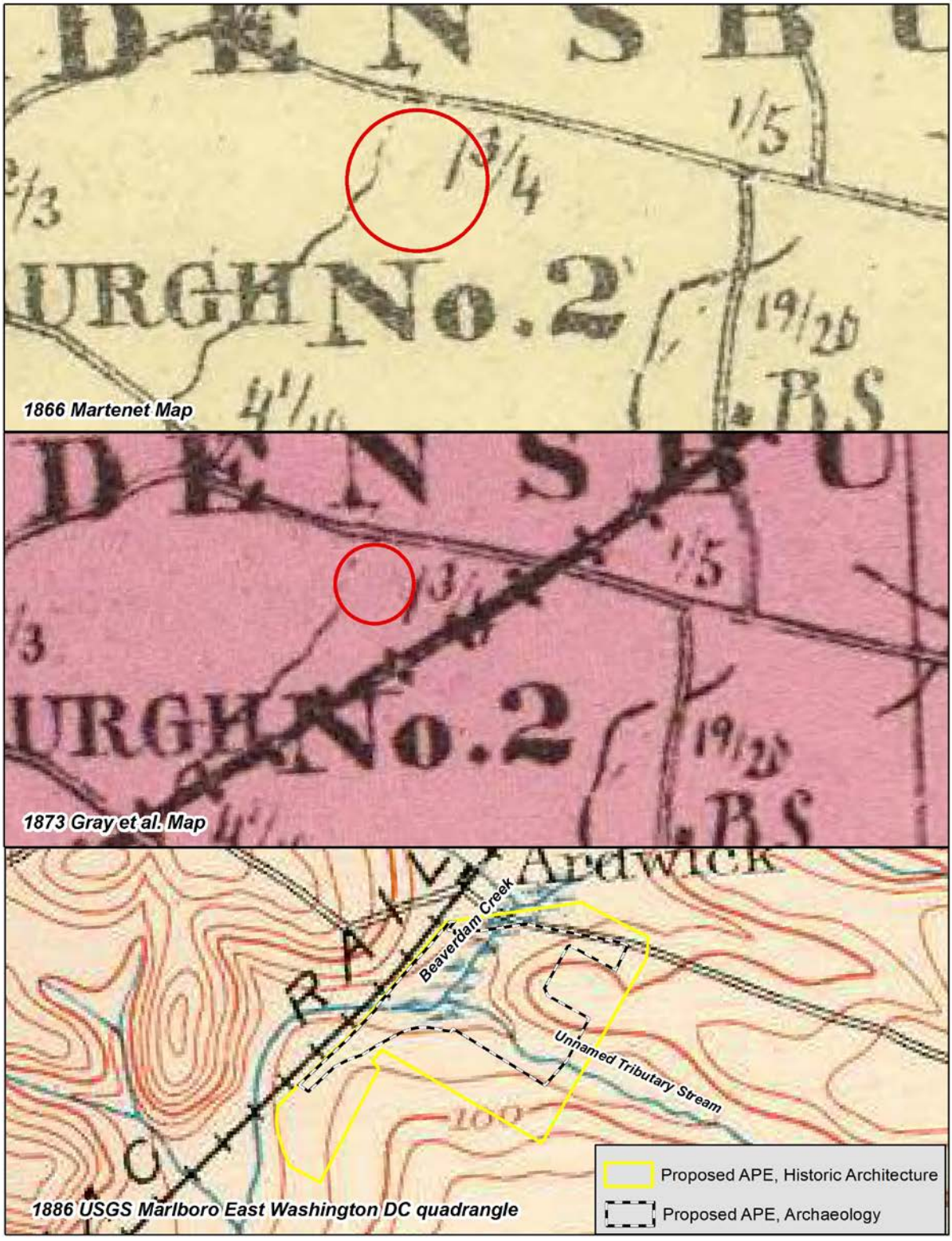


Figure 4. Nineteenth-century Maps

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

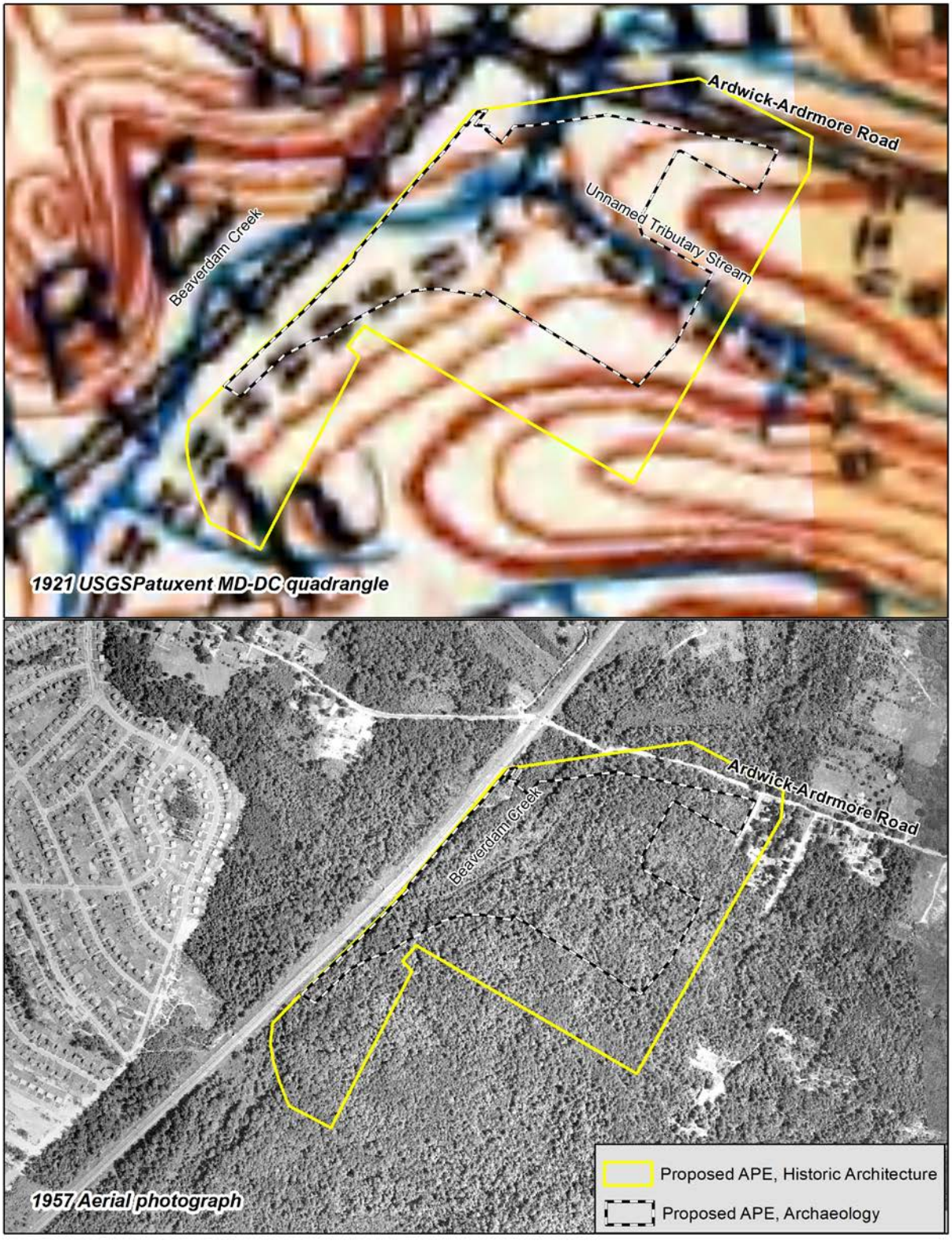


Figure 5. Early and Mid-Twentieth-Century Images

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

Figure 6. 1964 Aerial Photograph

ATTACHMENT 2
Maryland Historical Trust Project Review Form (continuation sheet)
Pennsy Drive Heavy Repair and Overhaul Facility
Prince George's County, MD

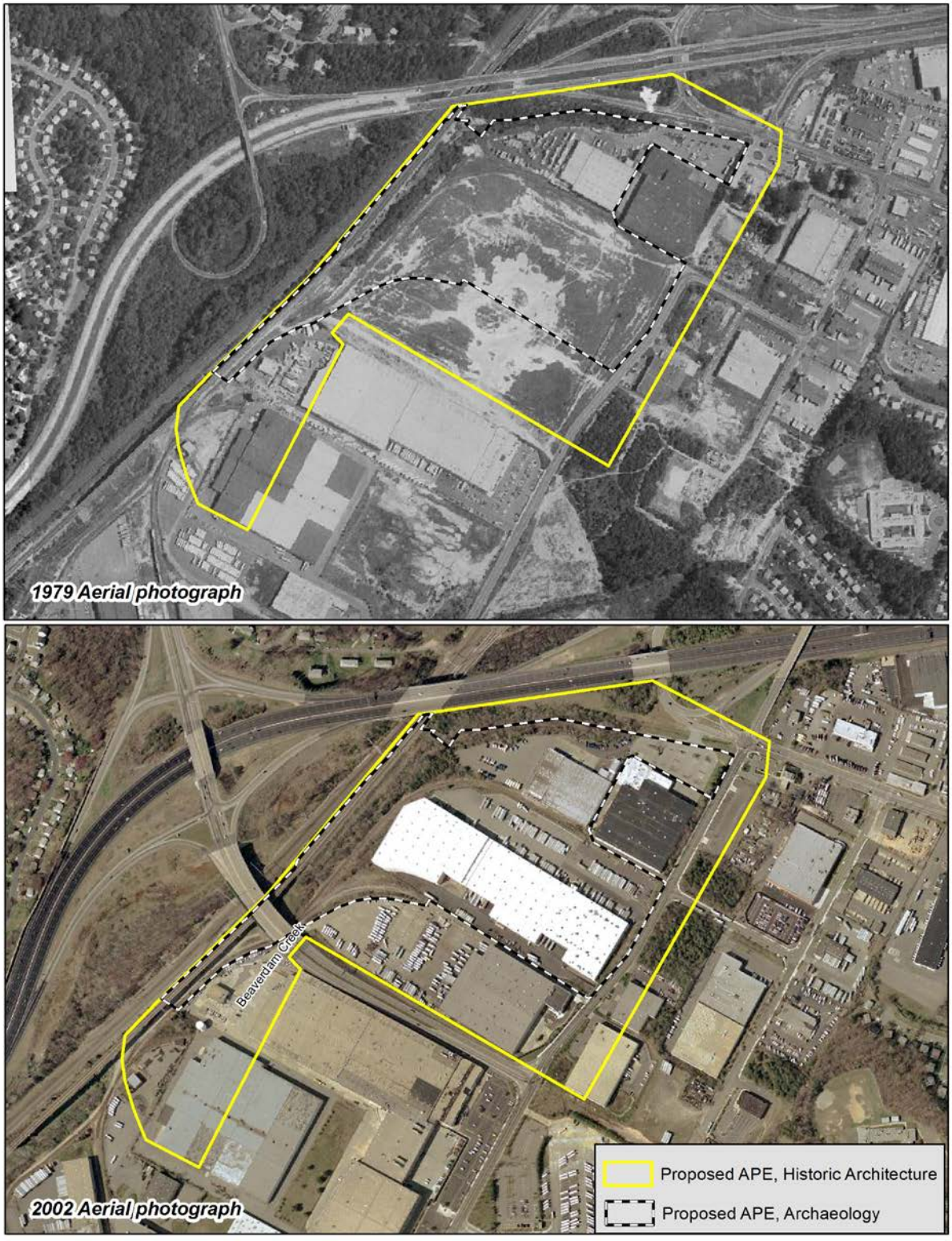


Figure 7. Late Twentieth-Century Images

F

FTA

TJT/EJC

MARYLAND HISTORICAL TRUST

PROJECT REVIEW FORM

Request for Comments from the Maryland Historical Trust/ MDSHPO on State and Federal Undertakings

MHT USE ONLY	
Date Received:	Log Number:
6/21/18	20180315S

Project Name	Pennsy Drive Heavy Repair and Overhaul Facility	County	Prince George's

Primary Contact:

Contact Name	James A. Ashe, PE, CPG	Company/Agency	Washington Metropolitan Area Transit Aut
Mailing Address	600 5th Street, NW		
City	Washington	State: District of Columbia	Zip: 20001
Email	jashe@wmata.com	Phone Number: +1 (202) 962-1745	Ext.

Project Location:

Address	3636 Pennsy Drive	City/Vicinity	Landover, MD
Coordinates (if known): Latitude	38.941	Longitude: -76.875	Waterway: Beaverdam Creek

Project Description:

List federal and state sources of funding, permits, or other assistance (e.g. Bond Bill Loan of 2013, Chapter #; HUD/ CDBG; MDE/COE permit; etc.).	Agency Type	Agency/Program/Permit Name	Project/Permit/Tracking Number (if applicable)
	Federal	Federal Transit Administration	
	Federal	USACE/MDE	Wetland permits

This project includes (check all applicable): ☒ New Construction ☒ Demolition ☐ Remodeling/Rehabilitation

☐ State or Federal Rehabilitation Tax Credits ☒ Excavation/Ground Disturbance ☐ Shoreline/Waterways/Wetlands

Other\Additional Description:

Known Historic Properties:

This project involves properties (check all applicable): ☐ Listed in the National Register ☐ Subject to an easement held by MHT

☐ Included in the Maryland Inventory of Historic Properties ☐ Designated historic by a local government

☒ Previously subject to archeological investigations

Property\District\Report Name: Gardner, W.1976 An Archaeological Survey of the Washington Metropolitan Area Transit Authority

Attachments:

All attachments are required. Incomplete submittals may result in delays or be returned without comment.

☒ Aerial photograph or USGS Quad Map section with location and boundaries of project clearly marked.

☒ Project Description, Scope of Work, Site Plan, and\or Construction Drawings.

☒ Photographs (print or digital) showing the project site including images of all buildings and structures.

☒ Description of past and present land uses in project area (wooded, mined, developed, agricultural uses, etc).

MHT Determination:

☒ There are **NO HISTORIC PROPERTIES** in the area of potential effect

☐ The project will have **NO EFFECT** on historic properties

☐ The project will have **NO ADVERSE EFFECT** on historic properties

☐ The project will have **NO ADVERSE EFFECT WITH CONDITIONS**

☐ The project will have **ADVERSE EFFECTS** on historic properties

☐ **MHT REQUESTS ADDITIONAL INFORMATION**

MHT Reviewer: Tim Tamburrino Date: 6/26/18

Submit printed copy of form and all attachments by mail to: Beth Cole, MHT, 100 Community Place, Crownsville, MD 21032

Appendix C – Natural and Biological Resources

Supplemental Technical Analyses

IPAC online certification submitted to USFWS 7/9/2018.

Return receipt received from USFWS 7/9/2018.

Species and Habitats

No federally listed threatened and endangered species or critical habitats have been documented within the project site (USFWS 2018b). No other ecologically sensitive resources, such as essential fish habitat and bald eagle nests, have been documented in or near the project site (State of Maryland 2018; MBCP 2018). In accordance with guidance on the website of the USFWS Chesapeake Bay Field Office (CBFO), WMATA will submit via email a self-certification package to notify CBFO of the proposed project and document the absence of federally threatened and endangered species and critical habitat on the project site. Therefore, the proposed project would have no or negligible impacts on these resources.

Water Quality

The proposed project would have negligible or no effects on water quality. The proposed project would result in a net loss of approximately 3.6 acres of impervious surface at the site. The concept plan provides for onsite stormwater management in accordance with the *2000 Maryland Stormwater Design Manual (rev. 2009)* to regulate the volume, temperature, velocity, and quality of stormwater discharged from the site. Once the new facilities are operational, it is anticipated that the volume, velocity, temperature, and quality of stormwater discharged from the site would be similar to or improved relative to current conditions.

To minimize construction effects, the construction contractor would obtain coverage under Maryland's 2014 General Permit for Stormwater Associated with Construction Activity (General Permit).

United States Department of the Interior
U.S. Fish & Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401
410/573 4575

Online Certification Letter

Today's date: 7/9/2018

Project: WMATA Pennsy Dr. HR&O Yard

Dear Applicant for online certification:

Thank you for using the U.S. Fish and Wildlife Service (Service) Chesapeake Bay Field Office online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA).This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

Based on this information and in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), we certify that except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For additional information on threatened or endangered species in Maryland, you should contact the Maryland Wildlife and Heritage Division at (410) 260-8573. For information in Delaware you should contact the Delaware Division of Fish and Wildlife, Wildlife Species Conservation and Research Program at (302) 735-8658. For information in the District of Columbia, you should contact the National Park Service at (202) 339-8309.

The U.S. Fish and Wildlife Service also works with other Federal agencies and states to minimize loss of wetlands, reduce impacts to fish and migratory birds, including bald eagles, and restore habitat for wildlife. Information on these conservation issues and how development projects can avoid affecting these resources can be found on our website (www.fws.gov/chesapeakebay)

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Chesapeake Bay Field Office Threatened and Endangered Species program at (410) 573-4527.

Sincerely,

Genevieve LaRouche
Field Supervisor

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127
http://www.fws.gov/chesapeakebay/
http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

In Reply Refer To:
Consultation Code: 05E2CB00-2018-SLI-1414
Event Code: 05E2CB00-2018-E-03058
Project Name: WMATA Pennsy HRO Yard

June 11, 2018

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

Project Summary

Consultation Code: 05E2CB00-2018-SLI-1414

Event Code: 05E2CB00-2018-E-03058

Project Name: WMATA Pennsy HRO Yard

Project Type: TRANSPORTATION

Project Description: The Washington Metropolitan Area Transit Authority (WMATA) proposes the construction of a new heavy repair and overhaul (HR&O) facility for Metrorail vehicles at 3636 Pennsy Drive in Landover, Maryland. The purpose of the project is to centralize Metrorail car heavy repair and mid-life overhaul activities at a single facility.

Facility components to be constructed include:
• Enclosed HR&O service bays to accommodate up to 40 rail cars;
• Rail car truck shop;
• Vehicle storage tracks to accommodate up to 24 rail cars;
• Bays for railcar repair;
• Traction power substation;
• Yard operations control tower;
• Roadway access and loading docks for heavy trucks;
• Stormwater management facilities;
• Employee parking; and
• Operations and administrative offices.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.94183532998778N76.87656360235152W

Counties: Prince George's, MD

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

- PEM5A

FRESHWATER FORESTED/SHRUB WETLAND

- PSS1/EM5A

Figure 1 – Project Location (USGS Quadrangle)

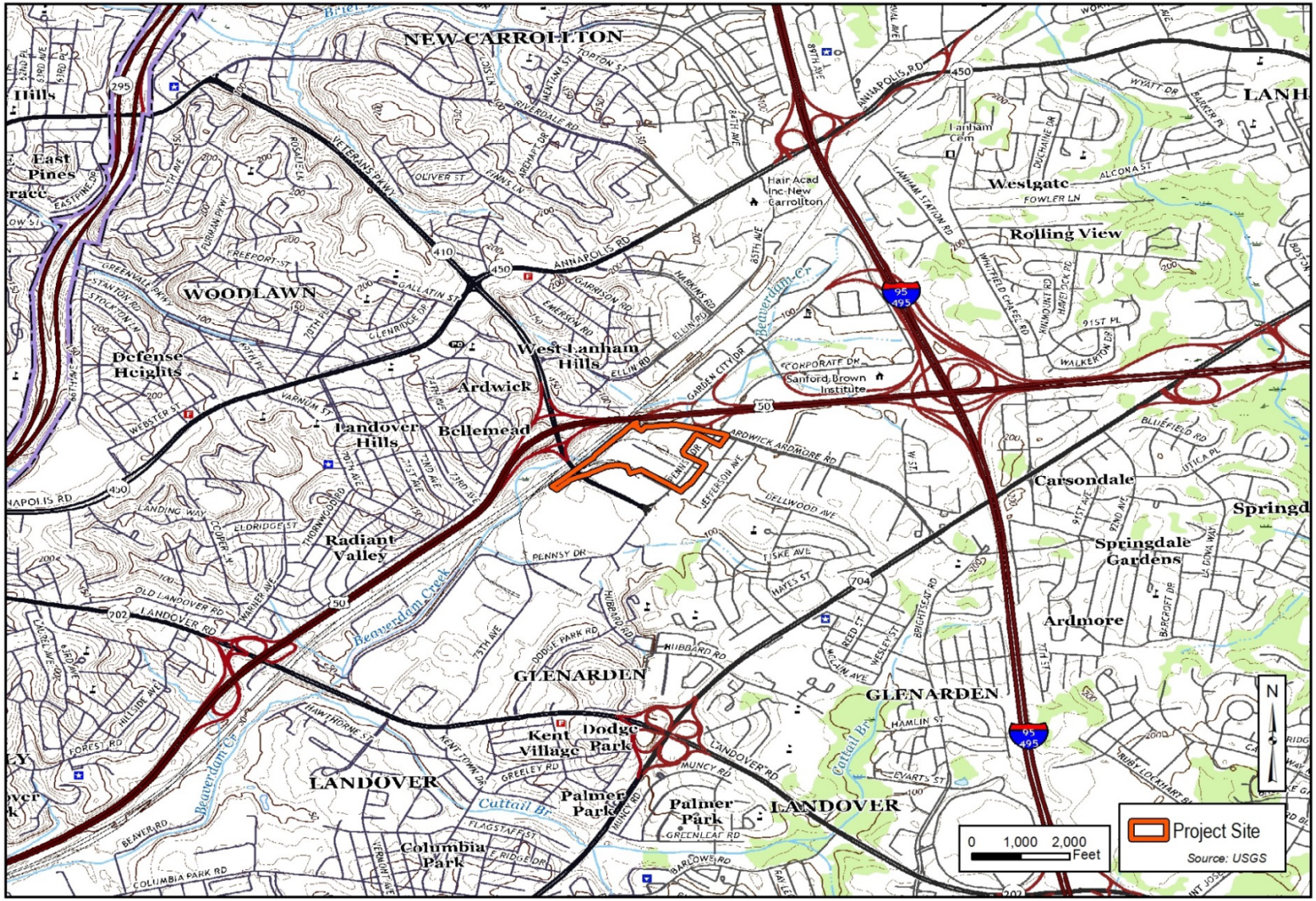


Figure 2 – Project Site Existing Conditions

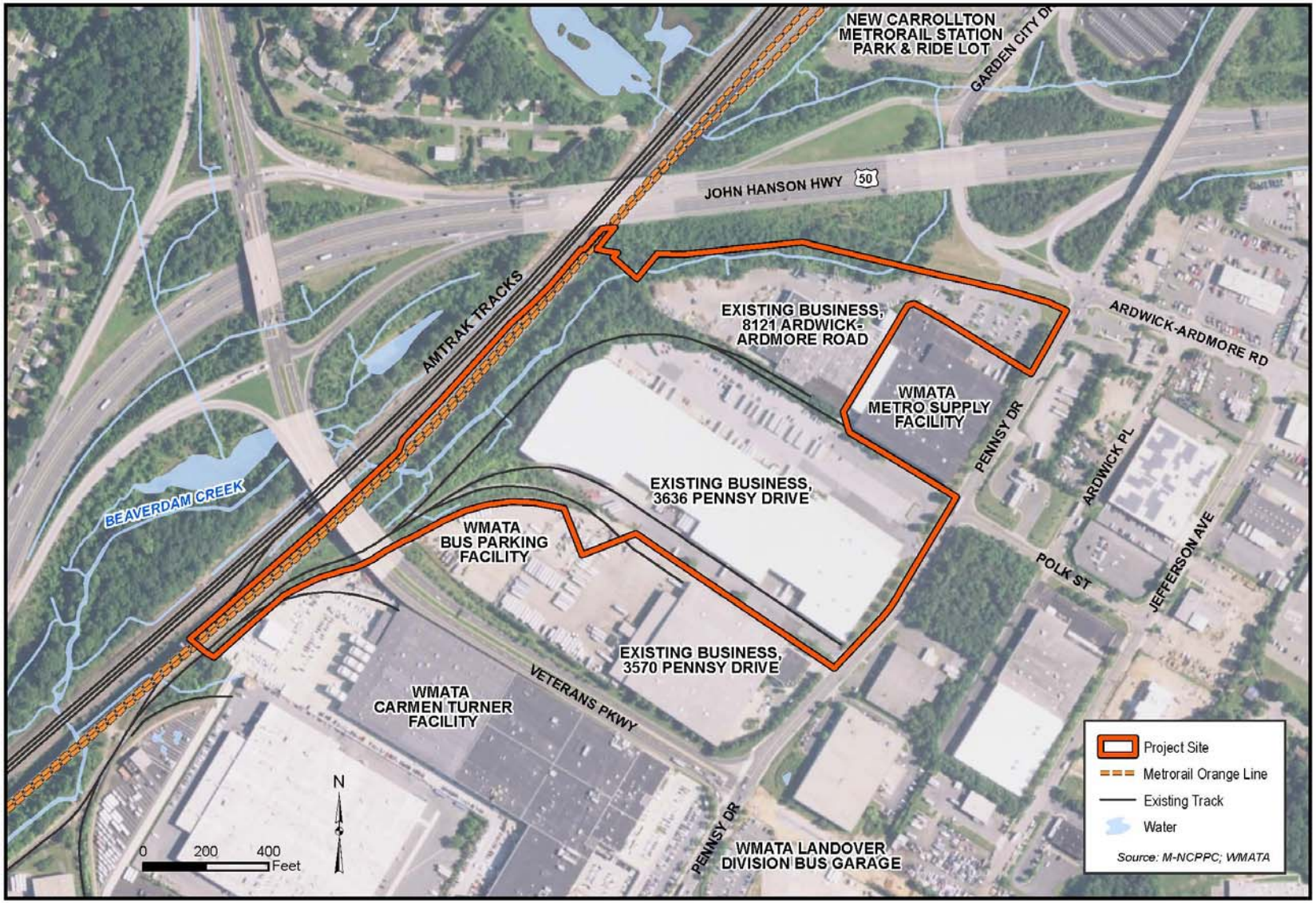
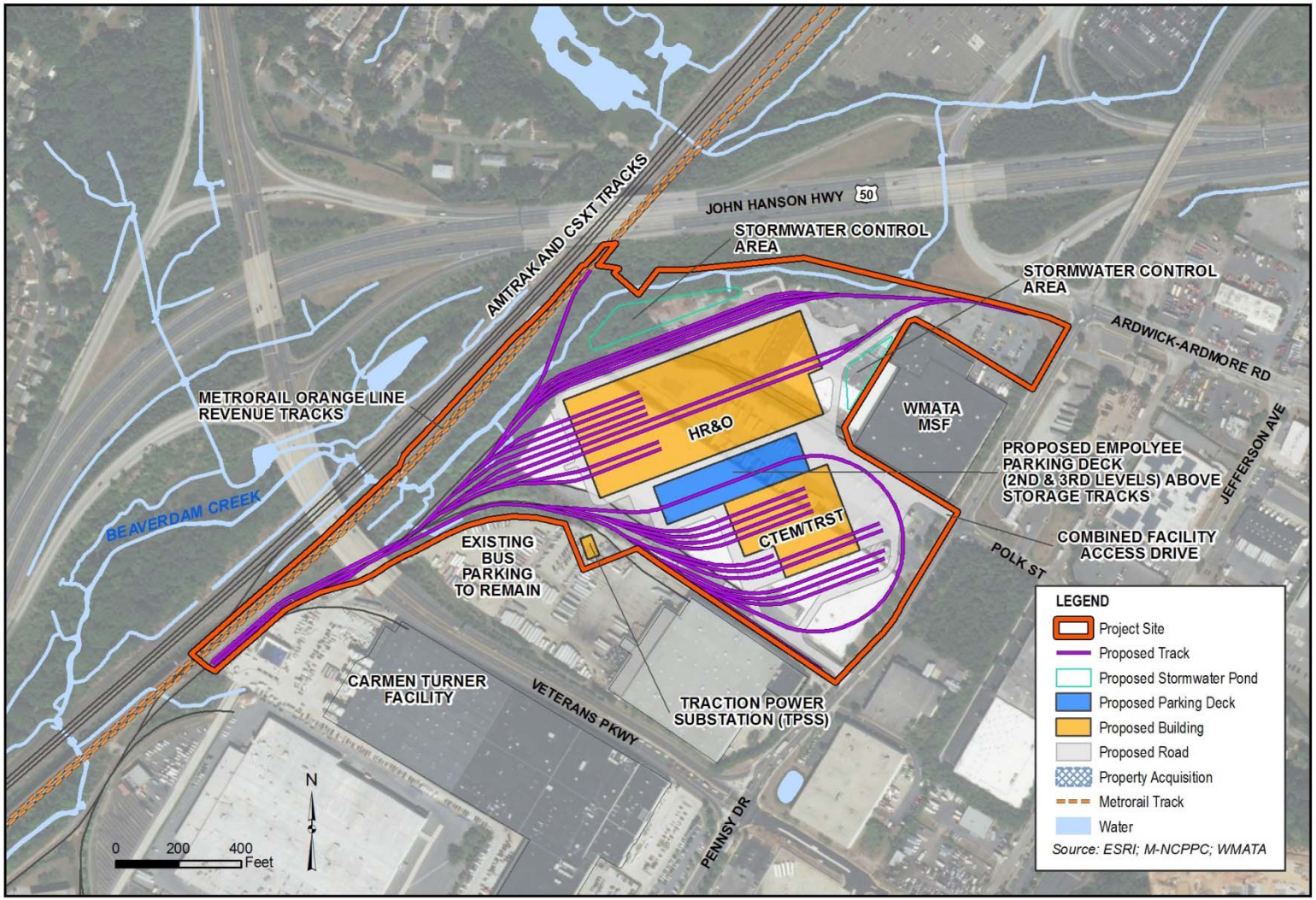


Figure 3 – Conceptual Site Plan



From: CBFO Project Review, FW5 [mailto:cbfoprojectreview@fws.gov]
Sent: Monday, July 09, 2018 1:26 PM
To: Anderson, Susan
Subject: "cbfoprojectreview@fws.gov" return receipt Re: [EXTERNAL] RE: Online Project Review Certification Letter: WMATA Proposed Heavy Repair & Overhaul (HR&O) Facility

This message is a return receipt from the "cbfoprojectreview@fws.gov" mailbox. The U.S. Fish and Wildlife Service has received your project. Thank you.

Appendix D – Federal Consistency Determination

Federal Coastal Zone Consistency Determination package submitted to MDE 8/1/2018.

August 1, 2018

Elder Ghigiarelli
Federal Consistency Coordinator
Deputy Program Administrator
Maryland Department of the Environment
Wetlands and Waterways Program
1800 Washington Boulevard, Suite 430
Baltimore, Maryland 21230-1708

SUBJECT: Federal Coastal Zone Consistency Determination
Construction and Operation of Pennsy Drive Heavy Repair and Overhaul (HR&O) Facility

Dear Mr. Ghigiarelli:

The Washington Metropolitan Area Transit Authority (WMATA) has prepared this Federal Consistency Determination pursuant to Section 307(c)(1) of the Coastal Zone Management Act, 16 United States Code (U.S.C.) § 1456, as amended, and Title 15 Code of Federal Regulations (CFR) Part 930 §§ C for the proposed construction and operation of a Heavy Repair and Overhaul (HR&O) facility in Prince George's County, Maryland (proposed action). Prince George's County is located in Maryland's designated Coastal Zone and the project will be implemented with federal funding; therefore, WMATA must determine the consistency of the proposed action with the enforceable policies of Maryland's Coastal Zone Management Program (CZMP).

WMATA is preparing a Documented Categorical Exclusion (DCE) in accordance with the National Environmental Policy Act of 1969 (NEPA) and requirements of the Federal Transit Administration (FTA), which is the lead federal agency.

Project Description

The purpose of the proposed action is to centralize Metrorail car heavy repair and mid-life overhaul activities at a single facility. The proposed action will be implemented on a 36.6-acre adjacent to the Metrorail Orange Line between the Landover and New Carrollton Metrorail Stations in Landover. This site is shown on **Figure 1** and **Figure 2**.

Components of the proposed facility include the following:

- Enclosed HR&O service bays to accommodate up to 40 rail cars
- Rail car truck shop
- Vehicle storage tracks to accommodate up to 24 rail cars
- Bays for railcar repair
- Traction power substation (TPS)
- Yard operations control tower
- Roadway access and loading docks for heavy trucks
- Stormwater management facilities
- Employee parking
- Operations and administrative offices.

Figure 3 shows the proposed HR&O concept plan.

The site consists of several individual properties with active light industrial uses. The majority of the proposed site is developed with buildings or paved surfaces, which will be demolished to accommodate construction of the proposed facility. Wooded areas border the site to the north and west. A segment of Beaverdam Creek, a tributary of the Anacostia River, traverses the northern and western sides of the project site. The 100-year floodplain associated with Beaverdam Creek is also present along those sides of the site.

Analysis

The following analysis addresses the consistency of the proposed action with applicable Enforceable Policies of Maryland's CZMP as presented in *Maryland's Enforceable Coastal Policies, Effective April 8, 2011* (MD CZMP 2018). Enforceable Policies of the Maryland CZMP that are not applicable to the proposed action are not addressed in this document. The applicability or consistency of each Enforceable Policy to the proposed action is indicated in **Table 1**.

Policy A.1.1[1] – *It is State policy to maintain that degree of purity of air resources which will protect the health, general welfare, and property of the people of the State* (MDE (C9) Md. Code Ann., Envir. §§ 2-102 to -103).

The project site is located within the Metropolitan Washington Air Quality Region, which is designated by the U.S. Environmental Protection Agency (EPA) as a nonattainment area for 8-hour ozone (O_3) and a maintenance (formerly, nonattainment) area for particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$) and carbon monoxide (CO). The construction and operation of federally funded projects must not cause or contribute to exceedances of regulatory thresholds for these and other pollutants (i.e., criteria pollutants) established by the National Ambient Air Quality Standards (NAAQS) and regulated by EPA in accordance with the Clean Air Act (CAA).

The project is included in the Metropolitan Washington Council of Governments' (MWCOG) Financially Constrained Long-Range Transportation Plan (CLRP) for projects planned between 2016 and 2045. The HR&O project is also included in the MWCOG FY 2017-2022 Transportation Improvement Program (TIP), by amendment, adopted on July 6, 2018. Since the project comes from a conforming TIP, it is considered in compliance with the transportation conformity rule on a regional level and no further regional emission impact analysis is required for any regional pollutants. Therefore, the proposed action is consistent with this enforceable policy.

Policy A.1.2 – *The environment shall be free from noise which may jeopardize health, general welfare, or property, or which degrades the quality of life* (MDE (C9) COMAR 26.02.03.02).

The project site is in an intensively urbanized area adjacent to existing Metrorail and Amtrak/ MARC Commuter Train/ CSX heavy rail tracks and U.S. 50, a regional four-lane limited-access highway.

Noise generated during construction of the proposed HR&O facility (including demolition of existing buildings and pavements on the site) will be typical of that produced by heavy construction equipment such as bulldozers, excavators, graders, and heavy trucks during projects of similar scale. The volume and duration of construction-related noise will vary throughout the project's construction phase and will generally be limited to normal working hours (Monday through Friday, 8 a.m. to 5 p.m.).

A study prepared for WMATA in accordance with established FTA and WMATA guidelines and methodologies determined that noise and vibration levels generated by the operation of the new facility will increase only negligibly over existing conditions at nearby noise sensitive receptors on Ardwick

[1] The numbering of enforceable policies as presented in this document correlates to that used in *Maryland's Enforceable Coastal Policies Effective April 8, 2011.*

Ardmore Road. Noise and vibration associated with the proposed facility will also remain well below existing noise and vibration levels generated by Metrorail, Amtrak, MARC Commuter Rail, and CSX freight trains operating on existing tracks between the noise sensitive receptors and the proposed facility. Noise and vibration levels resulting from the operation of the proposed facility will not exceed allowable impact criteria established by FTA and WMATA for the operation of such a facility. Therefore, the proposed action is consistent with this enforceable policy.

Policy A.1.11 – *Soil erosion shall be prevented to preserve natural resources and wildlife; control floods; prevent impairment of dams and reservoirs; maintain the navigability of rivers and harbors; protect the tax base, the public lands, and the health, safety and general welfare of the people of the State, and to enhance their living environment* (MDA (C4) Md. Code Ann., Agric. § 8-102(d)).

Prior to beginning demolition and construction activities, WMATA's construction contractor will obtain coverage under Maryland's 2014 General Permit for Stormwater Associated with Construction Activity (General Permit). As a condition of obtaining coverage under the General Permit, the contractor will prepare and adhere to the requirements of an approved, site-specific erosion and sediment control plan that will specify measures to minimize or prevent the erosion of exposed soils by wind and water and the corresponding sedimentation of receiving water bodies, including Beaverdam Creek. In accordance with the erosion and sediment control plan, the contractor will periodically inspect on-site erosion and sediment control measures and perform maintenance or repairs as necessary to ensure they are functioning as intended throughout the duration of the project's construction phase. Once the proposed HR&O facility is operational, any areas of the site not paved or otherwise developed will be vegetated, thereby minimizing the erosion of exposed soils.

As such, the proposed action is consistent to the maximum extent practicable with this enforceable policy.

Policy A.1.12 – *Controlled hazardous substances may not be stored, treated, dumped, discharged, abandoned, or otherwise disposed anywhere other than a permitted controlled hazardous substance facility or a facility that provides an equivalent level of environmental protection* (MDE (D4) Md. Code Ann., Envir. § 7-265(a)).

Controlled hazardous substances that will be used during construction and operation of the proposed HR&O facility will be used in accordance with applicable label instructions, stored in secured cabinets or lockers when not in use, and disposed of in accordance with applicable federal, state, and local regulatory requirements. Accidental spills of such substances will be contained and/or cleaned up immediately and reported to appropriate regulatory authorities as required by applicable federal, state, and/or local laws. Thus, the proposed action will be consistent with this enforceable policy.

Policy A.2.8 – *Any development or redevelopment of land for residential, commercial, industrial, or institutional purposes shall use small-scale non-structural stormwater management practices and site planning that mimics natural hydrologic conditions, to the maximum extent practicable. Development or redevelopment will be consistent with this policy when channel stability and 100 percent of the average annual predevelopment groundwater recharge are maintained, nonpoint source pollution is minimized, and structural stormwater management practices are used only if determined to be absolutely necessary* (MDE (C9) Md. Code Ann., Envir. § 4-203; COMAR 26.17.02.01, .06).

As a condition of obtaining coverage under the Maryland General Permit (see Policy A.1.11 above), the construction contractor will prepare and adhere to the requirements of a site-specific construction stormwater pollution prevention plan (SWPPP), which will specify measures for regulating the volume, velocity, temperature, and concentrations of pollutants in stormwater discharged from the project site. The contractor will periodically inspect these measures and maintain or repair them as necessary to ensure that they function as intended throughout the duration of the project's construction phase.

Permanent stormwater management measures will be designed in accordance with the *Maryland Stormwater Design Manual (October 2000, revised May 2009)* and incorporated into the overall design of

the proposed facility to mimic natural hydrologic conditions and minimize increases in the volume of stormwater discharged from the site to the extent practicable.

For these reasons, the proposed action is consistent with this enforceable policy to the maximum extent practicable.

Policy A.3.1 – *Projects in coastal tidal and non-tidal floodplains which would create additional flooding upstream or downstream, or which would have an adverse impact upon water quality or other environmental factors, are contrary to State policy* (MDE (C2) Md. Code Ann., Envir. § 5-803 COMAR 26.17.05.04A).

Portions of the proposed HR&O facility and segments of new service tracks are within the 100-year floodplain associated with Beaverdam Creek. These components of the proposed action will be designed and built to prevent increases of the base flood elevation and the downstream displacement of floodwaters. As necessary, WMATA will coordinate with Prince George's County to obtain permits for construction in the 100-year floodplain; obtain a General Waterway Construction Permit from the Maryland Department of the Environment's (MDE) Water Management Administration in accordance with Code of Maryland (COMAR) 26.17.04.10; and/or obtain a Letter of Map Revision Based on Fill (LOMR-F) from the Federal Emergency Management Agency (FEMA).

Thus, the proposed action is consistent with this enforceable policy.

Policy A.3.2[2] – *The following policies apply to projects in non-tidal waters and non-tidal floodplains, but not non-tidal wetlands* (MDE (C2) COMAR 26.17.04.01, .07, .11):

- *Proposed floodplain encroachments, except for roadways, culverts, and bridges, shall be designed to provide a minimum of 1 foot of freeboard above the elevation of the 100-year frequency flood event. In addition, the elevation of the lowest floor of all new or substantially improved residential, commercial, or industrial structures shall also be at least 1 foot above the elevation of the 100-year frequency flood event.*

Components of the proposed action in the 100-year floodplain associated with Beaverdam Creek will be designed, built, and operated in accordance with these requirements.

- *Projects that increase the risk of flooding to other property owners are generally prohibited, unless the area subject to additional risk of flooding is purchased, placed in designated flood easement, or protected by other means acceptable to the Maryland Department of the Environment.*

The proposed action will be designed and built in such a way that will not increase the risk of flooding to other property owners.

- *The construction or substantial improvement of any residential, commercial, or industrial structures in the 100-year frequency floodplain and below the water surface elevation of the 100-year frequency flood may not be permitted. Minor maintenance and repair may be permitted. The modifications of existing structures for flood-proofing purposes may be permitted. Flood-proofing modifications shall be designed and constructed in accordance with specifications approved by the Maryland Department of the Environment.*

Components of the proposed action will not be built below the water surface elevation of the 100-year frequency flood.

- *Multiple purpose use shall be preferred over single purpose use, the proposed project shall achieve the purposes intended, and, at a minimum, project shall provide for a 50 percent reduction of the average annual flood damages.*

[2] Elements of this enforceable policy that are not applicable to the proposed action are not addressed in this document.

The proposed action will be built and operated for a single purpose (i.e., the heavy repair and overhaul of WMATA Metrorail railcars) and achieves the intended purpose of consolidating those functions currently located in two geographically separated locations to a single purpose-built facility.

For these reasons, the proposed action is consistent to the maximum extent practicable with this enforceable policy.

Policy B.3.1 – *Removal, excavation, grading, dredging, dumping, or discharging of, or filling a non-tidal wetland with materials of any kind, including the driving of piles and placing of obstructions; changing existing drainage characteristics, sedimentation patterns, flow patterns, or flood retention characteristics; disturbing the water level or water table; or removing or destroying plant life that would alter the character of a non-tidal wetland is prohibited unless:*

- *The proposed project has no practicable alternative;*
- *Adverse impacts are first avoided and then minimized based on consideration of existing topography, vegetation, fish and wildlife resources, and hydrological conditions;*
- *Comprehensive watershed management plans are considered; and*
- *The proposed project does not cause or contribute to an individual or cumulative effect that degrades:*
  - *Aquatic ecosystem diversity, productivity, and stability,*
  - *Plankton, fish, shellfish, and wildlife,*
  - *Recreational and economic values, and*
  - *Public welfare;*
  - *Surface water quality; or*
  - *Ground water quality.*

Mitigation measures are required to replace the ecological values associated with non-tidal wetlands that are impaired by activities described above (MDE (C3) COMAR 26.23.01.01; COMAR 26.23.02.04, .06; COMAR 26.23.04.02).

The National Wetland Inventory (NWI) map does not depict any wetlands or other Waters of the U.S. within the project site. The Natural Resource Conservation Service (NCRS) web soil survey does not identify any hydric soils on-site. Several roadside ditches were observed via aerial photography, but do not show evidence of being jurisdictional in nature. No wetland signatures were identified through analysis of aerial photography within the project limits. The Department of Natural Resources (DNR) does not identify any Wetlands of Special State Concern or State Wetlands within the project site. On-site field investigations will occur during final design and prior to construction activities to confirm the absence of jurisdictional wetlands.

Should non-tidal wetlands be identified during field investigations, WMATA will obtain applicable coverage under a Maryland Non-tidal Wetland and Waterway Permit and/or other applicable federal, state, and local permits and adhere to the requirements specified therein throughout the project's construction phase. Such requirements could include measures to avoid, minimize, or mitigate impacts on non-tidal wetlands and waterways resulting from the proposed action. Non-tidal wetlands temporarily impacted by construction will be restored to a pre-construction condition following the completion of the proposed project. WMATA will adhere to avoidance, mitigation, and/or compensation measures specified in the applicable permit(s) to minimize permanent impacts on wetlands and waterways resulting from the proposed project.

Therefore, the proposed action is consistent with this enforceable policy.

Policy B.4.1 – *The Forest Conservation Act and its implementing regulations, as approved by NOAA, are enforceable policies. Generally, before developing an area greater than 40,000 square feet, forested and environmentally sensitive areas must be identified and preserved whenever possible. If these areas cannot be preserved, reforestation or other mitigation is required to replace the values associated with*

them. This policy does not apply in the Critical Area (DNR (C5) Md. Code Ann., Nat. Res. §§ 5-1601 to -1613; COMAR 08.19.01-.06).

Forested areas exist at the project site; however, the extent of tree clearing to accommodate the proposed action on the project site is not known at this stage of planning. Prior to implementing the proposed action, WMATA will conduct a forest stand delineation and prepare a forest conservation plan in accordance with the Maryland Forest Conservation Act to identify the composition of forested areas on the project site, evaluate potential impacts, and develop measures to avoid or mitigate any required clearing. WMATA and/or its construction contractor will adhere to mitigation requirements specified in the forest conservation plan approved by Maryland Department of Natural Resources throughout and subsequent to the proposed action's construction phase, as applicable.

As such, the proposed action is consistent with this enforceable policy.

Policy B.6.7 – *Projects in or adjacent to non-tidal waters shall not adversely affect aquatic or terrestrial habitat unless there is no reasonable alternative and mitigation is provided* (MDE (C2) COMAR 26.17.04.11B(5)).

During construction of the proposed facility, implementation of and adherence to applicable requirements specified in the Maryland General Permit, site-specific erosion and sediment control plan and SWPPP, Maryland Non-tidal Wetland and Waterway Permit, and forest conservation plan will minimize or prevent the degradation of aquatic and terrestrial habitat on and adjacent to the project site. Operation of the proposed HR&O facility will have no effects on these resources.

Therefore, the proposed action is consistent with this enforceable policy.

Policy C.7.1 – *The social, economic, and environmental effects of proposed transportation facilities projects must be identified and alternative courses of action must be considered* (MDOT (D8) COMAR 11.01.06.02B).

In addition to relocating HR&O activities to the Pennsy Road site (i.e., the proposed action analyzed in this document), WMATA considered other alternative sites in Prince George's and Montgomery counties in Maryland, and Fairfax County in Virginia. Based on preliminary reviews of environmental, social, and physical constraints on and near those sites and further consideration of Metrorail operational requirements and other factors, development of the proposed HR&O facility at the Pennsy Road site was identified as WMATA's preferred alternative and carried forward for further analysis in the DCE and this document.

Policy C.7.2 – *The public must be involved throughout the process of planning transportation projects* (MDOT (D8) Md. Code Ann., Transp. § 7-304(a); COMAR 11.01.06.02B).

WMATA is consulting with the Maryland Historical Trust (MHT) with respect to the proposed action in accordance with Section 106 of the National Historic Preservation Act and with the U.S. Fish and Wildlife Service (USFWS) in accordance with Section 7 of the Endangered Species Act. The proposed action will have no adverse effects or impacts on resources under the jurisdiction of these agencies. See Attachment 5, Agency Concurrence.

In accordance with WMATA Compact procedures, a public hearing will be held prior to implementation. The public will be given the opportunity to review project documents and provide comments on the proposed action. WMATA will review and consider any feedback received on the proposed action prior to making the staff recommendation to the WMATA Board of Directors.

Pursuant to 15 CFR 930.41, the Maryland Department of the Environmental -Wetland & Waterways Program has 60 days from receipt of this letter to concur with, or object to this Federal Consistency Determination, or to request an extension in writing under 15 CFR 930.41 (b). Concurrence will be assumed if no response is received after 60 days from receipt of this letter.

The state's response should be sent to:

James A. Ashe, PE, CPG
Manager, Environmental Planning and Compliance
Office of Chief Engineer, Infrastructure
Transit Infrastructure and Engineering Services
Washington Metropolitan Area Transit Authority
600 5th Street, NW
Washington, DC 20001

Please contact me at (202) 962-1745 should you have questions or require additional information.

Sincerely,

James A. Ashe, PE, CPG
Manager, Environmental Planning and Compliance
Washington Metropolitan Area Transit Authority

Enclosures:

1) Figure 1 – Project Location (USGS Quadrangle)
2) Figure 2 – Project Site Existing Conditions
3) Figure 3 – Conceptual Site Plan
4) Table 1 – Maryland Enforceable Policies
5) Agency Concurrence

Figure 1 – Project Location (USGS Quadrangle)

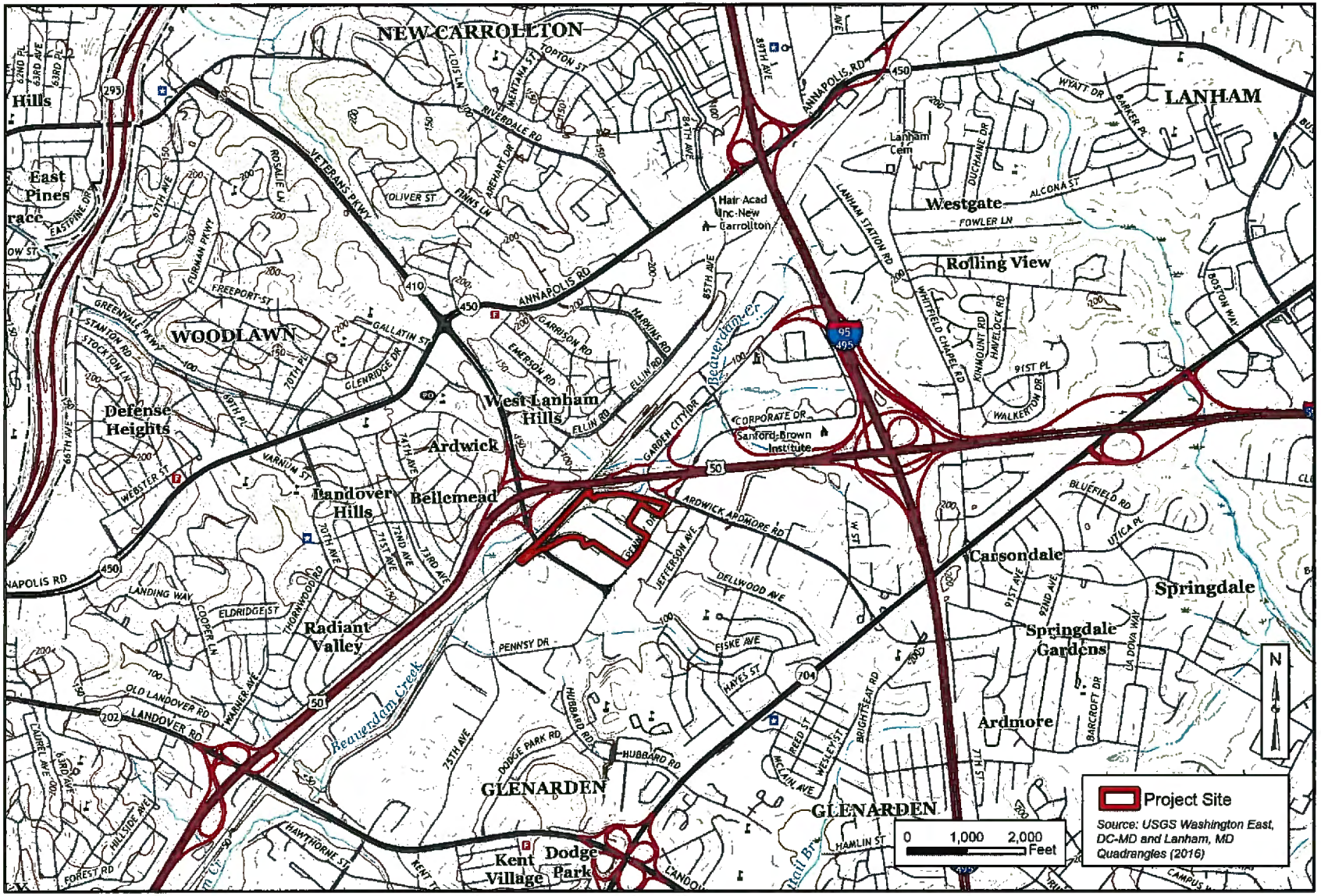


Figure 2 – Project Site Existing Conditions

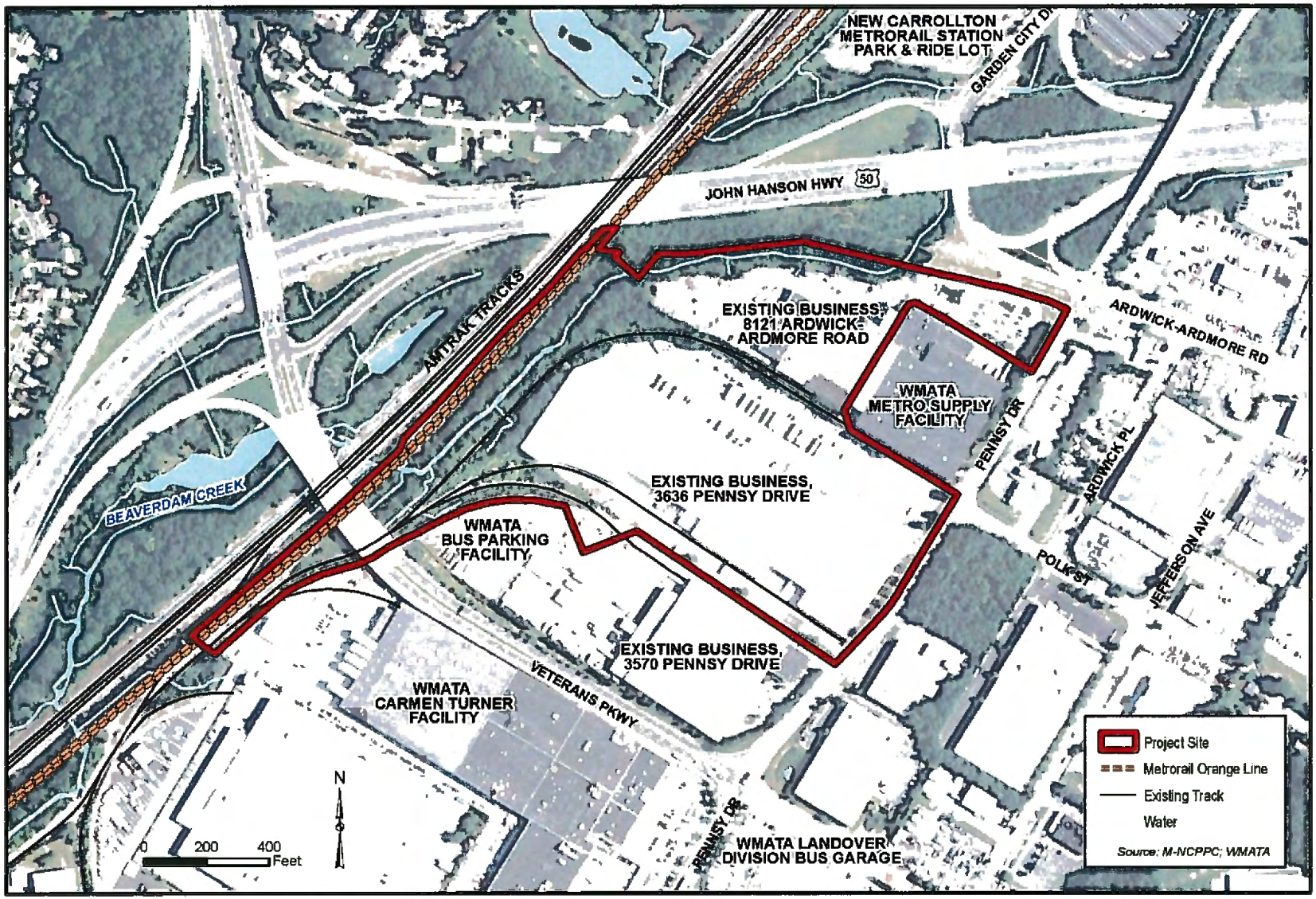


Figure 3 – Conceptual Site Plan

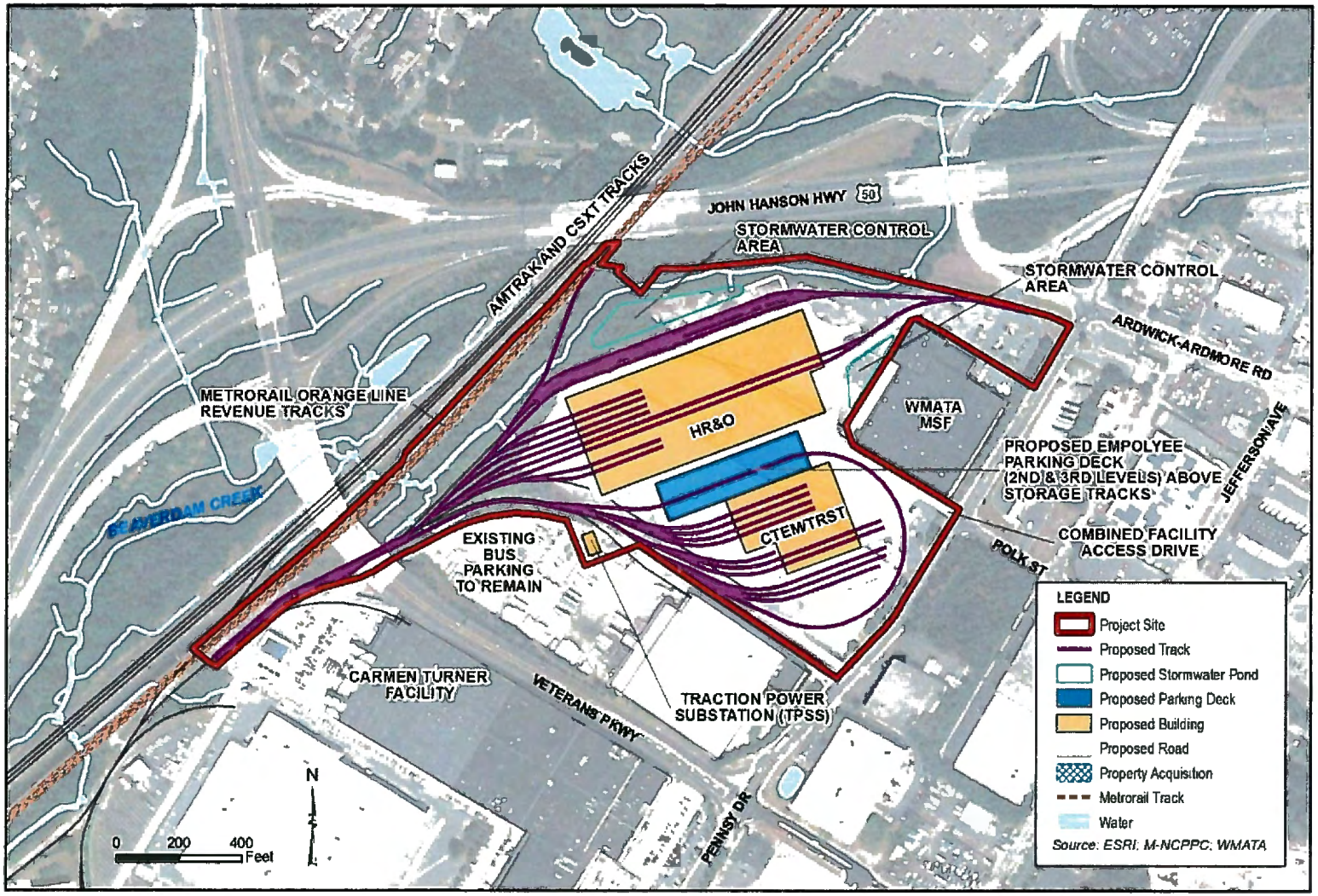


Table 1 – Maryland Enforceable Policies

Number	Policy	Policy References[1]	Applicability or Consistency[2]
A	General Policies		
A.1	Core Policies		
A.1.1	It is State policy to maintain that degree of purity of air resources which will protect the health, general welfare, and property of the people of the State.	MDE (C9) Md. Code Ann., Envir. §§ 2-102 to -103	Consistent
A.1.2	The environment shall be free from noise which may jeopardize health, general welfare, or property, or which degrades the quality of life.	MDE (C9) COMAR 26.02.03.02	Consistent
A.1.3	The unique ecological, geological, scenic, and contemplative aspects of State wild lands shall not be affected in a manner that would jeopardize the future use and enjoyment of those lands as wild.	DNR (C7) Md. Code Ann., Nat. Res. §§ 5-1201, -1203	Not Applicable (N/A)
A.1.4	The safety, order, and natural beauty of State parks and forests, State reserves, scenic preserves, parkways, historical monuments and recreational areas shall be preserved.	DNR (B1) Md. Code. Ann., Nat. Res. § 5-209	N/A
A.1.5	Any water appropriation must be reasonable in relation to the anticipated level of use and may not have an unreasonable adverse impact on water resources or other users of the waters of the State.	MDE (C9) COMAR 26.17.06.02	N/A
A.1.6	The natural character and scenic value of a river or waterway must be given full consideration before the development of any water or related land resources including construction of improvements, diversions, roadways, crossings, or channelization.	MDE/DNR (C7) Md. Code Ann., Nat. Res. § 8-405 COMAR 26.17.04.11	N/A
A.1.7	A dam or other structure that impedes the natural flow of a scenic or wild river may not be constructed, operated, or maintained, and channelization may not be undertaken, until the applicant considers alternatives less harmful to the scenic and wild resource. Construction of an impoundment upon a scenic or wild river is contrary to the public interest, if that project floods an area of unusual beauty, blocks the access to the public of a view previously enjoyed, or alters the stream's wild qualities.	MDE/DNR (C7) Md. Code Ann., Nat. Res. § 8-406 COMAR 26.17.04.11	N/A
A.1.8	Permanent structures that do not have a clear environmental benefit are prohibited east of the dune line along the Atlantic Coast.	MDE/DNR (B1) Md. Code Ann., Nat. Res. § 8-1102	N/A
A.1.9	Activities which will adversely affect the integrity and natural character of Assateague Island will be inconsistent with the State's Coastal Management Program, and will be prohibited.	MDE/DNR (B1) Md. Code. Ann., Nat. Res. §§ 5-209, 8-1102	N/A
A.1.10	An opportunity for a public hearing shall be provided for projects in non-tidal waters that dredge, fill, bulkhead, or change the shoreline; construct or reconstruct a dam; or create a waterway, except in emergency situations.	MDE (A3) COMAR 26.17.04.13A	N/A

Number	Policy	Policy References[1]	Applicability or Consistency[2]
A.1.11	Soil erosion shall be prevented to preserve natural resources and wildlife; control floods; prevent impairment of dams and reservoirs; maintain the navigability of rivers and harbors; protect the tax base, the public lands, and the health, safety and general welfare of the people of the State, and to enhance their living environment.	MDA (C4) Md. Code Ann., Agric. § 8-102(d)	Consistent
A.1.12	Controlled hazardous substances may not be stored, treated, dumped, discharged, abandoned, or otherwise disposed anywhere other than a permitted controlled hazardous substance facility or a facility that provides an equivalent level of environmental protection.	MDE (D4) Md. Code Ann., Envir. § 7-265(a)	Consistent
A.1.13	A person may not introduce in the Port of Baltimore any hazardous materials, unless the cargo is properly classed, described, packaged, marked, labeled, placarded, and approved for highway, rail, or water transportation.	MDOT (D3) COMAR 11.05.02.04A	N/A
A.1.14	Operations on the Outer Continental Shelf must be conducted in a safe manner by well-trained personnel using technology, precautions, and techniques sufficient to prevent or minimize the likelihood of blowouts, loss of well control, fires, spillages, physical obstruction to other users of the waters or subsoil and seabed, or other occurrences which may cause damage to the environment or property, or which may endanger life or health.	(B2) Md. Code Ann., Envir. §§ 17-101 to -403 COMAR 26.24.01.01 COMAR 26.24.02.01, .03 COMAR 26.24.05.01	N/A
A.2	Water Quality		
A.2.1	No one may add, introduce, leak, spill, or emit any liquid, gaseous, solid, or other substance that will pollute any waters of the State without State authorization.	MDE (A5) Md. Code Ann., Envir. §§ 4-402, 9-101, 9-322	N/A
A.2.2	All waters of the State shall be protected for water contact recreation, fish, and other aquatic life and wildlife. Shellfish harvesting and recreational trout waters and waters worthy of protection because of their unspoiled character shall receive additional protection.	MDE (A1) COMAR 26.08.02.02	N/A
A.2.3	The discharge of any pollutant which will accumulate to toxic amounts during the expected life of aquatic organisms or produce deleterious behavioral effects on aquatic organisms is prohibited.	MDE (A4) COMAR 26.08.03.01	N/A
A.2.4	Before constructing, installing, modifying, extending, or altering an outlet or establishment that could cause or increase the discharge of pollutants into the waters of the State, the proponent must hold a discharge permit issued by the Department of the Environment or provide an equivalent level of water quality protection.	MDE (D6) Md. Code Ann., Envir. § 9-323(a)	N/A
A.2.5	The use of best available technology is required for all permitted discharges into State waters, but if this is insufficient to comply with the established water quality standards, additional treatment shall be required and based on waste load allocation.	MDE (D4) COMAR 26.08.03.01C	N/A
A.2.6	Thermal discharges shall be controlled so that the temperature outside the mixing zone (50 feet radially from the point of discharge) meets the applicable water quality criteria or discharges comply with the thermal mixing zone criteria.	MDE (D4) COMAR 26.08.03.03C	N/A
A.2.7	Pesticides shall be stored in an area located at least 50 feet from any water well or stored in secondary containment approved by the Department of the Environment.	MDA (C4) COMAR 15.05.01.06	N/A

Number	Policy	Policy References[1]	Applicability or Consistency[2]
A.2.8	Any development or redevelopment of land for residential, commercial, industrial, or institutional purposes shall use small-scale non-structural stormwater management practices and site planning that mimics natural hydrologic conditions, to the maximum extent practicable. Development or redevelopment will be consistent with this policy when channel stability and 100 percent of the average annual predevelopment groundwater recharge are maintained, nonpoint source pollution is minimized, and structural stormwater management practices are used only if determined to be absolutely necessary.	MDE (C9) Md. Code Ann., Envir. § 4-203 COMAR 26.17.02.01, .06	Consistent
A.2.9	Unless otherwise permitted, used oil may not be dumped into sewers, drainage systems, or any waters of the State or onto any public or private land.	MDE (D4) Md. Code Ann., Envir. § 5-1001(f)	N/A
A.2.10	If material being dumped into Maryland waters or waters off Maryland's coastline has demonstrated actual toxicity or potential for being toxic, the discharger must perform biological or chemical monitoring to test for toxicity in the water.	MDE (A5) COMAR 26.08.03.07(D) COMAR 26.08.04.01	N/A
A.2.11	Public meetings and citizen education shall be encouraged as a necessary function of water quality regulation.	MDE (A2) COMAR 26.08.01.02E(3)	N/A
A.3	Flood Hazards		
A.3.1	Projects in coastal tidal and non-tidal flood plains which would create additional flooding upstream or downstream, or which would have an adverse impact upon water quality or other environmental factors, are contrary to State policy.	MDE (C2) Md. Code Ann., Envir. § 5-803 COMAR 26.17.05.04A	Consistent
A.3.2	The following policies apply to projects in non-tidal waters and non-tidal floodplains, but not non-tidal wetlands. ▪ Proposed floodplain encroachments, except for roadways, culverts, and bridges, shall be designed to provide a minimum of 1 foot of freeboard above the elevation of the 100-year frequency flood event. In addition, the elevation of the lowest floor of all new or substantially improved residential, commercial, or industrial structures shall also be at least 1 foot above the elevation of the 100-year frequency flood event. ▪ Proposed unlined earth channels may not change the tractive force associated with the 2-year and the 10-year frequency flood events, by more than 10 percent, throughout their length unless it can be demonstrated that the stream channel will remain stable. ▪ Proposed lined channels may not change the tractive force associated with the 2-year and the 10-year frequency flood events, by more than 10 percent, at their downstream terminus unless it can be demonstrated that the stream channel will remain stable. ▪ Category II, III, or IV dams may not be built or allowed to impound water in any location where a failure is likely to result in the loss of human life or severe damage to streets, major roads, public utilities, or other high value property. ▪ Projects that increase the risk of flooding to other property owners are generally prohibited, unless the area subject to additional risk of flooding is purchased, placed in designated flood easement, or protected by other means acceptable to the Maryland Department of the Environment.	MDE (C2) COMAR 26.17.04.01, .07, .11	Consistent

Number	Policy	Policy References[1]	Applicability or Consistency[2]
	▪ The construction or substantial improvement of any residential, commercial, or industrial structures in the 100-year frequency floodplain and below the water surface elevation of the 100-year frequency flood may not be permitted. Minor maintenance and repair may be permitted. The modifications of existing structures for flood-proofing purposes may be permitted. Flood-proofing modifications shall be designed and constructed in accordance with specifications approved by the Maryland Department of the Environment. ▪ Channelization shall be the least favored flood control technique. ▪ Multiple purpose use shall be preferred over single purpose use, the proposed project shall achieve the purposes intended, and, at a minimum, project shall provide for a 50 percent reduction of the average annual flood damages.		
A.3.3	Development may not increase the downstream peak discharge for the 100-year frequency storm event in the following watersheds and all their tributaries: ▪ Gwynns Falls in Baltimore City and Baltimore County; and ▪ Jones Falls in Baltimore City and Baltimore County.	MDE (C2) COMAR 26.17.02.07	N/A
B	Coastal Resources		
B.1	The Chesapeake and Atlantic Coastal Bays Critical Area – *The proposed action does not include activities that would occur in or affect Maryland's Chesapeake and Atlantic Coastal Bays Critical Area; therefore, enforceable policies addressing the Critical Area are not applicable and are not included in this table.*		
B.2	Tidal Wetlands – *The proposed action does not include activities that would occur in or affect tidal wetlands; therefore, enforceable policies addressing tidal wetlands are not applicable and are not included in this table.*		
B.3	Non-Tidal Wetlands		
B.3.1	Removal, excavation, grading, dredging, dumping, or discharging of, or filling a non-tidal wetland with materials of any kind, including the driving of piles and placing of obstructions; changing existing drainage characteristics, sedimentation patterns, flow patterns, or flood retention characteristics; disturbing the water level or water table; or removing or destroying plant life that would alter the character of a non-tidal wetland is prohibited unless: ▪ The proposed project has no practicable alternative; ▪ Adverse impacts are first avoided and then minimized based on consideration of existing topography, vegetation, fish and wildlife resources, and hydrological conditions; ▪ Comprehensive watershed management plans are considered; and ▪ The proposed project does not cause or contribute to an individual or cumulative effect that degrades: o Aquatic ecosystem diversity, productivity, and stability, o Plankton, fish, shellfish, and wildlife, o Recreational and economic values, and o Public welfare; o Surface water quality; or	MDE (C3) COMAR 26.23.01.01 COMAR 26.23.02.04, .06 COMAR 26.23.04.02	Consistent

Number	Policy	Policy References[1]	Applicability or Consistency[2]
	o Ground water quality. Mitigation measures are required to replace the ecological values associated with non-tidal wetlands that are impaired by activities described above.		
B.4	Forests		
B.4.1	The Forest Conservation Act and its implementing regulations, as approved by NOAA, are enforceable policies. Generally, before developing an area greater than 40,000 square feet, forested and environmentally sensitive areas must be identified and preserved whenever possible. If these areas cannot be preserved, reforestation or other mitigation is required to replace the values associated with them. This policy does not apply in the Critical Area.	DNR (C5) Md. Code Ann., Nat. Res. §§ 5-1601 to -1613 COMAR 08.19.01-.06	Consistent
B.4.2	Forestry activities shall provide for adequate restocking, after cutting, of trees of desirable species and condition; provide for reserving, for growth and subsequent cutting, a sufficient growing stock of thrifty trees of desirable species to keep the land reasonably productive; and prevent clear-cutting, or limit the size of a tract to be clear-cut in areas where clear-cutting will seriously interfere with protection of a watershed.	DNR (C5) Md. Code Ann., Nat. Res. § 5-606	N/A
B.4.3	When any timber is cut for commercial purposes from five acres or more of land on which loblolly pine, shortleaf pine, or pond pine, singly or together occur and constitute 25 percent or more of the live trees on each acre, the person conducting the cutting or the landowner shall leave uncut and uninjured at least eight well distributed, cone-bearing, healthy, windfirm, loblolly, shortleaf, or pond pine trees on each acre cut for the purpose of reseeding.	DNR (C5) Md. Code Ann., Nat. Res. §§ 5-501, -504	N/A
B.4.4	Any highway construction project may only cut or clear the minimum amount of trees and other woody plants necessary to be consistent with sound design principles. If over an acre of forest is lost as a result of the project, an equivalent area of publicly owned property shall be reforested.	DNR/MDOT (C5) Md. Code Ann., Nat. Res. § 5-103	N/A
B.4.5	Roadside trees should not be cut down, trimmed, mutilated, or injured unless the activity will eliminate a hazard to property, public safety, or health; improve or prevent tree deterioration; or improve the general aesthetic appearance of the right-of-way.	DNR (C5) COMAR 08.07.02.05	N/A
B.4.6	A person conducting a forestry activity in non-tidal wetlands shall develop and implement a sediment and erosion control plan.	MDE (C3) COMAR 26.23.05.02	N/A
B.5	Historical and Archaeological Sites – *The proposed action does not include activities that would disturb or otherwise affect historical and archaeological sites; therefore, enforceable policies addressing such sites are not applicable and are not included in this table.*		
B.6	Living Aquatic Resources		
B.6.1	Unless authorized by an Incidental Take Permit, no one may take a State listed endangered or threatened species of fish or wildlife.	DNR (A4) Md. Code Ann., Nat. Res. §§ 4-2A-01 to -09 Md. Code Ann., Nat. Res. §§ 10-2A-01 to -09	N/A
B.6.2	Fisheries shall be sustainably harvested.	DNR (A4) Md. Code Ann., Nat. Res. § 4-215	N/A

Number	Policy	Policy References[1]	Applicability or Consistency[2]
B.6.3	Any land or water resource acquired by the State to protect, propagate, or manage fish shall not be damaged.	DNR (A4) Md. Code Ann., Nat. Res. § 4-410	N/A
B.6.4	No activity will be permitted that impedes or prevents the free passage of any finfish, migratory or resident, up or down stream.	DNR (A4) Md. Code Ann., Nat. Res. § 4-501 to -502	N/A
B.6.5	All in-stream construction in non-tidal waters is prohibited from October through April, inclusive, for natural trout waters and from March through May, inclusive, for recreational trout waters. In addition, the construction of proposed projects, which may adversely affect anadromous fish spawning areas, shall be prohibited in non-tidal waters from March 15 through June 15, inclusive.	MDE (C2) COMAR 26.17.04.11B(5)	N/A
B.6.6	Riparian forest buffers adjacent to waters that are suitable for the growth and propagation of self-sustaining trout populations shall be retained whenever possible.	MDE (C5) COMAR 26.08.02.03-3F	N/A
B.6.7	Projects in or adjacent to non-tidal waters shall not adversely affect aquatic or terrestrial habitat unless there is no reasonable alternative and mitigation is provided.	MDE (C2) COMAR 26.17.04.11B(5)	Consistent
B.6.8	The harvest, cutting, or other removal or eradication of submerged aquatic vegetation may only occur in a strip up to 60 feet wide surrounding a pier, dock, ramp, utility crossing, or boat slip to point of ingress in a marina, otherwise the activity must receive the approval of the Department of Natural Resources. No chemical may be used for this purpose, and the timing and method of the activity shall minimize the adverse impact on water quality and on the growth and proliferation of fish and aquatic grasses.	MDE (A4) Md. Code Ann., Nat. Res. § 4-213	N/A
B.6.9	Natural oyster bars in the Chesapeake Bay shall not be destroyed, damaged, or injured.	DNR (A4) Md. Code Ann., Nat. Res. § 4-1118.1	N/A
B.6.10	A person, other than the leaseholder, may not willfully and without authority catch oysters on any aquaculture or submerged land lease area, or willfully destroy or transfer oysters on this land in any manner.	DNR (A4) Md. Code Ann., Nat. Res. § 4-11A-15(a)	N/A
B.6.11	An organism into which genetic material from another organism has been experimentally transferred so that the host acquires the genetic traits of the transferred genes may not be introduced into State waters.	DNR (A4) COMAR 08.02.19.03	N/A
B.6.12	Vectors for the introduction of nonnative aquatic organisms must be appropriately controlled to prevent adverse impacts on aquatic ecosystems.	DNR (A4) Md. Code Ann., Nat. Res. § 4-205.1	N/A
B.6.13	Except as authorized by federal law, any live snakehead fish or viable eggs of snakehead fish of the Family Channidae may not be imported, transported, or introduced into the State.	DNR (A4) COMAR 08.02.19.06	N/A
B.6.14	Nonnative oysters may not be introduced into State waters.	DNR (A4) Md. Code Ann., Nat. Res. § 4-1008	N/A
C	Coastal Uses		
C.1	Mineral Extraction – *The proposed action does not include mineral extraction activities; therefore, enforceable policies addressing such activities are not applicable and are not included in this table.*		

Number	Policy	Policy References[1]	Applicability or Consistency[2]
C.2	Electrical Generation and Transmission – *The proposed action does not involve electrical generation and transmission activities; therefore, enforceable policies addressing such activities are not applicable and are not included in this table.*		
C.3	Tidal Shore Erosion Control – *The proposed action would not occur in a tidal shoreline environment; thus, enforceable policies addressing tidal shoreline erosion control are not applicable and are not included in this table.*		
C.4	Oil and Natural Gas Facilities – *The proposed action does not involve the development or operation of oil and natural gas facilities; therefore, enforceable policies addressing such facilities are not applicable and are not included in this table.*		
C.5	Dredging and Disposal of Dredged Material – *The proposed action does not involve dredging or disposal of dredged material; therefore, enforceable policies addressing such activities are not applicable and are not included in this table.*		
C.6	Navigation – *The proposed action would not affect navigation; therefore, enforceable policies addressing navigation are not applicable and are not included in this table.*		
C.7	Transportation		
C.7.1	The social, economic, and environmental effects of proposed transportation facilities projects must be identified and alternative courses of action must be considered.	MDOT (D8) COMAR 11.01.06.02B	Consistent
C.7.2	The public must be involved throughout the process of planning transportation projects.	MDOT (D8) Md. Code Ann., Transp. § 7-304(a) COMAR 11.01.06.02B	Consistent
C.7.3	Transportation development and improvement projects must support the integrated nature of the transportation system, including removing impediments to the free movement of individuals from one mode of transportation to another.	MDOT (D8) Md. Code Ann., Transp. § 2-602	N/A
C.7.4	Private transit facilities must be operated in such a manner as to supplement facilities owned or controlled by the State to provide a unified and coordinated regional transit system without unnecessary duplication or competing service.	MDOT (D8) Md. Code Ann., Transp. § 7-102.1(b)	N/A
C.7.5	Access to and use of transportation facilities by pedestrians and bicycle riders must be enhanced by any transportation development or improvement project, and best engineering practices regarding the needs of bicycle riders and pedestrians shall be employed in all phases of transportation planning.	MDOT (D8) Md. Code Ann., Transp. § 2-602	N/A
C.8	Agriculture – The proposed action would have no potential to affect agricultural land or activities; therefore, enforceable policies addressing agriculture are not applicable and are not included in this table.		
C.9	Development – The proposed action does not involve development activities; therefore, policies addressing development are not applicable and are not included in this table.		
C.10	Sewage Treatment – The proposed action does not involve nor would it affect sewage treatment; therefore, enforceable policies addressing sewage treatment are not applicable and are not included in this table.		

Source:
State of Maryland. 2011. *Maryland's Enforceable Coastal Policies.* Effective April 8, 2011.

Notes:
1. Initial reference expressions indicates the implementing agency followed a parenthetical citation to the section where the policy can be found in the Chart of Proposed Changes included in the original Maryland Coastal Management Program document, *Routine Program Change, Update and Clarification of Maryland Coastal Management Program Enforceable Policies, Request for Concurrence* (Maryland Department of Natural Resources, November 2010). Subsequent expressions indicate statutory or regulatory references.
2. "Consistent" indicates consistent, to the maximum extent practicable.

Number	Policy	Policy References[1]	Applicability or Consistency[2]
Implementing Agency: CAC – Critical Area Commission for the Chesapeake and Atlantic Coastal Bays DNR – Maryland Department of Natural Resources MDA – Maryland Department of Agriculture MDE – Maryland Department of the Environment MDOT – Maryland Department of Transportation MDP – Maryland Department of Planning PSC – Public Service Commission	**Regulatory and Statutory Reference:** § – Section §§ – Subsection Agric. – Agriculture Article COMAR – Code of Maryland Regulations Crim. Law – Criminal Law Article Envir. – Environment Article Fin. & Proc. – Finance and Procurement Article Md. Code Ann. – Maryland Code Annotated Nat. Res. – Natural Resources Article Pub. Util. Cos. – Public Utilities Article Transp. – Transportation Article		

AGENCY CONCURRENCE

United States Department of the Interior
U.S. Fish & Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401
410/573 4575

Online Certification Letter

Today's date: 7/9/2018
Project: WMATA Pennsy Dr. HR&O Yard

Dear Applicant for online certification:

Thank you for using the U.S. Fish and Wildlife Service (Service) Chesapeake Bay Field Office online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA).This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

Based on this information and in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), we certify that except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For additional information on threatened or endangered species in Maryland, you should contact the Maryland Wildlife and Heritage Division at (410) 260-8573. For information in Delaware you should contact the Delaware Division of Fish and Wildlife, Wildlife Species Conservation and Research Program at (302) 735-8658. For information in the District of Columbia, you should contact the National Park Service at (202) 339-8309.

The U.S. Fish and Wildlife Service also works with other Federal agencies and states to minimize loss of wetlands, reduce impacts to fish and migratory birds, including bald eagles, and restore habitat for wildlife. Information on these conservation issues and how development projects can avoid affecting these resources can be found on our website (www.fws.gov/chesapeakebay)

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Chesapeake Bay Field Office Threatened and Endangered Species program at (410) 573-4527.

Sincerely,

Genevieve LaRouche
Field Supervisor

F

FTA

TJT/EJC

MARYLAND HISTORICAL TRUST

PROJECT REVIEW FORM

Request for Comments from the Maryland Historical Trust/ MDSHPO on State and Federal Undertakings

MHT USE ONLY

Date Received: 6/21/18 Log Number: 20180315S

Project Name	Pennsy Drive Heavy Repair and Overhaul Facility	County	Prince George's

Primary Contact:

Contact Name	James A. Ashe, PE, CPG	Company/Agency	Washington Metropolitan Area Transit Aut
Mailing Address	600 5th Street, NW		
City	Washington	State: District of Columbia	Zip: 20001
Email	jashe@wmata.com	Phone Number: +1 (202) 962-1745	Ext.

Project Location:

Address	3636 Pennsy Drive	City/Vicinity	Landover, MD
Coordinates (if known): Latitude	38.941	Longitude: -76.875	Waterway: Beaverdam Creek

Project Description:

List federal and state sources of funding, permits, or other assistance (e.g. Bond Bill Loan of 2013, Chapter #; HUD/ CDBG; MDE/COE permit; etc.).	Agency Type	Agency/Program/Permit Name	Project/Permit/Tracking Number (if applicable)
	Federal	Federal Transit Administration	
	Federal	USACE/MDE	Wetland permits

This project includes (check all applicable): ☒ New Construction ☒ Demolition ☐ Remodeling/Rehabilitation

☐ State or Federal Rehabilitation Tax Credits ☒ Excavation/Ground Disturbance ☐ Shoreline/Waterways/Wetlands

Other\Additional Description:

Known Historic Properties:

This project involves properties (check all applicable): ☐ Listed in the National Register ☐ Subject to an easement held by MHT

☐ Included in the Maryland Inventory of Historic Properties ☐ Designated historic by a local government

☒ Previously subject to archeological investigations

Property\District\Report Name: Gardner, W.1976 An Archaeological Survey of the Washington Metropolitan Area Transit Authority

Attachments:

All attachments are required. Incomplete submittals may result in delays or be returned without comment.

☒ Aerial photograph or USGS Quad Map section with location and boundaries of project clearly marked.

☒ Project Description, Scope of Work, Site Plan, and\or Construction Drawings.

☒ Photographs (print or digital) showing the project site including images of all buildings and structures.

☒ Description of past and present land uses in project area (wooded, mined, developed, agricultural uses, etc).

MHT Determination:

☒ There are **NO HISTORIC PROPERTIES** in the area of potential effect ☐ The project will have **NO ADVERSE EFFECT WITH CONDITIONS**

☐ The project will have **NO EFFECT** on historic properties ☐ The project will have **ADVERSE EFFECTS** on historic properties

☐ The project will have **NO ADVERSE EFFECT** on historic properties ☐ **MHT REQUESTS ADDITIONAL INFORMATION**

MHT Reviewer: Tim Tamborrino Date: 6/26/18

Submit printed copy of form and all attachments by mail to: Beth Cole, MHT, 100 Community Place, Crownsville, MD 21032

Revised 6/21/2013

Appendix E – Noise and Vibration

Noise and Vibration Technical Memorandum

Appendix E

NOISE AND VIBRATION TECHNICAL MEMORANDUM

WMATA Heavy Repair & Overhaul Facility Project

September 2018

(This Page Intentionally Left Blank)

TABLE OF CONTENTS

1.0 Introduction 1

2.0 Regulatory Framework 1

2.1 Federal 1
2.1.1 Operational Noise Criteria 1
2.1.2 Operational Vibration Criteria 3
2.2 WMATA 4
2.2.1 Noise Criteria 4
2.2.2 Vibration Criteria 6
2.3 Prince George's County 6

3.0 Methodology 7

3.1 Receptor Locations 7
3.2 Field Measurement 7
3.3 Assumptions 9
3.4 Noise Monitoring Equipment 10

4.0 Existing Conditions 11

4.1 Noise 11
4.2 Vibration 11

5.0 Environmental Consequences 12

5.1 No Build Alternative 12
5.1.1 Noise 12
5.1.2 Vibration 12
5.2 Build Alternative 12
5.2.1 Noise 12
5.2.2 Vibration 14

6.0 Temporary Construction Impacts 16

7.0 Potential Avoidance, Minimization and Mitigation Measures 16

8.0 References 17

LIST OF FIGURES

Figure 2-1: FTA Noise Impact Criteria for Transit Projects 2
Figure 2-2: FTA Increase in Cumulative Noise Levels Allowed by Criteria 3
Figure 3-1: Monitoring Site Locations 8

LIST OF TABLES

Table 2-1: FTA Land Use Categories and Noise Metrics 1
Table 2-2: Ground-Borne RMS Vibration Impact Criteria for Annoyance during Operations and Construction 4
Table 2-3: WMATA Residential Noise Criteria for Metrorail Operations at Service and Inspection Yards (dBA) 5
Table 2-4: General Categories of Communities along WMATA Metrorail System Corridors 5
Table 2-5: Criteria for Maximum Airborne Noise Levels (Lmax) from Train Operations (dBA) 6
Table 2-6: Criteria for Maximum Ground-borne Vibration from Train Operations for Buildings with Sleeping Areas 6
Table 3-1: Receptor Distances to the Existing and Future Rail Sources at Pennsy Drive 7
Table 4-1: Baseline Noise Level Measured in the Vicinity of the Pennsy Drive Maintenance Facility 11
Table 5-1: Existing and Predicted Noise Levels at Select Receivers near the Proposed Pennsy Drive Rail Maintenance Facility – FTA Criteria 13
Table 5-2: Predicted Maximum Noise Levels and WMATA Impact Criteria at Select Receivers near the Proposed Pennsy Drive Rail Maintenance Facility 14
Table 5-3: Predicted Maximum Vibration Levels and FTA/WMATA Impact Criteria at Select Receivers near the Proposed Pennsy Drive Rail Maintenance Facility 14

LIST OF ATTACHMENTS

Attachment 1: Human Perception of Noise and Vibration
Attachment 2: Expanded Noise Monitoring Results

ACRONYMS

BMP	Best Management Practices
dB	decibels, linear or unweighted
dBA	A-weighted decibels
EA	Environmental Assessment
FTA	Federal Transit Administration
ips	inches per second
Ldn	Average Day-Night Noise Level
Leq	Average Hourly Equivalent Noise Level
Lmax	Maximum Noise Levels
µips	micro inch per second
mph	miles per hour
NEC	Amtrak Northeast Corridor
NEPA	National Environmental Policy Act
OCS	Overhead Contact System
RMS	Root Mean Squared
ROW	Right of Way
SEL	Sound Exposure Level
VdB	Vibration velocity levels in Decibels
WMATA	Washington Metropolitan Area Transit Authority

1.0 INTRODUCTION

The Washington Metropolitan Area Transit Authority (WMATA) is preparing an environmental study for the construction of a heavy repair and overhaul (HR&O) facility for Metrorail vehicles at 3636 Pennsy Drive in Landover, Maryland. An Environmental Evaluation (EE) is being prepared in accordance with WMATA Compact policies, and a Documented Categorical Exclusion (DCE) is being prepared in accordance with the National Environmental Policy Act (NEPA) as well as other Federal, state and local laws.

This technical memorandum identifies the potential effects of the No Build Alternative and Build Alternative due to noise and vibration. A brief overview describing human perceptions of noise and vibration is provided in **Attachment 1**.

2.0 REGULATORY FRAMEWORK

The noise and vibration assessment was prepared in accordance with NEPA and the guidelines set forth by FTA's *Transit Noise and Vibration Impact Assessment (2006)*. The future predicted noise and vibration levels from the project were evaluated using both the FTA guidelines and the WMATA *Manual of Design Criteria for Maintaining and Continued Operation of Facilities and Systems* (2010). While the FTA criteria are used to evaluate cumulative noise exposure (such as the day-night noise level over 24 hours), the WMATA criteria are used to evaluate instantaneous levels from single events (such as a single Metrorail pass-by) and activities at rail yards.

2.1 Federal

2.1.1 Operational Noise Criteria

FTA's guidance manual *Transit Noise and Vibration Impact Assessment* presents the basic concepts, methods, and procedures for evaluating the extent and severity of noise impacts from transit projects. Transit noise impacts are assessed based on land use categories and sensitivity to noise from transit sources under the FTA guidelines. As shown in **Figure 2-1** on the following page, the FTA noise impact criteria are defined by two curves that allow increasing project noise levels as existing noise increases up to a point, beyond which impact is determined based on project noise alone. The FTA land use categories and required noise metrics are described in **Table 2-1**.

Table 2-1: FTA Land Use Categories and Noise Metrics

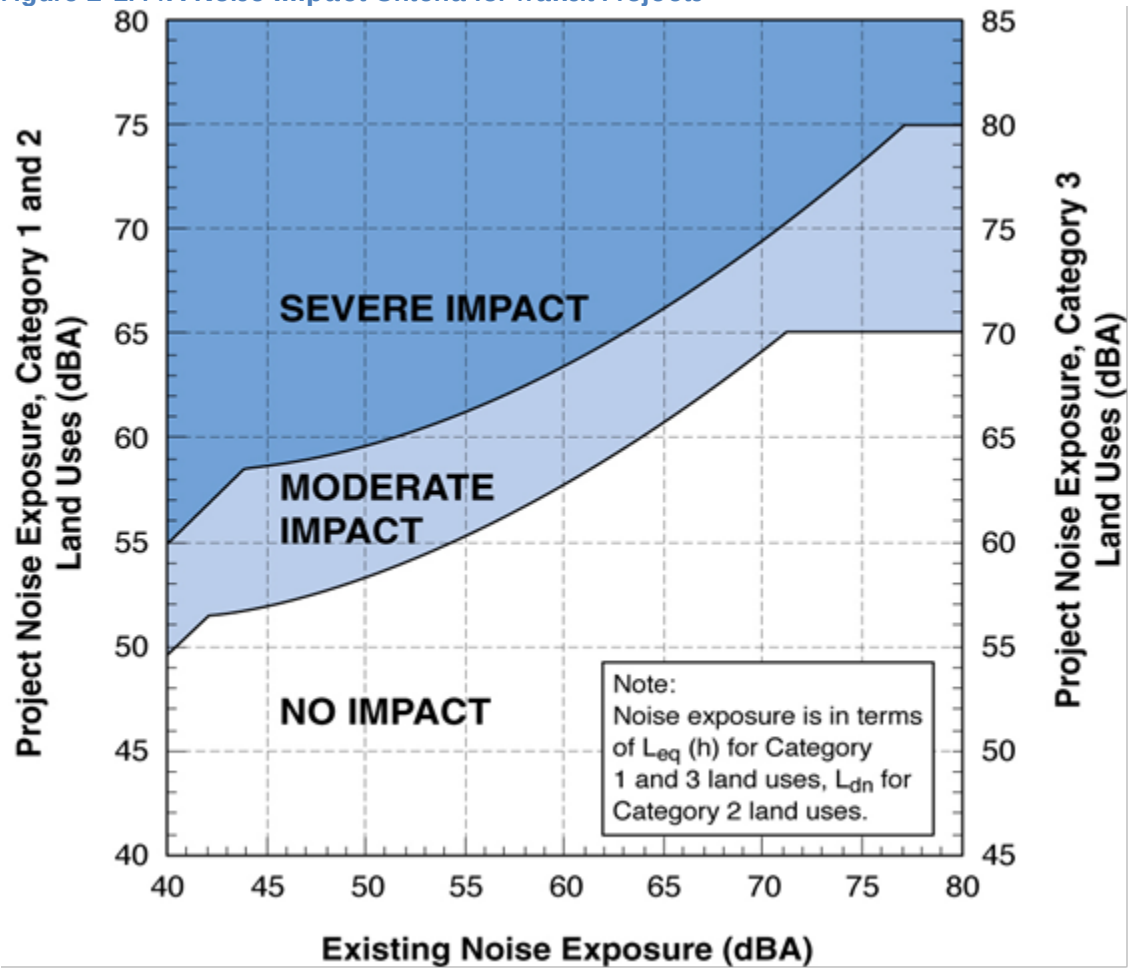
Land Use Category	Noise Metric[1]	Description
1	$L_{eq}(h)$	Tracts of land set aside for serenity and quiet, such as outdoor amphitheaters, concert pavilions, and historic landmarks.
2	L_{dn}	Buildings used for sleeping such as residences, hospitals, hotels, and other areas where nighttime sensitivity to noise is of utmost importance.
3	$L_{eq}(h)$	Institutional land uses with primarily daytime and evening uses, including schools, libraries, churches, museums, cemeteries, historic sites, parks, and certain recreational facilities used for study or meditation.

1. Leq(h) = Average hourly equivalent noise level; Ldn = 24-hour day-night noise level.
Source: FTA, 2006.

The FTA noise criteria are delineated into two categories: moderate and severe impact. The moderate impact threshold defines areas where the change in noise is noticeable but may not be sufficient to cause a strong,

adverse community reaction. The severe impact threshold defines the noise limits above which a significant percentage of the population would be highly annoyed by new noise.

Figure 2-1: FTA Noise Impact Criteria for Transit Projects

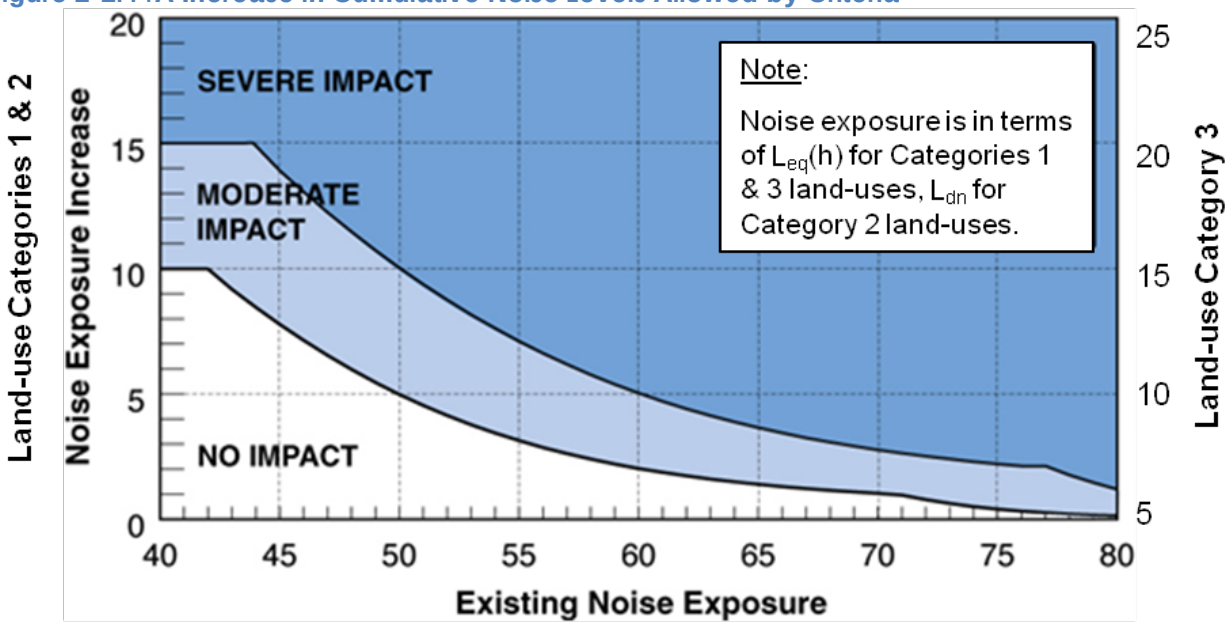


Source: FTA 2006

In most cases when a new transit source is proposed (such as a new rail corridor where there previously was none), the level of impact at any specific site can be established by comparing the predicted future project noise level at the site to the existing noise level at the site. However, for the proposed Pennsy Drive Rail Maintenance Facility, the existing noise sources (e.g., Metrorail operations) change as a result of the project (i.e., track switches are added and the land-use is reconfigured for maintenance activities), and so project noise cannot be defined separately from existing noise. In this case, the existing noise can be determined and a new future noise can be calculated, but accurately describing what constitutes the "project noise" is not possible.

Since the existing noise is dominated by a source that would change due to the project, adding the project noise to the existing noise would be incorrect. Consequently, the baseline noise levels used for comparison at the proposed Pennsy Drive Rail Maintenance Facility were the predicted future (Opening Year) noise levels under the No Build Alternative, since these are expected to be essentially the same as the Existing Conditions. The Opening Year No Build Alternative was compared with the calculated future noise for the Build Alternatives using the cumulative form of the noise criteria shown in **Figure 2-2**.

Figure 2-2: FTA Increase in Cumulative Noise Levels Allowed by Criteria



Source: FTA 2006

The average day-night noise level over a 24-hour period (or L_{dn}) was used to characterize noise exposure for residential areas (FTA Category 2). The L_{dn} descriptor describes a receiver's cumulative noise exposure from all events over a full 24 hours, with events between 10:00 pm and 7:00 am increased by 10 decibels to account for greater nighttime sensitivity to noise. For other noise-sensitive land uses, such as parks and schools (FTA Category 3), the average hourly equivalent noise level (or $L_{eq}(h)$) was used to represent the rail corridor's peak operating period.

2.1.2 Operational Vibration Criteria

The FTA vibration criteria for evaluating ground-borne vibration impacts from train passbys at nearby sensitive receptors are shown in **Table 2-2**. These vibration criteria are related to ground-borne vibration levels that are expected to result in human annoyance and are based on RMS velocity levels expressed in VdB referenced to one micro inch per second. FTA's experience with community response to ground-borne vibration indicates that when there are only a few train events per day, higher vibration levels are necessary to evoke the same community response that would be expected from more frequent events.

This experience is taken into account in the FTA criteria by distinguishing between projects with frequent, occasional, or infrequent events. The frequent events category is defined as more than 70 events per day, the occasional events category is defined as between 30 and 70 events per day, and the infrequent events category is defined as less than 30 events per day. To be conservative, the FTA frequent criteria were used to assess ground-borne vibration impacts in the study area.

Table 2-2: Ground-Borne RMS Vibration Impact Criteria for Annoyance during Operations and Construction

Receptor Land Use		RMS Vibration Levels (VdB)			Ground-borne Noise Levels (dBA)		
Category	Description	Frequent Events	Occasional Events	Infrequent Events	Frequent Events	Occasional Events	Infrequent Events
1	Buildings where low vibration is essential for interior operations	65	65	65	N/A	N/A	N/A
2	Residences and buildings where people normally sleep	72	75	80	35	38	43
3	Daytime institutional and office use	75	78	83	40	43	48
Specific Buildings	TV/Recording Studios/Concert Halls	65	65	65	25	25	25
	Auditoriums	72	80	80	30	38	38
	Theaters	72	80	80	35	43	43

Source: "Transit Noise and Vibration Impact Assessment", Federal Transit Administration, Washington, DC, May 2006.

The vibration criteria levels shown in **Table 2-2** are defined in terms of human annoyance for different land use categories such as high sensitivity (Category 1), residential (Category 2), and institutional (Category 3). In general, the vibration threshold of human perceptibility is approximately 65 VdB.

2.2 WMATA

During the construction and development of the initial Metrorail rapid transit system in the 1970s, design criteria were developed specifically for the WMATA system. The most current version of these design criteria is described in the WMATA *Manual of Design Criteria for Maintaining and Continued Operation of Facilities and Systems*[1]. The WMATA criteria for "Criteria for Maximum Airborne Noise from Train Operations" were used to evaluate impacts from Metrorail passbys and operations within the study area. The WMATA *Manual of Design Criteria* is intended to provide design criteria for all community-related noise and vibration control problems relating to the construction and operations of the WMATA Metrorail system.

2.2.1 Noise Criteria

Table 2-3 lists the WMATA design criteria for Metrorail operations and randomly occurring noises from service and inspection (S&I) yards (such as wheel squeal or railcar auxiliary equipment) for various types of buildings and land use area categories, which are described in more detail in **Table 2-4**. The S&I yard criteria apply to the proposed rail maintenance activities at the Pennsy Drive site, because they are the most similar WMATA use for which noise criteria have been developed. These noise limits are based on the maximum level that would not cause significant intrusion or alteration of the pre-existing noise environment and represent noise levels which are considered acceptable for the type of land use in each area. The criteria presented in **Table 2-3** should be applied at the nearest affected residential properties. If necessary to be compatible with existing noise

[1] WMATA *Manual of Design Criteria for Maintaining and Continued Operation of Facilities and Systems*, Section 16, Washington Metropolitan Area Transit Authority, Department of Operations Services, Office of Engineering Support Services, Release 9, February 18, 2010.

ordinances, the criteria should apply at the S&I Yard property line or the boundary line dividing the industrial/commercial and residential zones.

Additionally, the WMATA design criteria listed in **Table 2-5** were also used to evaluate the new noise from the proposed turnout switch along the WMATA revenue track. This new source was evaluated separately from the activities proposed at the maintenance facility itself.

Table 2-3: WMATA Residential Noise Criteria for Metrorail Operations at Service and Inspection Yards (dBA)

Community Area Category		Maximum Noise Level
I	Low-density Residential	55
II	Average Residential	55
III	High-density Residential	65
IV	Commercial	65
V	Industrial/Highway	70

Note: The WMATA criteria should be applied at the nearest affected residential properties.
Source: WMATA 2010.

Other than the single-family residences along Old Ardwick-Ardmore Road (north of John Hanson Highway), all of the other nearby sensitive land uses identified in the vicinity of the Pennsy Drive site are well outside the FTA screening distance of 1,000 feet. The proposed Pennsy Drive site is located adjacent to the Northeast rail corridor and major highways. Therefore, the WMATA criterion for evaluating maximum noise impacts from Metrorail activities at the Pennsy Drive maintenance facility for residences near industrial/highway sources is 70 dBA. Additionally, the WMATA criterion for evaluating maximum noise impacts from Metrorail passbys at the new turnout switch is 80 dBA.

Table 2-4: General Categories of Communities along WMATA Metrorail System Corridors

Area Category	Area Description	Typical Ambient Noise Levels (Average or L50*)	Typical Day/ Night Exposure Levels L_{dn}**
I	Low Density urban residential, open space park, suburban residential or quiet recreation area. No nearby highways or boulevards.	40-50 (day) 35-45 (night)	Below 55
II	Average urban residential, quiet apartments and hotels, open space, suburban residential, or occupied outdoor areas near busy streets.	45-55 (day) 40-50 (night)	50-60
III	High Density urban residential, average semi-residential/commercial areas, urban parks, museum, and non-commercial public building areas.	50-60 (day) 45-55 (night)	55-65
IV	Commercial areas with office buildings, retail stores, etc., primarily daytime occupancy. Central Business Districts.	60-70	Over 60
V	Industrial areas or Freeway and Highway Corridors	Over 60	Over 65

* - L50 is the long-term statistical median noise level.
** - Ldn is the day-night sound level.
Source: WMATA 2010.

Table 2-5: Criteria for Maximum Airborne Noise Levels (Lmax) from Train Operations (dBA)

Community Area Category[1]		Maximum Passby Noise Level		
		Single-Family	Multi-Family	Commercial
I	Low-density Residential	70	75	80
II	Average Residential	75	75	80
III	High-density Residential	75	80	85
IV	Commercial	80	80	85
V	Industrial/Highway	80	85	85

[1]The Community Area Categories are described further in **Table 2-4**.
Source: WMATA 2010.

2.2.2 Vibration Criteria

The appropriate vibration criteria for maximum ground-borne vibration for various types of residential buildings are listed in **Table 2-6**. These criteria apply to measurements of vertical vibration of floor surfaces within the buildings. Based on the surrounding predominant land uses identified in the vicinity of the proposed project, the WMATA criterion for evaluating ground-borne vibration impacts from train operations to residences is 75 VdB (Industrial/Highway Category). Similarly, the WMATA criterion for evaluating ground-borne vibration impacts from train operations at the new turnout switches is also 75 VdB.

Table 2-6: Criteria for Maximum Ground-borne Vibration from Train Operations for Buildings with Sleeping Areas

Community Area	Category	Maximum Pass-by Ground-borne Vibration Velocity Level (dB re 10^{-6} in/sec)		
		Single Family Dwellings	Multi Family Dwellings	Commercial Buildings
I	Low Density Residential	72	72	72
II	Average Residential	72	72	75
III	High Density Residential	72	75	75
IV	Commercial	72	75	75
V	Industrial/Highway	75	75	75

[1]The WMATA criteria are generally applicable outdoors at the nearside of the nearest occupied building or area under consideration, but not less than 50 feet from track centerline.
Source: WMATA 2010.

2.3 Prince George's County

The Prince George's County Code (Subtitle 19, Pollution, Division 2, Noise Control, Section 19-120) does not specify maximum allowable noise limits. Instead, the Prince George's County noise ordinance establishes only a qualitative prohibition on nuisance noise, such as amplified radios or tools. However, these criteria are not applicable to transit projects and were not used to assess impact as part of this study.

3.0 METHODOLOGY

Noise and vibration impacts were evaluated using the FTA's *General Assessment* guidelines and WMATA's *Manuel of Design Criteria* to reflect the type of input data available.

3.1 Receptor Locations

The intent of the noise monitoring program is to strategically select monitoring sites that are representative of the other land uses closest to the Pennsy Drive Rail Maintenance Facility site. A single-family residence (FTA Category 2 land use) located at 7803 Old Ardwick-Ardmore Road (north of John Hanson Highway) directly opposite the project site was selected to be representative of all residences along Old Ardwick-Ardmore Road and the neighborhood in general. Noise monitoring was only done at M3. Since receptors R4 and R5 are neighbors to M3, measured noise levels were equated from Site M3. The selected sites are summarized in **Table 3-1**. **Figure 3-1** shows the location of monitoring site M3 for the Pennsy Drive site.

A 5-dBA adjustment factor was applied at the residences along Old Ardwick-Ardmore Road (north of John Hanson Highway) to account for shielding provided by the existing highway noise barrier along John Hanson Highway just northwest of the project site.[2] This adjustment was applied to both the FTA and the WMATA evaluations.

Table 3-1: Receptor Distances to the Existing and Future Rail Sources at Pennsy Drive[1]

Receptor		Mainline Tracks			Yard	
ID	Description	NEC	WMATA	Switch	Squeal	Midpoint
M3	7803 Old Ardwick-Ardmore Road	205	275	330	1,049	1,015
R4	7805 Old Ardwick-Ardmore Road	326	397	411	1,037	1,105
R5	7807 Old Ardwick-Ardmore Road	433	506	518	1,020	1,194

1 Receptor distances, which are measured from the building façade, are reported in feet.
Source: AECOM, March 2015.

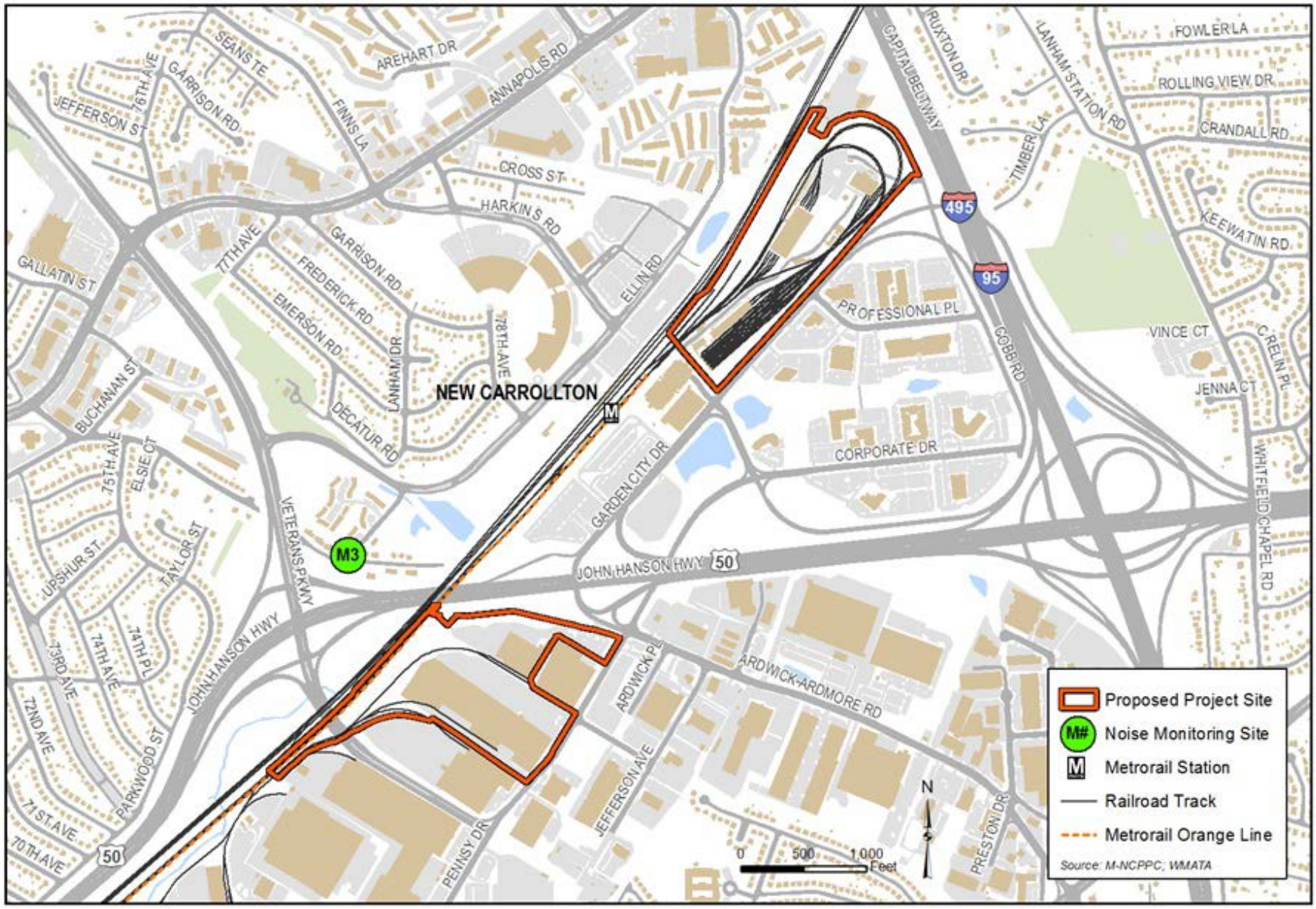
3.2 Field Measurement

Baseline noise levels were conducted on November 11-12, 2014 at Site M3 over a 24-hour period to document the hourly variation in ambient noise levels in the area during a typical weekday. Noise levels were measured in hourly equivalent A-weighted noise levels (or $L_{eq}(h)$ in dBA). Although the noise measurements were conducted over three years ago, the recorded levels are still valid and representative of the current conditions.

In accordance with FTA guidelines, 24-hour day-night noise levels (or L_{dn} in dBA) were developed based on the monitoring results. Since the closest noise-sensitive sites for this project include only residential receptors, the L_{dn} descriptor was used to reflect the particularly heightened sensitivity to nighttime noise.

[2] FTA's *Transit Noise and Vibration Impact Assessment* (2006), Table 5-2, page 5-6.

Figure 3-1: Monitoring Site Locations



3.3 Assumptions

The following assumptions were used in the analysis for operations at the Pennsy Drive Rail Maintenance Facility regarding Metrorail, Amtrak, MARC and CSX service.

Pennsy Drive Rail Maintenance Facility

- Two 8-car Metrorail trains are expected to access and egress the site per day.
- 100 percent of Metrorail vehicles are expected to access/egress the yard during non-revenue periods of the day, which is the nighttime period between 10:00 pm and 7:00 am.
- A maximum Metrorail operating speed of 15 miles per hour (mph) was applied in all areas of the yard.
- This estimate is based on observations made during the monitoring of existing Metrorail operations at New Carrollton Yard and feedback from the project team regarding the future use of the maintenance facility.
- Since all rail maintenance activities at the future facility would be conducted indoors, the estimated noise impact from the facility using the FTA guidelines would be conservative and thereby represent "worst-case" conditions.
- Based on the proposed use of the facility, which includes activities conducted completely indoors, the future impact from the actual maintenance activities is expected to be negligible.
- Adjustments for the new track turnout switch for the proposed maintenance facility were also applied using the FTA guidelines, which included a worst-case comparison between jointed-rail track impacts and track switches as a point source impact.

Metrorail

- 7-minute headways during the peak period for all Orange Line trains between Vienna/Fairfax and New Carrollton;
- 7.5-minute headways during all transitional periods (i.e., peak to off-peak) for the New Carrollton trains only; and
- 12-minute headways during all late night periods between 9:30 pm and 3:00 am and the early morning period between 5:00-6:00 am for the New Carrollton trains only.
- As a conservative assumption, a Friday Metrorail schedule was used with an operating schedule of 5:00 am to 3:00 am with peak and shoulder-peak periods occurring 6:00-9:00 am and 3:30-6:30 pm.
- An eight-car train consist was assumed for all peak periods of the day, a six-car consist was assumed for all off-peak periods, and a 7-car consist was assumed for all transitional periods between the peak and off-peak periods.
- Based on default FTA reference noise levels, a single Metrorail vehicle operating at 50 mph on ballast-and-tie track with continuous welded rail track is assumed to generate a maximum noise level of 80 dBA at 50 feet from the track centerline.

Amtrak

- Average daily train operations for Amtrak service between Baltimore and Washington was tabulated for Acela Express, Northeast Regional, Cardinal, Carolinian, Crescent, Palmetto, Silver Meteor, Silver Star and Vermonter.
- Average daily Amtrak service includes 63 daytime trains and 14 nighttime trains.
- Average travel speed is 40 miles per hour (mph) with an 8-car consist and no locomotives.

- These operating data were applied equally to both the Existing Condition/No Build Alternative and the Build Alternative since they are unaffected by the proposed project elements.

MARC

- Average daily train operations for the Maryland Area Regional Commuter (MARC) service between Baltimore and Washington was tabulated for an average weekday period.
- Average daily MARC service includes 46 daytime trains and 10 nighttime trains.
- Average travel speed is 40 miles per hour (mph) with two locomotives and 5-car bi-level railcars.
- These operating data were applied equally to both the Existing Condition/No Build Alternative and the Build Alternative since they are unaffected by the proposed project elements.

CSX

- No CSX train events were observed during a 2-day noise monitoring period April 8-9, 2014.
- Average daily train operations for CSX freight rail service between Baltimore and Washington was estimated for an average weekday period.
- Average daily CSX service includes one daytime train and one nighttime train.
- Average travel speed is 25 miles per hour (mph) with two locomotives and 20 railcars.
- These operating data were applied equally to both the Existing Condition/No Build Alternative and the Build Alternative since they are unaffected by the proposed project elements.

3.4 Noise Monitoring Equipment

Brüel & Kjær Model 2236 and Larson Davis Model 820 sound-level meters were used to measure baseline noise conditions. These meters meet or exceed the American National Standards Institute (ANSI) standards for Type I accuracy and quality. The sound-level meters were calibrated using a Brüel & Kjær Model 4231 before and after each measurement. All measurements were conducted according to ANSI Standard S1.13-2005, Measurement of Sound Pressure Levels in Air. All noise levels are reported in dBA, which best approximates the sensitivity of human hearing.

4.0 EXISTING CONDITIONS

4.1 Noise

The noise measurements documented existing noise sources including the Metrorail Orange Line and the Amtrak Northeast Corridor (NEC). Background noise is also dominated by motor vehicle traffic along the Capital Beltway (I-95 and I-495) and John Hanson Highway (U.S. 50). Since the residential community represented by Site M3 is adjacent to highway and rail corridors, background noise levels are representative of a dense multimodal transportation corridor. As shown in **Table 4-1**, the measured day-night noise level at Site M3 is 70 dBA. This level is dominated by noise from rail operations on the Metrorail Orange Line and NEC. The hourly variation in noise levels is shown graphically in **Attachment 2**.

Measured maximum noise levels range from 62 to 70 dBA for Metrorail passbys, 76 to 82 dBA for Amtrak passbys, and 74 to 81 dBA for MARC passbys.

Table 4-1: Baseline Noise Level Measured in the Vicinity of the Pennsy Drive Maintenance Facility

Receptor	Description	Land Use	Date	Ldn
M3	7803 Old Ardwick-Ardmore Rd, Hyattsville, MD	Residence	November 11-12, 2014	70 dBA

Source: AECOM, March 2015.

4.2 Vibration

Baseline vibration measurements were not conducted at residences due to the distance between the proposed yard and the closest receptors. Background vibration levels are dominated by existing rail operations along the Metrorail Orange Line and NEC.

5.0 ENVIRONMENTAL CONSEQUENCES

5.1 No Build Alternative

5.1.1 Noise

Future noise levels for the No Build Alternative would be similar to existing conditions. The areas in the vicinity of the project sites are affected by Metrorail operations and passenger rail operations on the NEC. Existing motor vehicle traffic along the John Hanson Highway (U.S. 50) also contributes to the ambient noise levels. The No Build Alternative would not cause any new noise impacts, because the Pennsy Drive Rail Maintenance Facility would not be constructed. The study area is characterized by urban communities that will continue to include several major transportation-related sources of ambient noise, such as the Metrorail Orange Line, Amtrak NEC, and traffic along U.S. 50.

For example, a doubling of the traffic volumes (or Metrorail operations) would be necessary for the noise levels to increase by three decibels, the threshold where most listeners detect the change. However, regional traffic forecasts do not anticipate any increases in traffic volumes at nearly those levels. Therefore, no FTA noise impacts are expected under the No Build Alternative.

While the FTA criteria consider the change in noise levels from a baseline condition, the WMATA criteria for evaluating train pass-by noise impacts are based on the noise level at a point in time. Maximum measured noise levels from Metrorail passbys along the existing rail corridor range from 62 dBA to 72 dBA at Site M1.

5.1.2 Vibration

Unlike noise, which is assessed using cumulative noise levels over one-hour and 24-hour periods, transit vibration impacts are assessed based on individual events, such as a train pass-by. Future vibration levels under the No Build Alternative are expected to be similar to those currently experienced under existing conditions. Since existing vibration is dominated by existing rail operations along the Metrorail Orange Line and NEC, these levels are expected to remain the same under the No Build Alternative. Since no project components or design elements are proposed under the No Build Alternative, the alternative would not cause any new vibration impacts.

5.2 Build Alternative

5.2.1 Noise

Since the project would introduce new maintenance activities at the Pennsy Drive site as well as modify existing rail operations by introducing a new turnout switch along revenue track, noise from the Build Alternative was determined using the FTA prediction procedures. The FTA allowable increase criteria were used to assess 24-hour impacts at residences (especially during the most sensitive nighttime period when people are sleeping), and the WMATA criteria were used to assess maximum noise from Metrorail operations and activities.

Predicted noise levels are shown in **Table 5-1**. The table compares noise levels for representative receptor locations for existing conditions and the Build Alternative.

The impact analysis evaluated the cumulative noise effects from all existing and new future sources, including rail operations along the NEC and proposed maintenance activities at the Pennsy Drive site. As shown in **Table**

5-1, the future noise levels from the new maintenance facility and the turnout switch at the closest noise-sensitive receptors are predicted to range from 64.3 dBA at Site M5 to 67.3 dBA at Site M3. The change in noise is predicted to increase slightly up to 0.3 dBA from the Existing Condition, which is well below the allowable increase criterion of 1.1 dBA for *moderate* impacts.

Overall, no exceedance of the FTA Category 2 (residential areas) *moderate* or *severe* impact criteria is predicted under the Build Alternative.

Table 5-1: Existing and Predicted Noise Levels at Select Receivers near the Proposed Pennsy Drive Rail Maintenance Facility – FTA Criteria

Receiver		FTA Cat.	Noise Metric	Predicted Noise Levels (dBA)				FTA Allowable Increase Criteria[1]		
				Measured	Predicted Levels					
ID	Address			Existing	Existing/No Build	Build	Change	MOD	SEV	Impact
M3	7803 Old Ardwick-Ardmore Road	2	L_{dn}	70	67.1	67.3	0.2	1.1	2.8	No
R4	7805 Old Ardwick-Ardmore Road	2	L_{dn}	70	65.2	65.5	0.3	1.1	2.8	No
R5	7807 Old Ardwick-Ardmore Road	2	L_{dn}	70	64.0	64.3	0.3	1.1	2.8	No

[1] The FTA criteria represent the allowable increase in cumulative future noise level for the project and the existing background.
Source: AECOM, March 2015.

The Build Alternative was also evaluated using WMATA noise impact criteria. Unlike the FTA criteria, which utilize a cumulative noise metric, the WMATA criteria utilize the maximum noise level from an event. As summarized in **Table 5-2**, maximum noise levels from Metrorail operations and proposed activities under the Build Alternative at the closest residences along Old Ardwick-Ardmore Road (north of John Hanson Highway) are predicted to range from 63 to 64 dBA, due to maintenance and yard activities, to 69 dBA, due to wheel squeal at the yard curves, to 65 to 69 dBA from Metrorail passbys at the new turnout switch. All of these noise levels are lower than the noise levels under the existing condition of 71 to 77 dBA from Amtrak and MARC diesel locomotive passbys.

As shown in **Table 5-2**, the existing condition is dominated by train operations along the NEC, which range from 63 to 77 dBA L_{max}. However, since the WMATA criteria do not account for the change in noise from existing conditions, maximum pass-by noise levels from Metrorail operations and activities at the yard under the Build Alternative were evaluated independently.

As a result, maximum noise levels under the Build Alternative due to yard activities of 63 to 64 dBA and wheel squeal of 69 dBA are not predicted to exceed the WMATA criterion of 70 dBA at the Old Ardwick-Ardmore Road residences (north of John Hanson Highway). Similarly, maximum noise levels from the new turnout switch of 65 to 69 dBA are also not predicted to exceed the WMATA criterion of 80 dBA for Metrorail passbys. Therefore, no impacts are predicted at the closest residences due to wheel squeal, other yard activities, or Metrorail passbys at the new turnout switch.

Table 5-2: Predicted Maximum Noise Levels and WMATA Impact Criteria at Select Receivers near the Proposed Pennsy Drive Rail Maintenance Facility

Receiver		Noise Metric	Noise Levels (dBA)					WMATA Criteria[1]	
			Existing		Build Alternative				
ID	Noise		NEC[2]	WMATA[2]	Switch	Squeal[3]	Yard	Passbys	Yards
M3	7803 Old Ardwick-Ardmore Road	L_{max}	66-77	59	69	69	64	80	70
R4	7805 Old Ardwick-Ardmore Road	L_{max}	64-75	57	67	69	64	80	70
R5	7807 Old Ardwick-Ardmore Road	L_{max}	63-74	55	65	69	63	80	70

[1] The "WMATA Criteria for Noise from Transit System Ancillary Facilities" are reported for land-use Area Category III, which includes high-density urban residential and average semi-residential/commercial areas.
[2] NEC represents the maximum noise levels from existing train passbys along the Northeast Corridor.
[3] Wheel squeal noise for the future Build Alternative is based on WMATA-specific levels based on measurements for similarly-sized curves.
Source: AECOM, March 2015.

5.2.2 Vibration

As shown in **Table 5-3,** maximum event vibration levels for the existing condition are predicted to range from 38 VdB at Site M5 to 64 VdB at Site M3. Both Sites M3 and M5 are residences along Old Ardwick-Ardmore Road (north of John Hanson Highway) opposite the proposed maintenance facility. These levels are dominated by both Amtrak and MARC train operations. Vibration levels due to existing WMATA operations range from well below background at Site M5 to 43 VdB at Site M4 to 57 VdB at Site M3.

Future vibration levels under the Build Alternative are expected to be similar to those currently experienced under existing conditions. Since existing vibration is dominated by existing rail traffic along the NEC rather than the maintenance facility, these levels are expected to remain the same under the Build Alternative.

As shown in **Table 5-3**, vibration from the proposed turnout switch (Metrorail revenue-service trains) is predicted to range from well below background (15 VdB at Site M3) to 63 VdB at Site M3. These levels are also below the current vibration levels predicted for MARC diesel locomotives of 64 VdB. Therefore, no exceedances of the FTA impact criterion of 72 VdB are expected under the Build Alternative, because the proposed turnout switch, at over 330 feet distance from the receptors, is well outside the FTA screening distance of 200 feet.

Table 5-3: Predicted Maximum Vibration Levels and FTA/WMATA Impact Criteria at Select Receivers near the Proposed Pennsy Drive Rail Maintenance Facility

Receiver		Predicted Vibration Levels (VdB)				Criteria[1]	
		Existing		Build Alternative			
ID	Address	NEC[2]	WMATA[2]	Switch	Yard	FTA	WMATA
M3	7803 Old Ardwick-Ardmore Road	61-64	57	63	<AMB	72	75
R4	7805 Old Ardwick-Ardmore Road	53-56	43	50	<AMB	72	75
R5	7807 Old Ardwick-Ardmore Road	35-38	11	15	<AMB	72	75

[1] The "WMATA Criteria for Noise from Transit System Ancillary Facilities" are reported for land-use Area Category III, which includes high-density urban residential and average semi-residential/commercial areas.
[2] NEC represents the maximum noise levels from existing train passbys.

[3] Wheel squeal noise for the future Build Alternative is based on WMATA-specific noise levels for similarly-sized yard curves.
Source: AECOM, March 2015.

Future vibration levels under the Build Alternative are expected to be similar to those currently experienced under the existing condition. Since existing vibration is dominated by existing rail traffic along the NEC, which is higher than predicted levels for the proposed maintenance facility, these vibration levels are expected to remain the same under the Build Alternative. As shown in **Table 5-3**, vibration from the proposed turnout switch (e.g., for Metrorail revenue-service trains along the NEC) is predicted to range from well below background (15 VdB at Site M5) to 63 VdB at Site M3. Therefore, no exceedances of the WMATA impact criterion of 75 VdB are expected under the Build Alternative.

6.0 TEMPORARY CONSTRUCTION IMPACTS

Noise levels from construction activities, although temporary, could be a nuisance at nearby sensitive receptors. Noise levels during construction are difficult to predict and vary depending on the types of construction activity and the types of equipment used for each stage of work. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns and is not usually at one location very long.

Project construction activities could include site excavation, relocating utilities, and track laying. Although these general excavation activities typically include earth-moving equipment, heavy-duty impulsive equipment, such as pile drivers, may be utilized by the selected contractor. All construction activities would need to comply with the limits and guidelines included in the WMATA *Manual of Design Criteria* to minimize noise and vibration in the community.

7.0 POTENTIAL AVOIDANCE, MINIMIZATION AND MITIGATION MEASURES

Since none of the predicted noise and vibration levels at either site are predicted to exceed the FTA or the WMATA impact criteria if the Build Alternative is constructed, no mitigation measures are required. Therefore, the proposed project is predicted to be in full compliance with all applicable noise and vibration criteria.

8.0 REFERENCES

ANSI. American National Standard S12.9-1992/Part 2. Quantities and Procedures for Description and Measurement of Environmental Sound. Part 2: Measurement of Long-term, Wide-Area Sound. Standards Secretariat, Acoustical Society of America, New York, NY.

ANSI. American National Standard S12.9-1993/Part 3. Quantities and Procedures for Description and Measurement of Environmental Sound. Part 3: Short-Term Measurements with an Observer Present. Standards Secretariat, Acoustical Society of America, New York, NY.

U.S. Department of Transportation, Federal Transit Administration (FTA). 2006. FTA-VA-90-1003-06. Transit Noise and Vibration Impact Assessment. Office of Planning and Environment. Washington, DC.

Washington Metropolitan Area Transit Authority, WMATA Manual of Design Criteria for Maintaining and Continued Operation of Facilities and Systems, Washington, DC, May 2008.

ATTACHMENT 1

HUMAN PERCEPTION OF NOISE AND VIBRATION

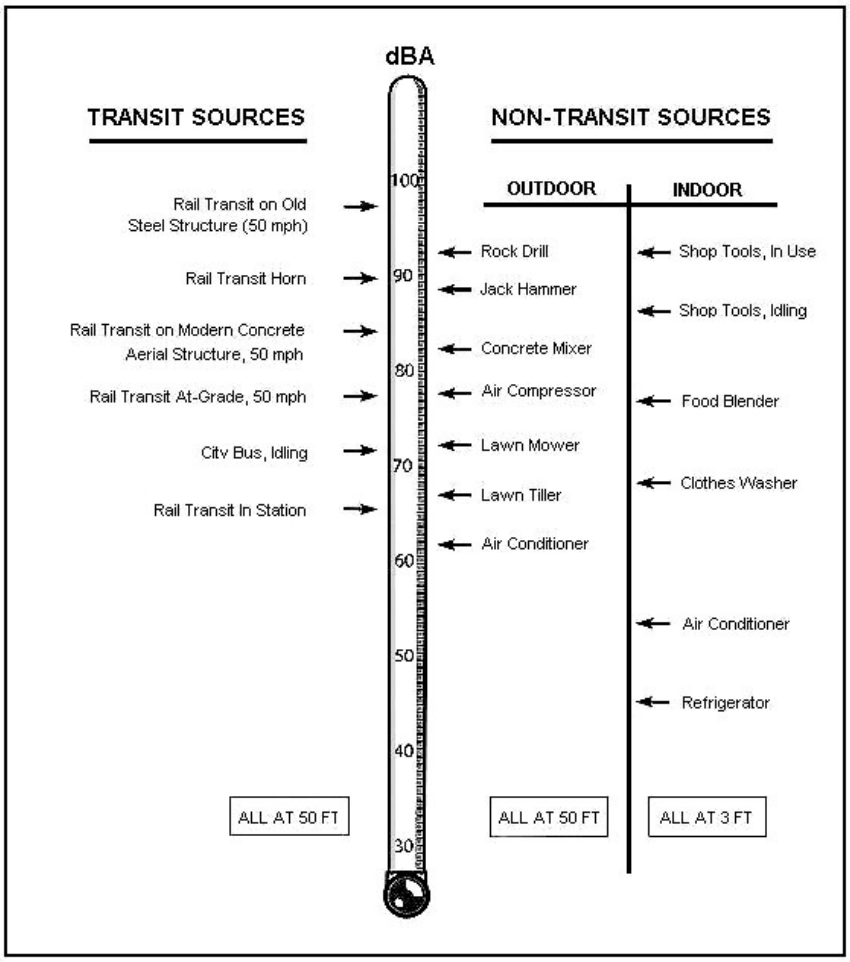
Noise

Noise is "unwanted sound" and, by this definition, the perception of noise is a subjective process. Several factors affect the actual level and quality of sound (or noise) as perceived by the human ear and can generally be described in terms of loudness, pitch (or frequency), and time variation. The loudness, or magnitude, of noise determines its intensity and is measured in decibels (dB) that can range from below 40 dB (the rustling of leaves) to over 100 dB (a rock concert). Pitch describes the character and frequency content of noise, such as the very low "rumbling" noise of stereo subwoofers or the very high-pitched noise of a piercing whistle. Finally, the time variation of noise sources can be characterized as continuous, such as with a building ventilation fan; intermittent, such as for trains passing by; or impulsive, such as pile-driving activities during construction.

Various sound qualities are used to quantify noise from transit sources, including a sound's loudness, duration, and tonal character. For example, the A-weighted decibel (dBA) is commonly used to describe the overall noise level because it more closely matches the human ear's response to audible frequencies. Because the A-weighted decibel scale is logarithmic, a 10 dBA increase in a noise level is generally perceived as a doubling of loudness, while a 3 dBA increase in a noise level is just barely perceptible to the human ear. Typical A-weighted sound levels from transit and other common sources are shown in **Figure A.1**.

Several A-weighted noise descriptors are used to determine impacts from stationary and transit related sources including the L_{max}, which represents the maximum noise level that occurs during an event such as a bus or train passby; the L_{eq}, which represents a level of constant noise with the same acoustical energy as the fluctuating noise levels observed during a given interval, such as one hour; the L_{90}, which represents the noise level exceeded 90 percent of the time and is used to establish the background ambient level; and the L_{dn}, or the 24-hour day-night noise level, which includes a 10-decibel penalty for all nighttime activity between 10:00 p.m. and 7:00 a.m.

Figure A.1: Typical A-Weighted Noise Levels



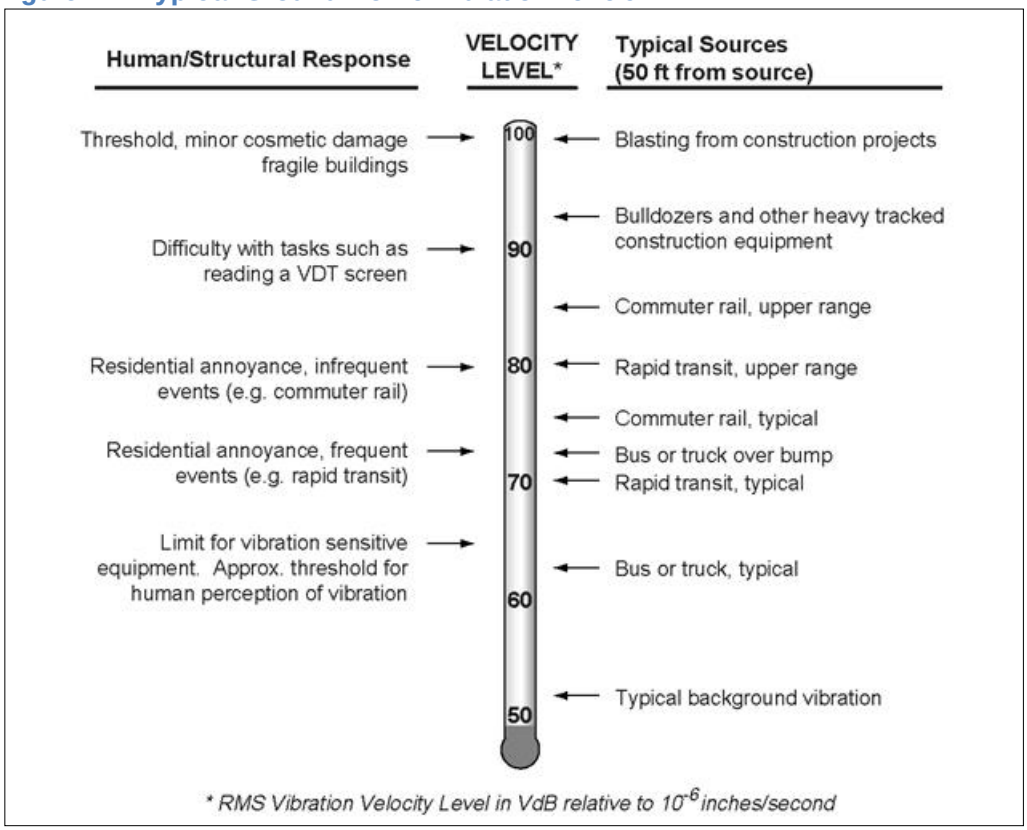
Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, Washington, DC, May 2006.

Vibration

Ground-borne vibration associated with vehicle movements is usually the result of uneven interactions between wheels and the road or rail surfaces. Examples of such interactions (and subsequent vibrations) include train wheels over a jointed rail, an untrue rail car wheel with "flats," and a motor vehicle wheel hitting a pothole, a manhole cover, or any other uneven surface. Typical ground-borne vibration levels from transit and other common sources are summarized in **Figure A.2**.

For example, typical ground-borne vibration levels at a receptor 50 feet from different transportation sources traveling at 50 miles per hour range from 61 VdB for trucks and buses, to 73 VdB for LRT vehicles, to 85 VdB for diesel locomotives. Similarly, a typical background vibration velocity level in residential areas is usually 50 VdB or lower, well below the threshold of perception for humans, which is around 65 VdB (FTA 2006). The typical background levels refer to ambient ground vibrations not related to any specific transportation source (e.g., naturally occurring ground vibration). This background vibration level is assumed to be fairly constant from site to site, except in the vicinity of active fault lines.

Figure A.2: Typical Ground-Borne Vibration Levels



Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, Washington, DC, May 2006.

Unlike noise, which travels in air, transit vibration typically travels along the surface of the ground. Depending on the geological properties of the surrounding terrain and the type of building structure exposed to transit vibration, vibration propagation can be more or less efficient. Buildings with a solid foundation set in bedrock are "coupled" more efficiently to the surrounding ground and experience relatively higher vibration levels than buildings located in sandier soil. Heavier buildings (such as masonry structures) are less susceptible to vibration than wood-frame buildings because they absorb more vibration energy.

Vibration induced by passing vehicles can generally be discussed in terms of displacement, velocity, or acceleration. However, human responses and responses by monitoring instruments and other objects are most accurately described with velocity. Therefore, the vibration velocity level is used to assess vibration impacts from transit projects.

To describe the human response to vibration, the average vibration amplitude (called the root mean square, or RMS, amplitude) is used to assess impacts. The RMS velocity level is expressed in inches per second or VdB. All VdB vibration levels are referenced to 1 micro-inch per second (ips). Similar to noise decibels, vibration decibels are dimensionless because they are referenced to (i.e., divided by) a standard level (such as 1x10-6 ips in the U.S.). This convention allows compression of the scale over which vibration occurs, such as 40-100 VdB rather than 0.0001 ips to 0.1 ips.

ATTACHMENT 2

EXPANDED NOISE MONITORING RESULTS

Figure A.3: Noise Monitoring Results at Site M3 (Residence, 7803 Old Ardwick-Ardmore Rd, Hyattsville, MD) on November 11-12, 2014

Appendix F – Traffic

Transportation Technical Memorandum

TRANSPORTATION TECHNICAL MEMORANDUM

WMATA Heavy Repair & Overhaul Facility
3636 Pennsy Drive, Landover, Maryland

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

July 2018

(This Page Intentionally Left Blank)

Table of Contents

1.0 Introduction 1
2.0 Data collection 1
3.0 Methodology 4
4.0 Traffic Conditions 4
4.1 Existing Conditions 4
4.2 2023 No Build Conditions 5
4.3 2023 Build Conditions 7
4.4 Mitigation 12
5.0 Conclusion 13

List of Figures

Figure 1: Pennsy Drive Study Intersections 2
Figure 2: Existing Peak Hour Traffic Volumes 3
Figure 3: 2023 No Build Peak Hour Traffic Volumes 6
Figure 4: 2023 Build Peak Hour Traffic Volumes with 400 New Employees 8
Figure 5: 2023 Build Peak Hour Traffic Volumes with 500 New Employees 9
Figure 6: 2023 Build Peak Hour Traffic Volumes with 600 New Employees 10

List of Tables

Table 1: LOS Criteria for CLV Method 4
Table 2: LOS Criteria for Unsignalized Intersections (HCM) 4
Table 3: Existing LOS at Study Intersections 5
Table 4: 2023 No Build LOS at Study Intersections 5
Table 5: Future Peak-Hour Traffic Volume Projections 7
Table 6: 2023 Build LOS at Study Intersections 11
Table 7: 2023 Pennsy Drive Traffic Results 11
Table 8: Traffic Signal Warrant Analysis for 2020 Build Conditions with 600 employees at the Pennsy Drive and Polk Street Intersection (AM Peak Hour) 12

LIST OF ATTACHMENTS

Attachment A: Traffic Impact Study Scoping Agreement
Attachment B: Traffic Turning Movement Counts
Attachment C: CLV Calculations and HCM Results

(This Page Intentionally Left Blank)

1.0 INTRODUCTION

The Washington Metropolitan Area Transit Authority (WMATA) is considering construction of a new Heavy Repair & Overhaul (HR&O) facility on a property in Prince George's County, Maryland, located at 3636 Pennsy Drive in Landover. The HR&O facility would be a maximum of 400,000 square feet in area and support a maximum of 600 employees working over three shifts. The purpose of this traffic impact study is to analyze the traffic conditions resulting from the project and other related site access issues. This technical memorandum describes the methodology, existing conditions and potential impacts to traffic at the study intersections near the HR&O Facility.

2.0 DATA COLLECTION

To prepare the traffic impact study, WMATA obtained a signed Traffic Impact Study Scoping Agreement, provided in **Attachment A**, from the Maryland-National Capital Park and Planning Commission (M-NCPPC). WMATA is thus in compliance with M-NCPPC requirements regarding traffic impact analyses in Prince George's County.

To evaluate the impact of the site-generated traffic on the roadway network, turning movement counts, including the proportion of heavy vehicles and peak hour factors, were gathered and reviewed at the study intersections. WMATA is in compliance with requirements to obtain a signed Traffic Impact Study Scoping Agreement for the study. The study intersections include the proposed new access intersection to the Pennsy Drive site and adjacent intersections. **Figure 1** shows the study intersections with the traffic control type used at each intersection.

1. Pennsy Drive and MD 410 Veterans Parkway (signalized)
2. Pennsy Drive and Polk Drive (unsignalized)
3. Pennsy Drive and Ardwick-Ardmore Road (signalized)
4. Pennsy Drive and Corporate Drive (signalized)

Turning movement counts were collected on Tuesday, February 27, 2018, during the morning peak period (7:00 AM – 9:00 AM) and evening peak period (4:00 PM – 6:00 PM). The data indicate that the morning peak hour occurs between 7:30 AM – 8:30 AM and that the evening peak hour occurs between 5:00 PM – 6:00 PM (with slight time variations at each intersection). The highest hourly volumes within each peak period were used for the traffic impact analysis. **Figure 2** provides peak hour turning movement counts at each study intersection. The detailed turning movement counts collected in the field are shown in **Attachment B**.

Figure 1: Pennsy Drive Study Intersections

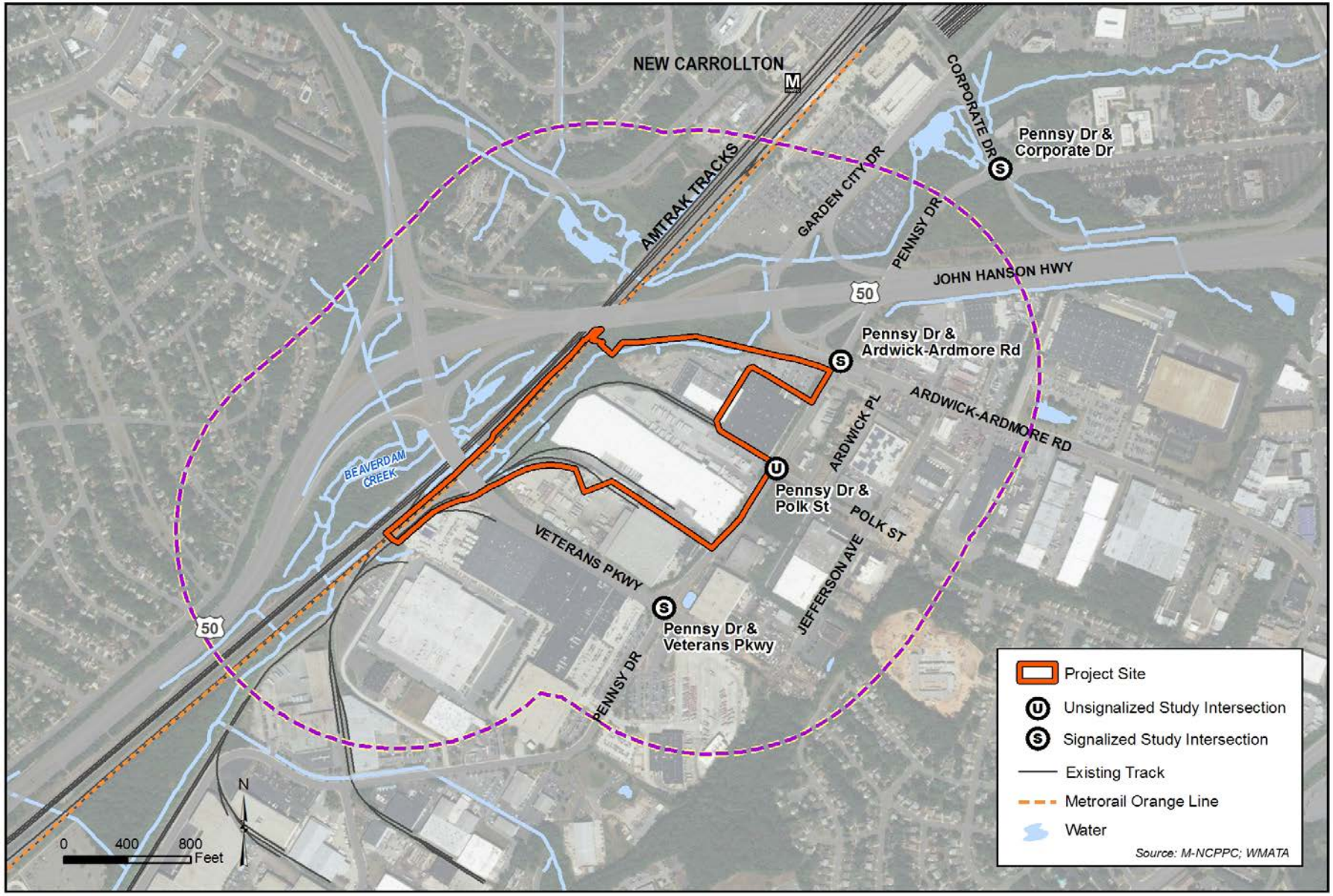
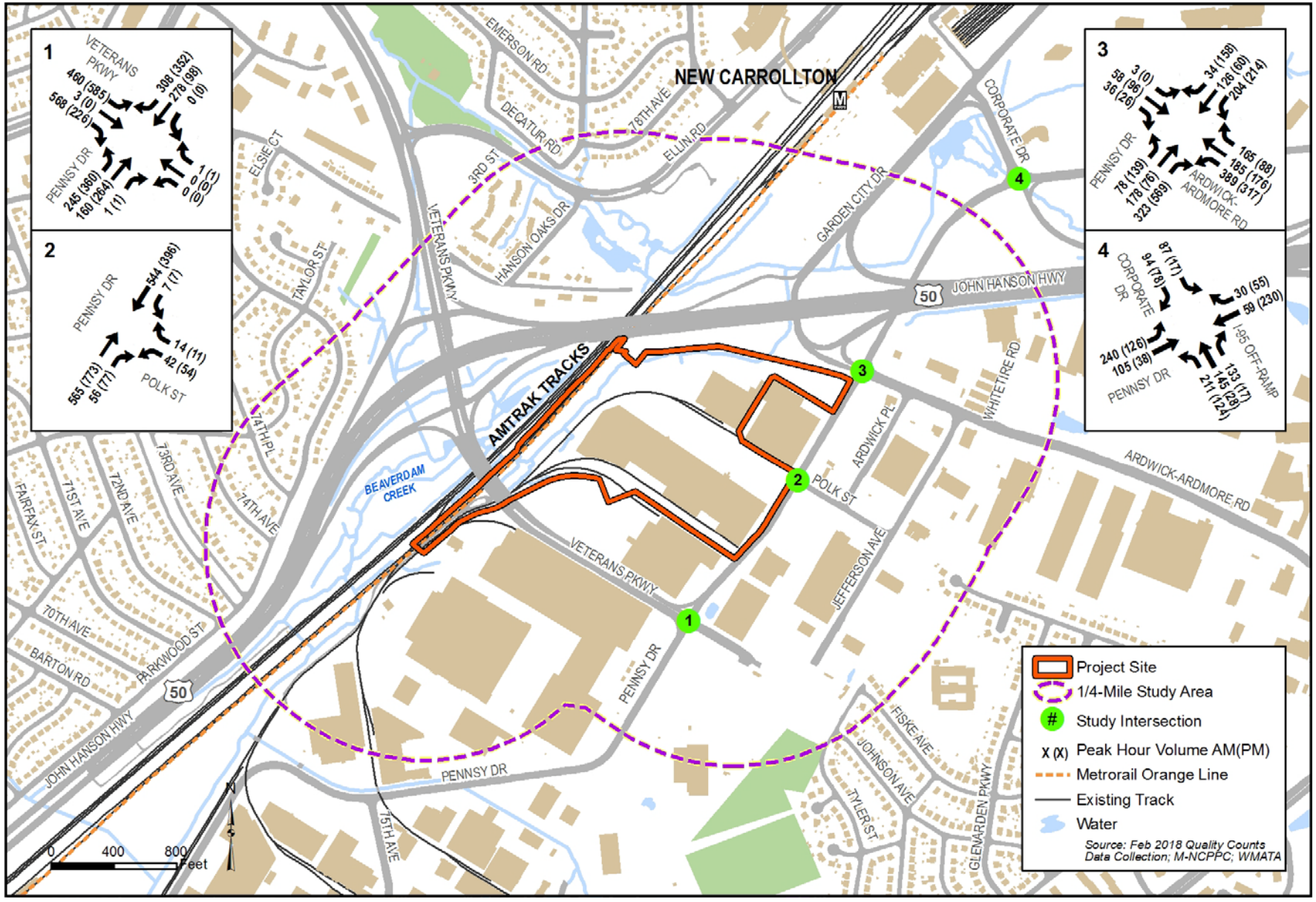


Figure 2: Existing Peak Hour Traffic Volumes



3.0 METHODOLOGY

The Transportation Review Guidelines manual developed by the Maryland-National Capital Park and Planning Commission (M-NCPPC), adopted in November 2012 and updated in 2013, is used as a primary reference for the analysis methodology. Traffic conditions were assessed for both signalized and unsignalized intersections. Based on the Transportation Review Guidelines 2012, the Critical Lane Volume (CLV) method was used to measure the intersection Level of Service (LOS) at signalized intersections. This analysis is a broad evaluation of the capacity of an intersection that determines the LOS for a given set of demand volumes and geometrics, including number of lanes on each approach and turning movements assigned by lane. **Table 1** provides CLV ranges and the corresponding intersection LOS.

Table 1: LOS Criteria for CLV Method

Critical Lane Volume (veh/hr)	Level of Service (LOS)
0 to 1,000	A
1,001 to 1,150	B
1,151 to 1,300	C
1,301 to 1,450	D
1,451 to 1,600	E
1,601 and over	F

Source: Transportation Review Guidelines 2012, M-NCPPC.

Traffic conditions at two-way stop controlled intersections were evaluated pursuant to the procedure in Transportation Research Board's Highway Capacity Manual (HCM 2010). The maximum delay in seconds for stop-controlled movements within the intersection should be calculated and used to represent the intersection delay. **Table 2** lists the LOS criteria for an unsignalized intersection as defined in the HCM 2010. Synchro modeling software was used to calculate the approach and intersection delays in accordance with the HCM methodology. LOS D or better indicates stable flow and acceptable delays. Intersections with LOS E and LOS F are highlighted in the results tables.

Table 2: LOS Criteria for Unsignalized Intersections (HCM)

Delay (sec/veh)	Level of Service (LOS)
≤ 10	A
> 10 - 15	B
> 15 - 25	C
> 25 - 35	D
> 35 - 50	E
> 50	F

4.0 TRAFFIC CONDITIONS

4.1 Existing Conditions

Table 3 summarizes existing conditions at the study intersections. Detailed CLV calculation sheets and HCM results for the analysis are provided in **Attachment C**.

All signalized intersections operate at LOS C or better in the existing traffic conditions. At the unsignalized intersection of Pennsy Drive and Polk Street, the vehicles from Polk Street experience LOS D in the morning and evening peak hours.

Table 3: Existing LOS at Study Intersections

Intersection	Control Type	Analysis Method	Existing AM		Existing PM	
			CLV (veh/hr) or Delay (sec/veh)	LOS	CLV (veh/hr) or Delay (sec/veh)	LOS
Pennsy Dr and Veterans Parkway	Signalized	CLV	677	A	766	A
Pennsy Dr and Ardwick-Ardmore Road	Signalized	CLV	1,096	B	1,227	C
Pennsy Dr and Polk Street*	Unsignalized	HCM	30.7	D	31.1	D
Pennsy Dr and Corporate Drive	Signalized	CLV	707	A	518	A

*LOS based on delay for the traffic movement with greatest delay

4.2 2023 No Build Conditions

The proposed facilities at the Pennsy Drive site are estimated to be completed and in operation by 2023. A future No Build scenario was analyzed for the year 2023 to serve as a baseline comparison for the Build Alternative. No Build refers to forecast traffic conditions with the planned and/or programmed highway, transit, High-Occupancy Vehicle (HOV), and pedestrian and bicycle projects defined in the Financially Constrained Long-Range Plan (CLRP), but without the proposed Pennsy Drive HR&O Facility project.

Future traffic conditions were estimated by applying an annual growth rate to existing traffic volumes. The traffic growth rate from 2018 to 2023 was developed using the latest Metropolitan Washington Council of Governments (MWCOG) regional transportation model, which reflects the network improvements included in the CLRP.

To estimate the annual growth rate, the MWCOG model roadway link volumes on Pennsy Drive were determined for the model's horizon year and compared to the existing year volumes. The forecasts indicate an annual growth rate of 1.1 percent in the morning peak and 0.91 percent in the evening peak period. To be on the conservative side, a 1.1 percent annual growth rate, corresponding to a total growth of 5.6 percent between 2018 and 2023, was assumed for both the morning and evening peak periods.

Figure 3 shows the projected 2023 No Build morning and evening peak hour traffic volumes at the study intersections. **Table 4** summarizes 2023 No Build traffic conditions at the study intersections. Intersections with LOS E are highlighted in orange. Detailed CLV calculation sheets and HCM results for the analysis are provided in **Attachment C**.

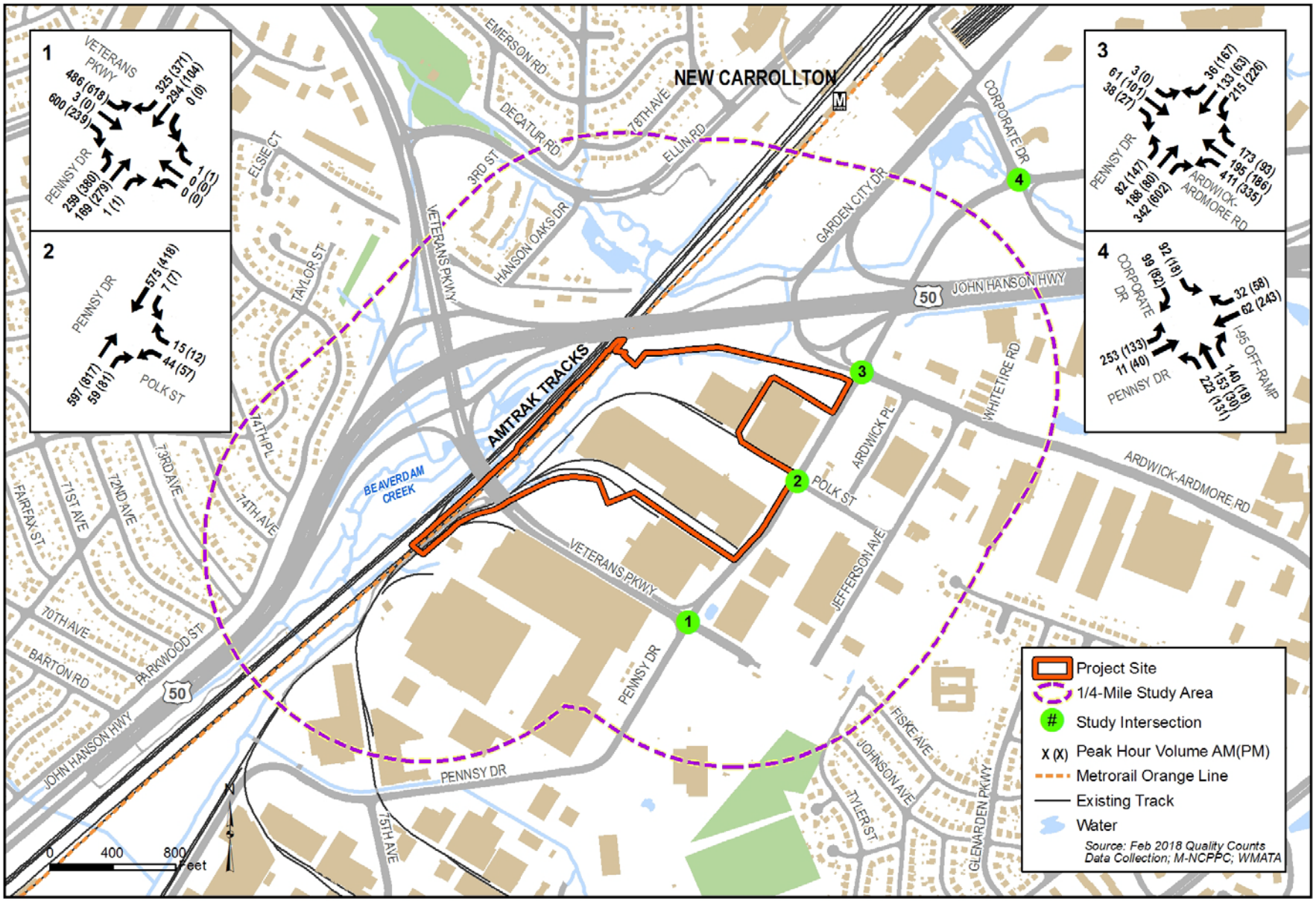
Table 4: 2023 No Build LOS at Study Intersections

Intersection	Control Type	Analysis Method	2023 No Build AM		2023 No Build PM	
			CLV (veh/hr) or Delay (sec/veh)	LOS	CLV (veh/hr) or Delay (sec/veh)	LOS
Pennsy Dr and Veterans Parkway	Signalized	CLV	715	A	809	A
Pennsy Dr and Ardwick-Ardmore Road	Signalized	CLV	1,156	C	1,295	C
Pennsy Dr and Polk Street*	Unsignalized	HCM	35.3	E	36.0	E
Pennsy Dr and Corporate Drive	Signalized	CLV	746	A	548	A

*LOS based on delay for the traffic movement with greatest delay

All signalized intersections operate at LOS C or better in the 2023 No Build traffic conditions. The unsignalized intersection of Pennsy Drive and Polk Street downgrades from LOS D in the existing condition to LOS E in the 2023 No Build condition due to traffic growth.

Figure 3: 2023 No Build Peak Hour Traffic Volumes



4.3 2023 Build Conditions

The development of the proposed HR&O facility would increase the number of employees accessing the site. In addition, the Build Alternative proposes to close the existing entrance on Ardwick-Ardmore Road for the WMATA Metro Supply Facility (MSF), and thus the MSF employees would also use the proposed access for the new facilities at the Pennsy Drive and Polk Street intersection. The intersection of Pennsy Drive and Polk Street becomes a cross-intersection in Build conditions, and the number of trips entering and exiting the location during the morning and evening peak hours would increase accordingly.

WMATA proposed three scenarios for the total number of future employees at the HR&O site: 400, 500 and 600. In order to project peak hour vehicular trips, the study team assumed volume-to-employee ratios identified in **Table 5**. **Table 5** provides estimated new trips from the HR&O site for the three scenarios.

Table 5: Future Peak-Hour Traffic Volume Projections

Row	Measure	Entering Volumes	Exiting Volumes
[A]	Volume-to-Employee Ratio (AM Peak Hour)	9.5 veh/100 emp	6.8 veh/100 emp
[B]	Volume-to-Employee Ratio (PM Peak Hour)	3.0 veh/100 emp	4.9 veh/100 emp
[C]	2023 AM Peak Hour for 400 employees (Row[A] X 400)	38	27
[D]	2023 PM Peak Hour for 400 employees (Row[B] X 400)	12	20
[E]	2023 AM Peak Hour for 500 employees (Row[A] X 500)	48	34
[F]	2023 PM Peak Hour for 500 employees (Row[B] X 500)	15	25
[G]	2023 AM Peak Hour for 600 employees (Row[A] X 600)	57	41
[H]	2023 PM Peak Hour for 600 employees (Row[B] X 600)	18	29

Total entering and exiting volumes during the peak hours were distributed to the study intersections based on the existing turning movement counts. **Figure 4, Figure 5 and Figure 6** show projected peak-hour traffic volumes in the 2023 Build condition for the three employee scenarios. The results for the 2023 Build traffic analysis are summarized in **Table 6**. Intersections with LOS F are highlighted in red. Detailed CLV calculation sheets and HCM results for the analysis are provided in **Attachment C**.

Figure 4: 2023 Build Peak Hour Traffic Volumes with 400 New Employees

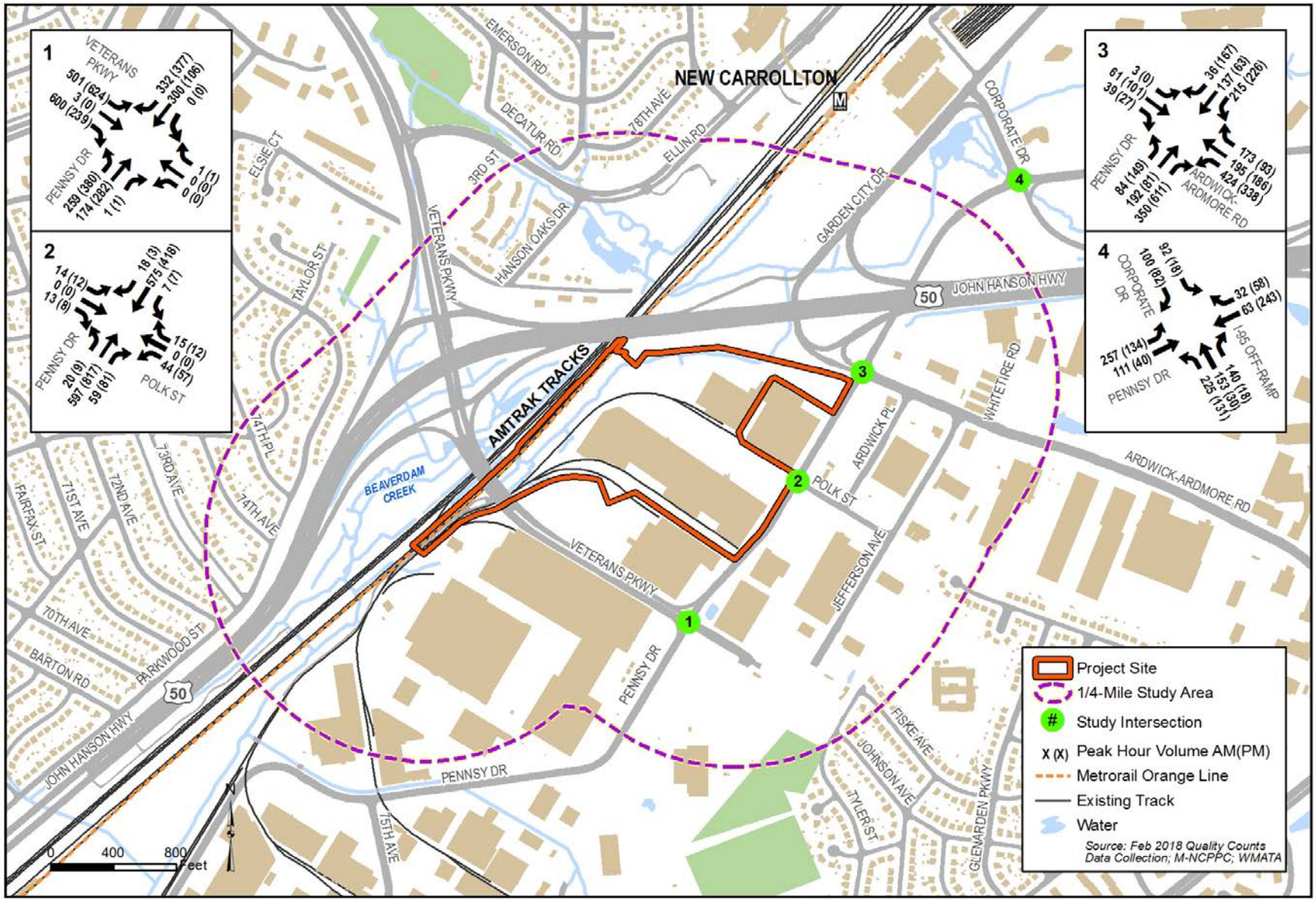


Figure 5: 2023 Build Peak Hour Traffic Volumes with 500 New Employees

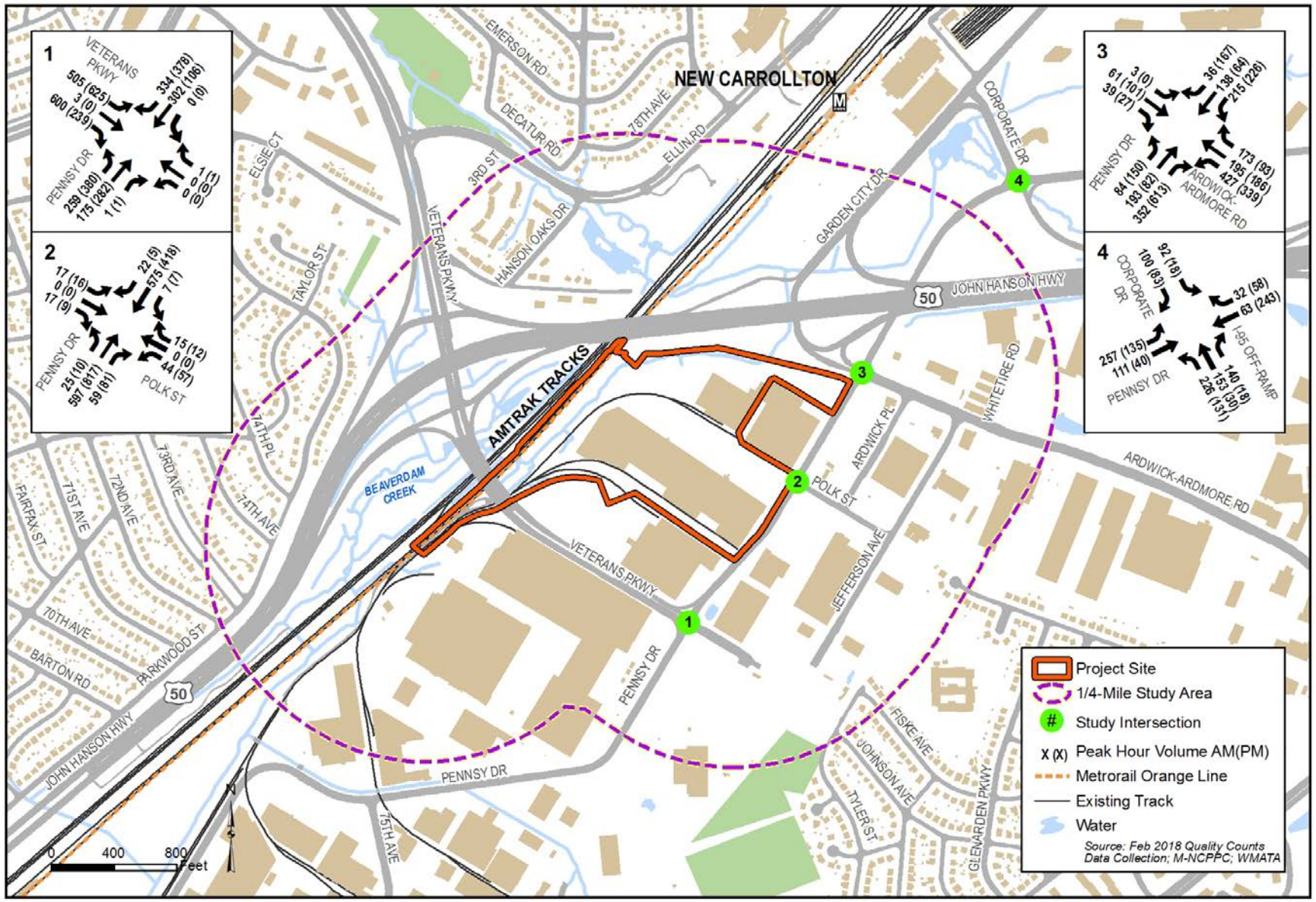


Figure 6: 2023 Build Peak Hour Traffic Volumes with 600 New Employees

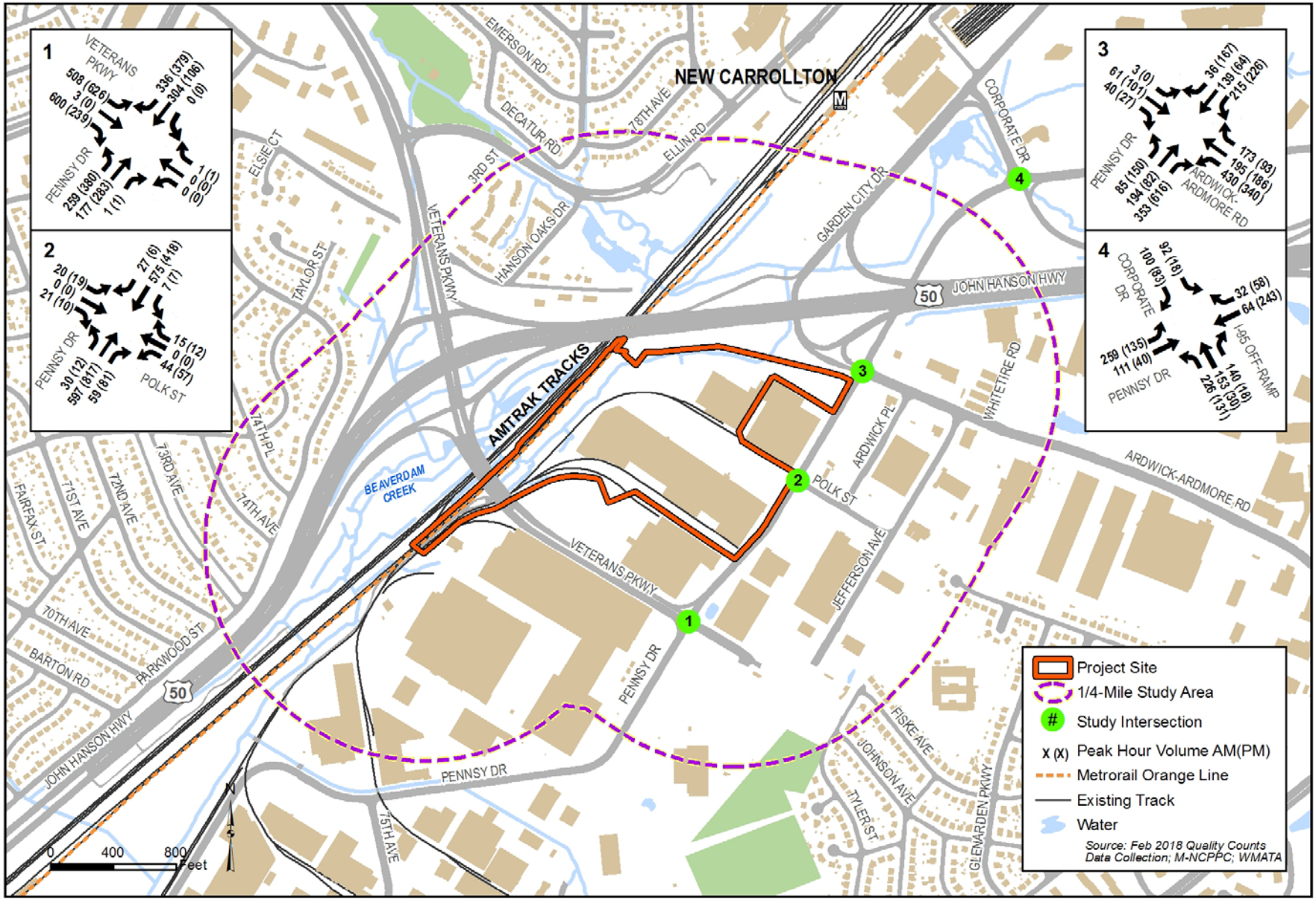


Table 6: 2023 Build LOS at Study Intersections

Intersection (Control Method / Analysis Method)	Peak Hour	400 Employees		500 Employees		600 Employees	
		CLV (veh/hr) or Delay (sec/veh)	LOS	CLV (veh/hr) or Delay (sec/veh)	LOS	CLV (veh/hr) or Delay (sec/veh)	LOS
Pennsy Dr and Veterans Parkway (Signalized/CLV)	AM	727	A	731	A	734	A
	PM	813	A	814	A	815	A
Pennsy Dr and Ardwick-Ardmore Road (Signalized/CLV)	AM	1,183	C	1,189	C	1,194	C
	PM	1,309	D	1,313	D	1,317	D
Pennsy Dr and Polk Street* (Unsignalized/HCM)	AM	57.2	F	60.9	F	64.3	F
	PM	54.3	F	54.3	F	55.5	F
Pennsy Dr and Corporate Drive (Signalized/CLV)	AM	753	A	755	A	757	A
	PM	549	A	550	A	550	A

*LOS based on delay for the traffic movement with greatest delay

As shown in **Table 6**, the unsignalized intersection of Pennsy Drive and Polk Street experience LOS F in the morning and evening peak hours for the trips from Polk Street and HR&O site in 2023 Build conditions. Vehicles from Polk Street and the HR&O site are expected to experience delay of approximately one minute in all three Build scenarios. All the signalized intersections would operate at LOS D or better.

Table 7 provides a comparative summary of traffic results among the existing conditions, 2023 No Build, and three Build scenarios. Scenarios with LOS E are highlighted in orange; those with LOS F are highlighted in red.

Table 7: 2023 Pennsy Drive Traffic Results

Intersection (Control Method / Analysis Method)	Peak Hour	Existing LOS	2023 No Build LOS	2023 Build - 400 Employees LOS	2023 Build - 500 Employees LOS	2023 Build - 600 Employees LOS
Pennsy Dr and Veterans Parkway (signalized/CLV)	AM	A	A	A	A	A
	PM	A	A	A	A	B
Pennsy Dr and Ardwick-Ardmore Road (signalized/CLV)	AM	B	C	C	C	C
	PM	C	C	D	D	D
Pennsy Dr and Polk Street* (Unsignalized/HCM)	AM	D	E	F	F	F
	PM	D	E	F	F	F
Pennsy Dr and Corporate Drive (signalized/CLV)	AM	A	A	A	A	A
	PM	A	A	A	A	A

*Delay measured in seconds.

In addition to the delay analysis, queue lengths for the stop-controlled approaches were also evaluated for 2023 Build conditions at the Pennsy Drive and Polk Street intersection. The 95th percentile queue lengths were calculated for the stop-controlled approaches. The analysis yielded a queue length of approximately 71 feet, which corresponds to approximately two-to-three vehicles for the stop-controlled approaches.

4.4 Mitigation

To mitigate the traffic impacts from the additional trips at the Pennsy Drive and Polk Street intersection, one potential approach would be signalizing the intersection. A signal warrant analysis was performed for this intersection under the worst Build condition (600 employees) to determine if signalizing the intersection would be an appropriate mitigation measure. Using the methodology from the Manual on Uniform Traffic Control Devices (MUTCD 2009 Edition), the Peak Hour Warrant (Warrant 3, Conditions A and B) was evaluated. **Table 8** summarizes the signal warrant analysis.

Table 8: Traffic Signal Warrant Analysis for 2020 Build Conditions with 600 employees at the Pennsy Drive and Polk Street Intersection (AM Peak Hour)

Signal Warrant	Number of Lanes		Volume Threshold		Actual Volumes		Total Stopped Delay Threshold	Actual Total Stopped Delay	Warrant Met?
	Major Street	Minor Street	Total Entering Volume	Minor Street High Approach	Total Entering Volume	Minor Street High Approach	Minor Street High Approach (veh.hr/hr)	Minor Street High Approach (veh.hr/hr)	
Warrant 3-Condition A1 (Total Stopped Delay on one Minor Street Approach)	2	1	-	-	-	-	4.0	1.05	No*
Warrant 3 - Condition A2 (Volume on Minor Street Approach)	2	1	-	100	-	59	-	-	No*
Warrant 3 - Condition A3 (Total Entering Volume Serviced During the hour)	2	1	800	-	1395	-	-	-	Yes*
Warrant 3 - Condition B (See Figure C-1, Attachment C)	2	1	Varies**	100	-	59	-	-	No

*All three conditions (A1, A2 and A3) must be met to warrant the signal. The intersection conditions meet only one out of the three.
** Varies based on the minor street approach volume. Please refer to Figure C-1, in Attachment C, for corresponding values.
(-) = Not applicable

The analysis shows that the Pennsy Drive and Polk Street intersection does NOT warrant a traffic signal based on the peak-hour volumes and minor street (stop-controlled) approach delay for 2023. This result is attributed to the low traffic volumes from Polk Street and the proposed HR&O facility site.

5.0 CONCLUSION

The traffic analysis indicates that the three signalized intersections operate at LOS D or better in the existing, 2023 No Build, and 2023 Build conditions. The unsignalized intersection of Pennsy Drive and Polk Street operates at LOS D in the existing condition but downgrades to LOS E and LOS F in 2023 No Build and Build conditions, respectively, due to volume increases. The traffic conditions among the three Build scenarios with different employees numbers are similar. Signal warrant analysis was performed for the intersection of Pennsy Drive and Polk Street, and the results indicate that the intersection does not warrant a traffic signal when the HR&O facility is constructed. Vehicles from Polk Street and the HR&O facility are expected to experience delay of approximately one minute in 2023 Build conditions.

AECOM
3101 Wilson Boulevard, Suite 900
Arlington, VA 22201
www.aecom.com

703 682 4900 tel

February 9, 2018

Mr. Tom Masog
Planning Supervisor, Transportation Planning
14741 Governor Oden Bowie Drive
Upper Marlboro, Maryland 20772

Re: Traffic impact study scoping agreement, 3636 Pennsy Drive, Landover, Maryland

Dear Mr. Masog,

The Washington Metropolitan Area Transit Authority (WMATA) is considering construction of a new Heavy Repair & Overhaul (HR&O) facility on a property in Prince George's County, Maryland, located at 3636 Pennsy Drive in Landover. The site comprises existing light industrial facilities. If this site is selected, a Mandatory Referral Review, including a traffic study, would be required. AECOM is preparing the traffic study for the effort. By this letter, I request your concurrence with the list of intersections proposed for analysis.

The study will analyze the traffic conditions resulting from the project and other related site access issues. This document provides the proposed methodology and study area that will be considered in the traffic impact study to be conducted by AECOM on behalf of WMATA. A draft Traffic Impact Study Scoping Agreement is attached for review and approval by the Transportation Planning Section.

For reference, WMATA submitted a Traffic Impact Study Scoping Agreement in February 2015 for the same project. However, the project was put on hold soon after and is now being reinitiated. The previously submitted and signed Traffic Impact Study Scoping Agreement is also attached.

Project Background

The purpose of the HR&O facility is to repair damaged rail cars and complete mid-life overhauls for scheduled replacement of major rail car components. Examples of the types of activities which would be completed at the HR&O facility include:

- In-depth Repairs: structural car body repairs, painting, and the removal and repair of doors, windows, and seats.
- Mid-life Overhauls: scheduled removal and rebuilding of motors, trucks, and other key components.

The HR&O facility would include the following elements:

- Rail car truck shop;
- Roadway access and loading docks for heavy trucks;
- Bays for railcar repair;
- Storage tracks;
- Operations and administrative offices, and
- Employee parking.

The HR&O facility would be a maximum of 400,000 square feet in area. The facility would support a maximum of 370 employees working over three shifts.

Traffic Analysis Methodology

The study team is using the *Transportation Review Guidelines* manual developed by the Maryland-National Capital Park and Planning Commission (M-NCPPC), adopted in November 2012 and updated in 2013, as a primary reference for the analysis methodology. Critical Lane Volume (CLV) will be used to analyze the intersection level of service in the study area at signalized intersections. At unsignalized intersections, the analysis will be based on Highway Capacity Manual (HCM). Therefore, Synchro's HCM method will be used for unsignalized intersections. This methodology is consistent with the M-NCPPC manual.

Study Area Intersections

WMATA proposes to evaluate the following intersections (see attached map):

- Pennsy Dr and Corporate Dr (signalized)
- Pennsy Dr and Ardwick-Armore Road (signalized)
- Pennsy Dr and Polk St
- Pennsy Dr and MD 410 Veterans Pkwy (signalized)

Data Collection

Turning movement counts will be collected at the above described study area intersections, in accordance with the traffic scoping agreement. Counts will be performed on a typical weekday for three hours in the morning peak and three hours in the afternoon peak, with 15-minute intervals.

Schedule

The study assumes the project will be completed in 2023. The traffic analysis are proposed for completion in April 2018.

Please contact me should you have any questions or need additional information. I can be reached by phone at (804) 515-8559 or by email at susan.anderson@aecom.com. I look forward to working with you on the analysis. WMATA's environmental coordinator is Jim Ashe; his phone number is (202) 962-1745.

Sincerely,

Susan T. Anderson

Susan T. Anderson, AICP
AECOM, Project Manager

cc: John Thomas, WMATA
Jim Ashe, WMATA
Daniel Worke, AECOM

Attachments:
Draft Traffic Impact Study Scoping Agreement (2018)
Traffic Impact Study Scoping Agreement (2015)
HR&O Proposed Site Concept Map
Study Area Intersections Map

Figure 1

The Maryland-National Capital Park and Planning Commission
Prince George's County Planning Department
Transportation Planning Section, Countywide Planning Division

TRAFFIC IMPACT STUDY SCOPING AGREEMENT

This form must be completed prior to commencing a Traffic Impact Study. The completed Scoping Agreement should be submitted to the Transportation Planning Section (TPS) by the traffic consultant for concurrence and signature. TPS will return a signed copy, with any comments, to the traffic consultant for inclusion in the Traffic Impact Study. Failure to conduct the study in accordance with the guidelines and the signed Scoping Agreement may be grounds for rejection of the study, thereby necessitating an addendum or a new study prior to the start of the staff review.

1. Date: 02/08/18 2. Consultant: AECOM
3. Project Name: WMATA Heavy Repair and Overhaul Facility
4. Type of Application (see Figure 2 of Guidelines): Mandatory Referral Review
5. Location (please attach map showing site location and boundaries)
   Policy Tier Developed Center _____ Corridor _____
6. Municipality Landover
7. Use (check one): Residential _____ Commercial _____ Other X
   If Residential, number and type of units proposed: 0
   If Commercial, amount and type of space proposed: _____
   If Other, describe: WMATA maintenance facility (36.6 acres; 370 employees)
8. SHA/DPW&T improvements assumed: None
9. Other improvements assumed: None
10. Will study assume trip reduction? (check one) Yes _____ No X
    Describe the source: _____
11. Is Mitigation (Section 11 in Guidelines) proffered? (check one) Yes _____ No X
12. Will SCRP (Section 12 in Guidelines) be used? (check one) Yes _____ No X
13. Will summer counts be used? (check one) Yes _____ No X
14. Do you want staff to provide you with a list of background development? (check one)
    Yes X No _____

Please attach a map (or maps) showing Study Area network with included intersections and links, estimated site trip distribution, and growth factors for through traffic. Please note any other assumptions and/or comments on a separate sheet with initials.

SIGNED: Susan T. Anderson — 2/9/18
Consultant **Date**

APPROVED: _____ _____
TPS Coordinator (or Supervisor) **Date**

Figure 1

The Maryland-National Capital Park and Planning Commission
Prince George's County Planning Department
Transportation Planning Section, Countywide Planning Division

TRAFFIC IMPACT STUDY SCOPING AGREEMENT

This form must be completed prior to commencing a Traffic Impact Study. The completed Scoping Agreement should be submitted to the Transportation Planning Section (TPS) by the traffic consultant for concurrence and signature. TPS will return a signed copy, with any comments, to the traffic consultant for inclusion in the Traffic Impact Study. Failure to conduct the study in accordance with the guidelines and the signed Scoping Agreement may be grounds for rejection of the study, thereby necessitating an addendum or a new study prior to the start of the staff review.

1. Date: 02/08/18 2. Consultant: AECOM
3. Project Name: WMATA Heavy Repair and Overhaul Facility
4. Type of Application (see Figure 2 of Guidelines): Mandatory Referral Review
5. Location (please attach map showing site location and boundaries)
   Policy Tier Developed Center_____ Corridor_____
6. Municipality Landover
7. Use (check one): Residential_____ Commercial_____ Other X
   If Residential, number and type of units proposed: 0
   If Commercial, amount and type of space proposed: _____
   If Other, describe: WMATA maintenance facility (36.6 acres; 370 employees)
8. SHA/DPW&T improvements assumed: None
9. Other improvements assumed: None
10. Will study assume trip reduction? (check one) Yes _____ No X
    Describe the source: _____
11. Is Mitigation (Section 11 in Guidelines) proffered? (check one) Yes_____ No X
12. Will SCRP (Section 12 in Guidelines) be used? (check one) Yes_____ No X
13. Will summer counts be used? (check one) Yes_____ No X
14. Do you want staff to provide you with a list of background development? (check one)
    Yes X No_____

Please attach a map (or maps) showing Study Area network with included intersections and links, estimated site trip distribution, and growth factors for through traffic. Please note any other assumptions and/or comments on a separate sheet with initials.

SIGNED: Susan T. Anderson (signature) — Consultant — Date: 2/9/18

APPROVED: Thomas (signature) — TPS Coordinator (or Supervisor) — Date: 2/23/2018

Table 1: Traffic Impact Study Scoping Agreement

The Maryland-National Capital Park and Planning Commission
Prince George's County Planning Department
Transportation Planning Section, Countywide Planning Commission

This form must be completed prior to commencing a traffic impact study (TIS). The completed and signed scoping agreement should be submitted to the Transportation Planning Section (TPS) by the traffic consultant for concurrence and signature. TPS will return a signed copy with any comments to the traffic consultant for inclusion in the TIS. Failure to conduct the study in accordance with the guidelines and the signed scoping agreement may be grounds for rejection of the study, thereby necessitating an addendum or a new study prior to the start of staff review.

Project Name:	WMATA Heavy Repair & Overhaul (HR&O) Facility
Policy Tier (Developed, Developing, or Rural): Please note if in center or corridor:	Developed
Type of Application (see Table 3):	Mandatory Referral Review
Project Location:	Landover
Traffic Consultant Name: Contact Number(s):	Burak Cesme, PhD, AECOM 703-340-3119

Describe the Proposal Under Study: Residential—Number & Type of Units: Commercial—Amount & Type of Space: Other Uses and Quantity:	Metrorail Heavy Repair and Overhaul Facility (36.6-acre new railyard site)		
Are pass-by trip rates in accordance with the guidelines? (circle one)	(Yes)	No	If No, please provide explanation on separate sheet.
Are there diverted trips? (circle one)	Yes	(No)	If Yes, please provide explanation on separate sheet.
Will a TOD credit be used? (Section 4 of the Guidelines) (circle one)	Yes	(No)	Note that all development in centers and corridors will be evaluated for TOD.
Will a transit facilities credit be used? (Section 5 of the Guidelines) (circle one)	Yes	(No)	Need/nexus must be justified in study, and it must be supported by operating agency.
Will a bike/ped facilities credit be used? (Section 6 of the Guidelines) (circle one)	Yes	(No)	Need/nexus must be justified in study, and it must be supported by operating agency.
Are additional trip reductions (internal trips, transit trips, etc.) proposed? (circle one)	(Yes)	No	If Yes, please provide explanation on separate sheet.

Attach a map (or maps) showing the study area network with included intersections and links, estimated site trip distribution, and growth factors for through traffic.

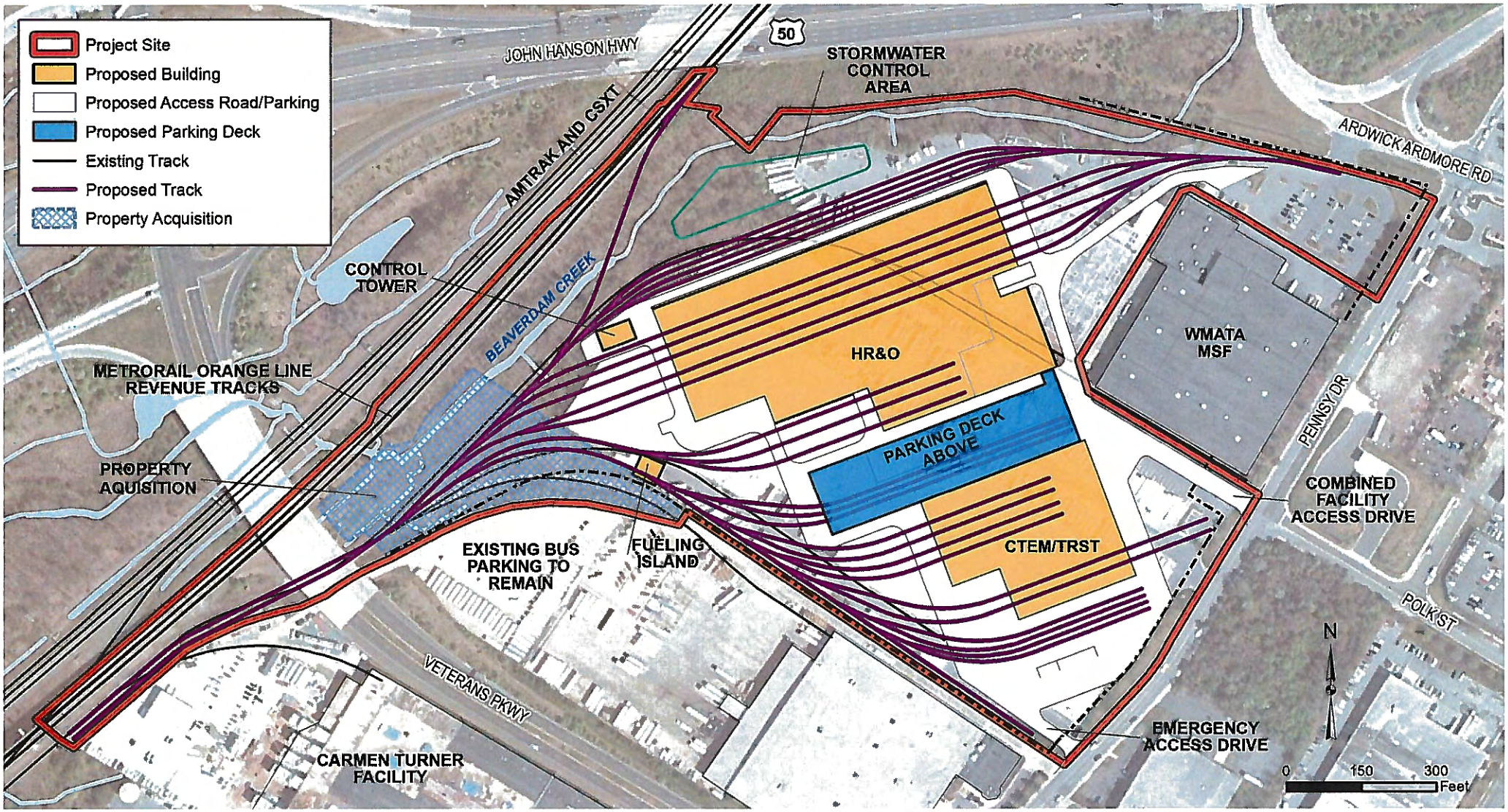
SHA/DPW&T capital program improvements assumed:		
Other improvements assumed:		
Is Mitigation (Section 8 of the Guidelines) to be proffered? (circle one)	Yes (No)	Note the locational criteria in Section 8, and please note the clarifications regarding mitigation included in Section 3, Subsection E.
Is a cooperative funding arrangement (such as a SCRP, PFFIP, or some other pro rata) to be used? (circle one)	Yes (No)	If Yes, please provide explanation on separate sheet, and note limitations in Section 3, Subsection E.
Will summer counts be used? (circle one)	Yes (No)	The use of summer counts must have specific concurrence of TPS staff.
Have there been discussions with the permitting agency (DPW&T and/or SHA) regarding access to this site and the analysis requirements? (circle one)	(Yes) No	Section 1, Subsection E, strongly advises that these discussions occur early in the development review process. Note that driveway access onto arterial facilities must be justified and approved by the Planning Board as a part of the subdivision process.
Has a listing of background development been developed? (circle one)	Yes (No)	If Yes, please provide the list so that TPS staff may either concur with it or provide changes.
Have the costs and feasibility of potential off-site transportation improvements been evaluated? (circle one)	Yes (No)	If No, bear in mind that Section 3, Subsection D, requires that any recommended physical off-site improvements include an evaluation of feasibility.

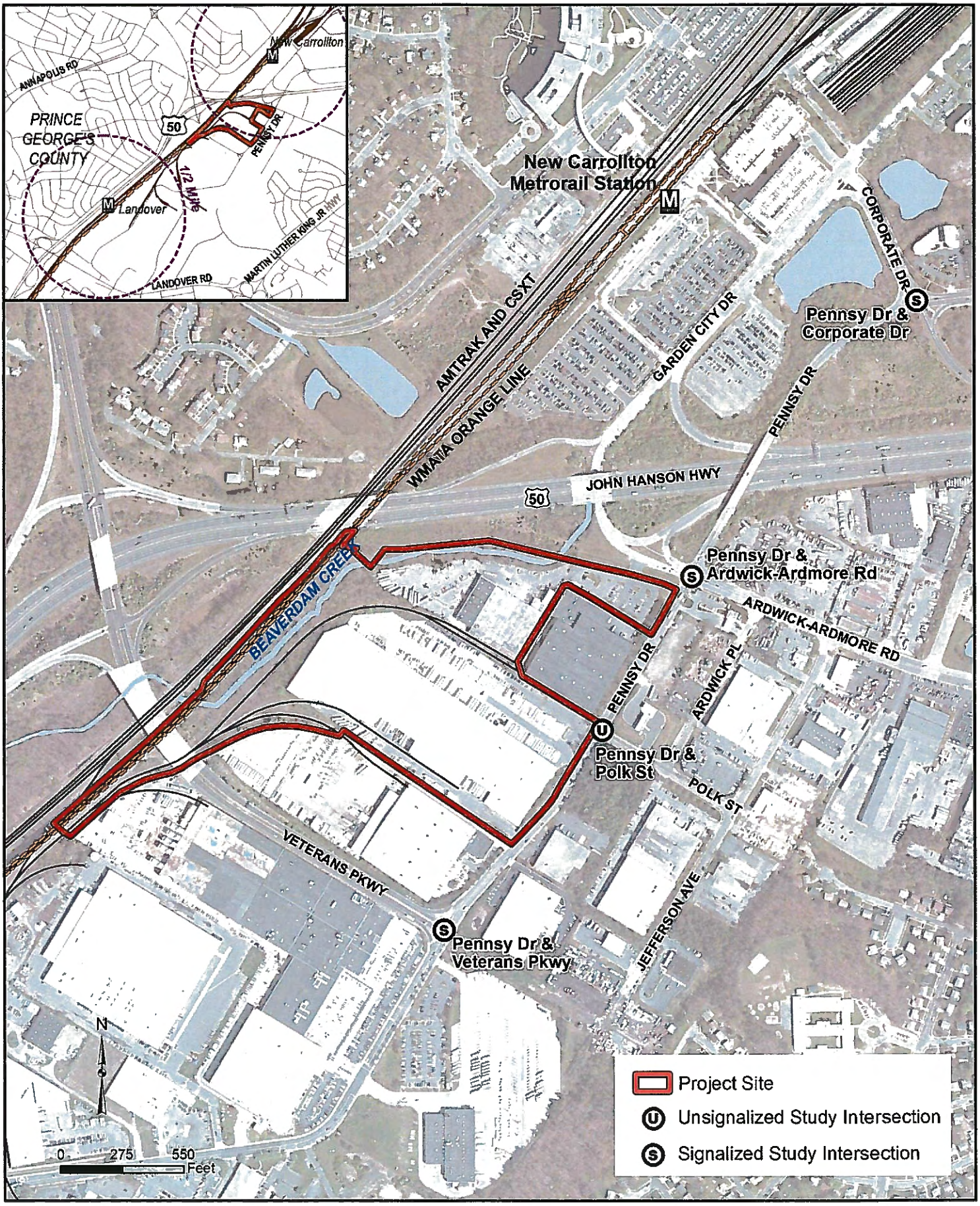
SIGNED: Blaine — **Traffic Consultant** — **Date** 2/22/15

APPROVED: — **TPS Coordinator (or Supervisor)** — **Date** 2/22/15

This form is not required for sites that do not require a TIS.

Note: Feasibility of Ped/Bike movements along Pennsylv. + Feasibility of better movements around Pennsylv./Ardmore Ardmore


Project Site
Proposed Building
Proposed Access Road/Parking
Proposed Parking Deck
Existing Track
Proposed Track
Property Acquisition
JOHN HANSON HWY
50
STORMWATER CONTROL AREA
AMTRAK AND CSXT
ARDWICK ARDMORE RD
CONTROL TOWER
BEAVERDAM CREEK
HR&O
WMATA MSF
METRORAIL ORANGE LINE REVENUE TRACKS
PARKING DECK ABOVE
PENNSY DR
PROPERTY AQUISITION
COMBINED FACILITY ACCESS DRIVE
EXISTING BUS PARKING TO REMAIN
FUELING ISLAND
CTEM/TRST
POLK ST
N
VETERANS PKWY
EMERGENCY ACCESS DRIVE
CARMEN TURNER FACILITY
0
150
300
Feet


New Carrollton
ANNAPOLIS RD
PRINCE GEORGE'S COUNTY
50
PENNSY DR
1/2 Mile
Landover
LANDOVER RD
MARTIN LUTHER KING JR HWY
New Carrollton Metrorail Station
CORPORATE DR
Pennsy Dr & Corporate Dr
AMTRAK AND CSXT
WMATA ORANGE LINE
GARDEN CITY DR
PENNSY DR
JOHN HANSON HWY
50
BEAVERDAM CREEK
Pennsy Dr & Ardwick-Ardmore Rd
ARDWICK-ARDMORE RD
ARDWICK PL
PENNSY DR
Pennsy Dr & Polk St
POLK ST
VETERANS PKWY
JEFFERSON AVE
Pennsy Dr & Veterans Pkwy
N
0
275
550
Feet
Project Site
Unsignalized Study Intersection
Signalized Study Intersection

(This Page Intentionally Left Blank)

ATTACHMENT B: TRAFFIC TURNING MOVEMENT COUNTS

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

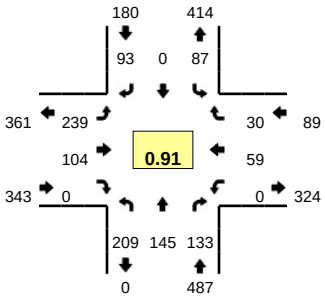
LOCATION: Corporate Dr -- Pennsy Dr/ Corporate Dr

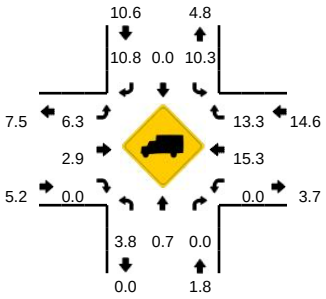
CITY/STATE: Hyattsville, MD

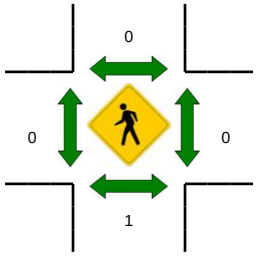
QC JOB #: 14638001

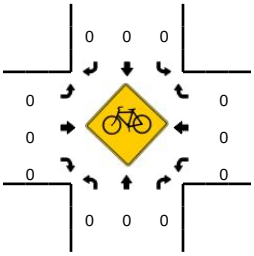
DATE: Tue, Feb 27 2018

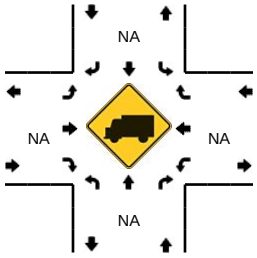
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:00 AM -- 8:15 AM

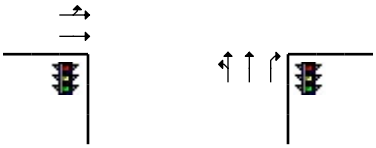


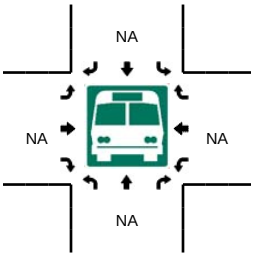












15-Min Count Period Beginning At	Corporate Dr (Northbound)				Corporate Dr (Southbound)				Pennsy Dr/ Corporate Dr (Eastbound)				Pennsy Dr/ Corporate Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	56	23	20	0	14	0	16	0	29	17	0	0	0	11	5	0	191	
7:15 AM	50	38	34	0	14	0	20	0	55	18	0	0	0	13	10	0	252	
7:30 AM	40	35	34	0	16	0	21	0	49	19	0	0	0	17	9	0	240	
7:45 AM	58	36	32	0	18	0	28	0	78	16	0	0	0	12	6	0	284	967
8:00 AM	64	36	32	0	28	0	22	0	67	32	0	0	0	12	8	0	301	1077
8:15 AM	47	38	35	0	25	0	22	0	45	37	0	0	0	18	7	0	274	1099
8:30 AM	39	18	36	0	15	0	22	0	44	32	0	0	0	14	6	0	226	1085
8:45 AM	31	22	32	0	19	0	17	0	50	22	0	0	0	16	6	0	215	1016

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	256	144	128	0	112	0	88	0	268	128	0	0	0	48	32	0	1204
Heavy Trucks	0	0	0		8	0	16		16	0	0		0	4	8		52
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 3/6/2018 7:57 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

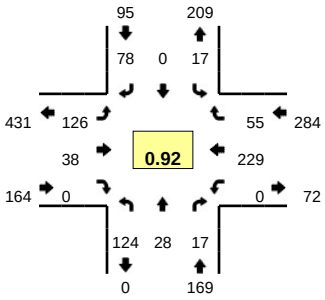
Method for determining peak hour: Total Entering Volume

LOCATION: Corporate Dr -- Pennsy Dr/ Corporate Dr

CITY/STATE: Hyattsville, MD

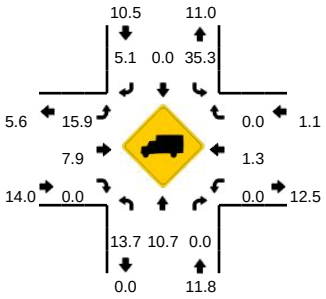
QC JOB #: 14638002

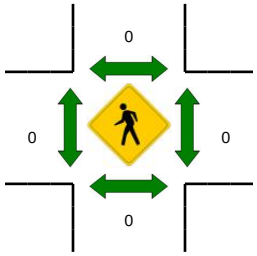
DATE: Tue, Feb 27 2018

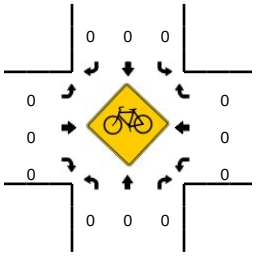


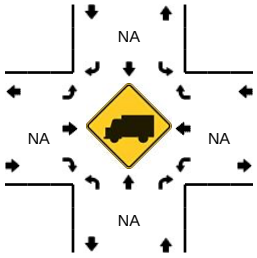
Peak-Hour: 4:30 PM -- 5:30 PM

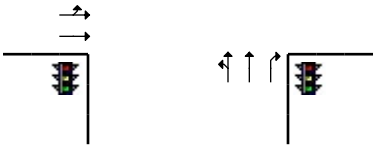
Peak 15-Min: 4:30 PM -- 4:45 PM

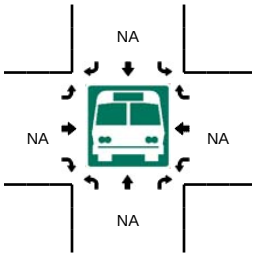












15-Min Count Period Beginning At	Corporate Dr (Northbound)				Corporate Dr (Southbound)				Pennsy Dr/ Corporate Dr (Eastbound)				Pennsy Dr/ Corporate Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	21	6	5	0	5	0	19	0	22	9	0	0	0	51	13	0	151	
4:15 PM	30	4	5	0	3	0	18	0	21	8	0	0	0	49	14	0	152	
4:30 PM	23	5	5	0	6	0	19	0	27	15	0	0	0	78	16	0	194	
4:45 PM	29	10	4	0	5	0	20	0	39	7	0	0	0	51	11	0	176	673
5:00 PM	33	8	4	0	3	0	21	0	33	11	0	0	0	61	14	0	188	710
5:15 PM	39	5	4	0	3	0	18	0	27	5	0	0	0	39	14	0	154	712
5:30 PM	39	12	3	0	4	0	26	0	39	6	0	0	0	47	16	0	192	710
5:45 PM	36	6	6	0	3	0	23	0	30	7	0	0	0	34	13	0	158	692

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	92	20	20	0	24	0	76	0	108	60	0	0	0	312	64	0	776
Heavy Trucks	12	0	0		4	0	8		16	4	0		0	4	0		48
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 3/6/2018 7:57 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

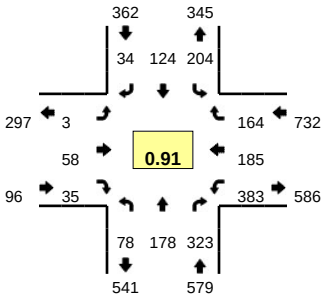
Type of peak hour being reported: Intersection Peak

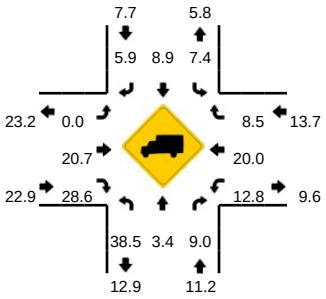
Method for determining peak hour: Total Entering Volume

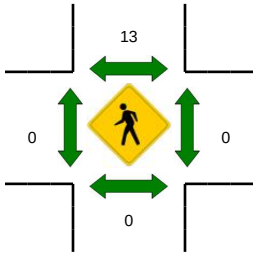
LOCATION: Pennsy Dr -- Ardwick Ardmore Rd
CITY/STATE: Hyattsville, MD

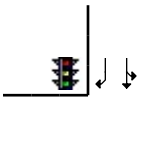
QC JOB #: 14638003
DATE: Tue, Feb 27 2018

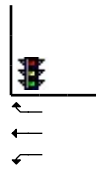
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

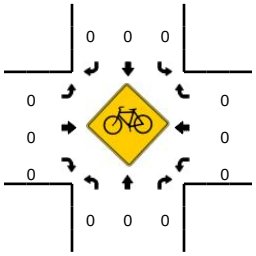


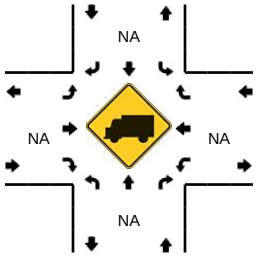


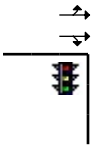


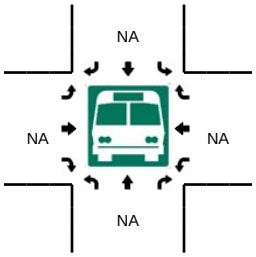












15-Min Count Period Beginning At	Pennsy Dr (Northbound)				Pennsy Dr (Southbound)				Ardwick Ardmore Rd (Eastbound)				Ardwick Ardmore Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	18	15	60	0	45	38	4	0	0	13	10	0	65	45	24	0	337	
7:15 AM	21	36	84	0	35	38	7	0	0	13	16	0	71	45	49	0	415	
7:30 AM	15	25	67	0	37	31	7	0	1	8	14	0	92	42	34	0	373	
7:45 AM	17	60	99	0	54	32	7	0	1	23	16	0	104	37	36	0	486	1611
8:00 AM	26	38	79	0	57	41	7	0	0	16	7	0	95	61	57	1	485	1759
8:15 AM	12	41	78	0	53	24	8	0	2	8	8	0	94	41	39	0	408	1752
8:30 AM	23	39	67	0	40	27	12	0	0	11	4	0	89	46	32	0	390	1769
8:45 AM	13	38	78	0	30	18	11	0	0	9	8	0	114	83	37	0	439	1722

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	68	240	396	0	216	128	28	0	4	92	64	0	416	148	144	0	1944
Heavy Trucks	32	8	36		12	12	8		0	12	16		24	20	12		192
Pedestrians		0				16				0				0			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 3/6/2018 7:57 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

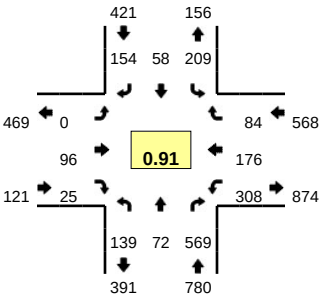
Type of peak hour being reported: Intersection Peak

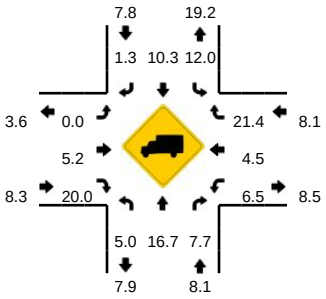
Method for determining peak hour: Total Entering Volume

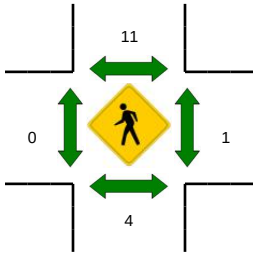
LOCATION: Pennsy Dr -- Ardwick Ardmore Rd
CITY/STATE: Hyattsville, MD

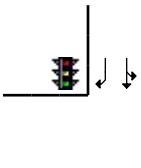
QC JOB #: 14638004
DATE: Tue, Feb 27 2018

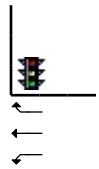
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

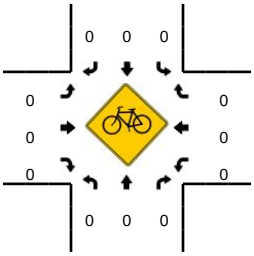


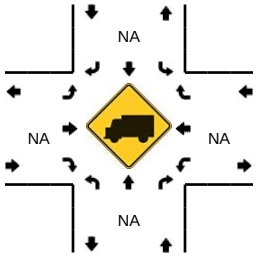


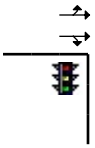


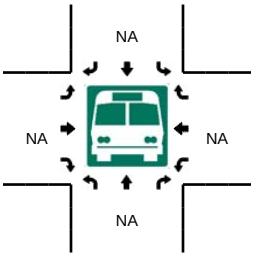












15-Min Count Period Beginning At	Pennsy Dr (Northbound)				Pennsy Dr (Southbound)				Ardwick Ardmore Rd (Eastbound)				Ardwick Ardmore Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	40	19	153	0	48	18	44	0	0	15	7	2	97	50	18	0	511	
4:15 PM	28	14	102	0	39	11	41	0	1	26	3	1	82	44	15	0	407	
4:30 PM	33	17	115	0	49	7	64	0	0	16	4	0	64	61	22	0	452	
4:45 PM	30	18	101	0	44	7	48	0	0	14	4	0	75	39	28	0	408	1778
5:00 PM	46	15	124	0	50	16	50	0	0	19	11	0	84	55	28	0	498	1765
5:15 PM	23	13	131	0	54	7	39	0	0	18	5	0	70	36	17	0	413	1771
5:30 PM	32	19	163	0	51	24	32	0	0	33	6	0	87	52	23	0	522	1841
5:45 PM	38	25	151	0	54	11	33	0	0	26	3	0	67	33	16	0	457	1890

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	76	652	0	204	96	128	0	0	132	24	0	348	208	92	0	2088
Heavy Trucks	12	16	40		28	8	0		0	8	4		16	12	20		164
Pedestrians		8				8				0				0			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 3/6/2018 7:57 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

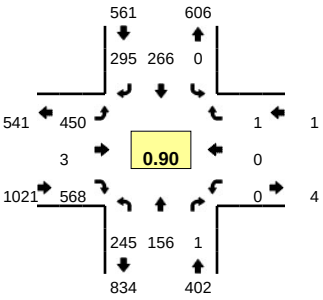
Type of peak hour being reported: Intersection Peak

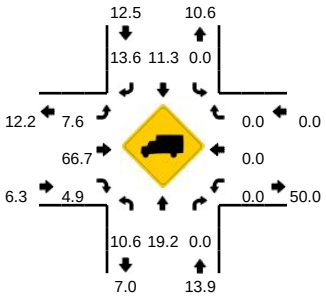
Method for determining peak hour: Total Entering Volume

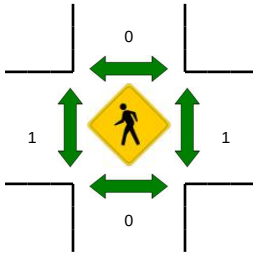
LOCATION: Pennsy Dr -- Veterans Pkwy
CITY/STATE: Hyattsville, MD

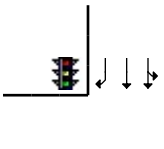
QC JOB #: 14638005
DATE: Tue, Feb 27 2018

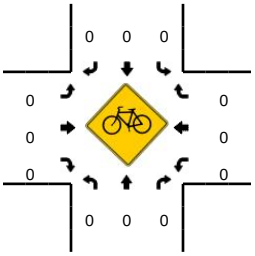
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

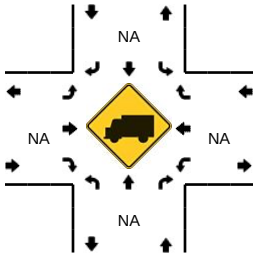


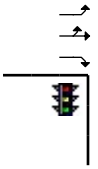


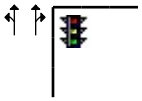


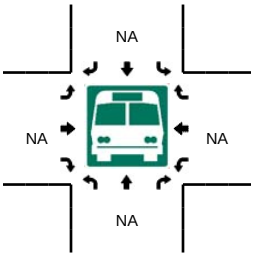












15-Min Count Period Beginning At	Pennsy Dr (Northbound)				Pennsy Dr (Southbound)				Veterans Pkwy (Eastbound)				Veterans Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	40	31	0	0	0	45	62	0	71	0	107	0	0	0	0	0	356	
7:15 AM	66	36	0	0	0	73	44	0	111	0	134	0	0	0	0	0	464	
7:30 AM	60	35	0	0	0	56	78	0	86	0	156	0	0	0	0	0	471	
7:45 AM	49	39	0	0	0	65	101	0	143	1	153	1	0	0	1	0	553	1844
8:00 AM	70	46	1	0	0	72	72	0	109	2	125	0	0	0	0	0	497	1985
8:15 AM	62	33	0	0	0	53	84	0	122	1	94	0	0	0	0	0	449	1970
8:30 AM	60	21	0	0	0	41	76	0	107	2	81	1	0	0	0	0	389	1888
8:45 AM	65	37	0	0	0	57	106	0	98	1	62	0	1	4	0	0	431	1766

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	196	156	0	0	0	260	404	0	572	4	612	4	0	0	4	0	2212
Heavy Trucks	20	32	0		0	36	40		36	0	24		0	0	0		188
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 3/6/2018 7:57 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

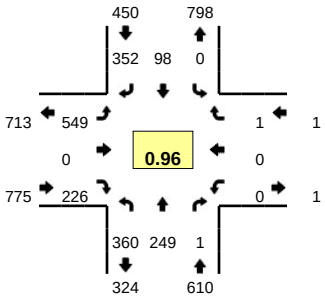
Type of peak hour being reported: Intersection Peak

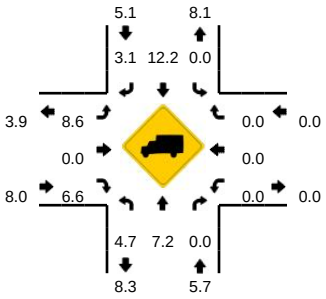
Method for determining peak hour: Total Entering Volume

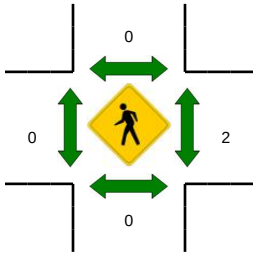
LOCATION: Pennsy Dr -- Veterans Pkwy
CITY/STATE: Hyattsville, MD

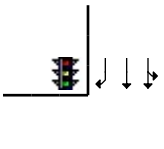
QC JOB #: 14638006
DATE: Tue, Feb 27 2018

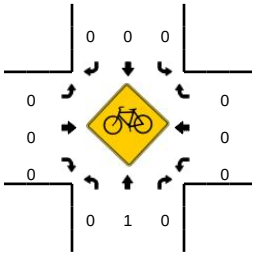
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

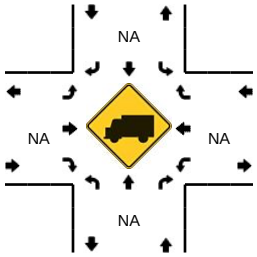


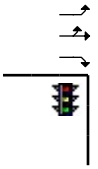


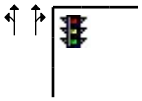


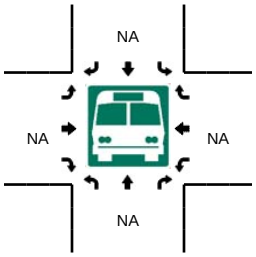












15-Min Count Period Beginning At	Pennsy Dr (Northbound)				Pennsy Dr (Southbound)				Veterans Pkwy (Eastbound)				Veterans Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	122	61	0	0	0	30	95	0	136	0	69	0	0	0	1	0	514	
4:15 PM	101	45	0	0	0	22	91	0	106	0	72	0	0	0	0	0	437	
4:30 PM	104	61	0	0	0	23	97	0	119	0	42	0	0	0	0	0	446	
4:45 PM	89	50	0	0	0	15	90	0	124	0	56	0	0	0	0	0	424	1821
5:00 PM	106	73	0	0	0	32	96	0	110	0	53	0	0	0	0	0	470	1777
5:15 PM	89	52	1	0	0	16	78	0	147	0	64	0	0	0	1	0	448	1788
5:30 PM	87	63	0	0	0	26	98	0	145	0	58	1	0	0	0	0	478	1820
5:45 PM	78	61	0	0	0	24	80	0	146	0	51	0	0	0	0	0	440	1836

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	348	252	0	0	0	104	392	0	580	0	232	4	0	0	0	0	1912
Heavy Trucks	12	16	0		0	8	4		52	0	0		0	0	0		92
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 3/6/2018 7:57 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

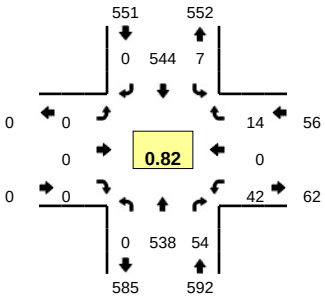
Type of peak hour being reported: Intersection Peak

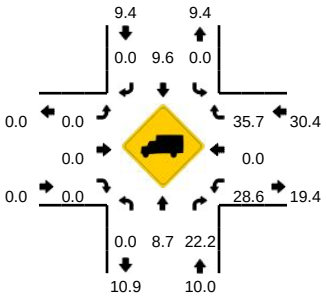
Method for determining peak hour: Total Entering Volume

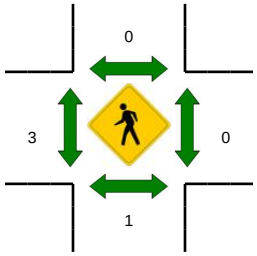
LOCATION: Pennsy Dr -- Polk St
CITY/STATE: Hyattsville, MD

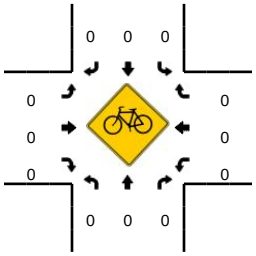
QC JOB #: 14638007
DATE: Tue, Feb 27 2018

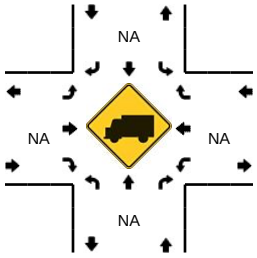
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

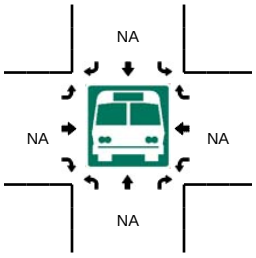












15-Min Count Period Beginning At	Pennsy Dr (Northbound)				Pennsy Dr (Southbound)				Polk St (Eastbound)				Polk St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	93	6	0	4	110	0	0	0	0	0	0	6	0	1	0	220	
7:15 AM	0	135	13	0	4	119	0	0	0	0	0	0	5	0	4	0	280	
7:30 AM	0	102	8	0	3	120	0	0	0	0	0	0	16	0	2	0	251	
7:45 AM	0	169	19	0	1	165	0	0	0	0	0	0	5	0	4	1	364	1115
8:00 AM	0	134	15	0	2	136	0	0	0	0	0	0	8	0	6	0	301	1196
8:15 AM	0	133	12	0	1	123	0	0	0	0	0	0	12	0	2	0	283	1199
8:30 AM	0	117	7	0	1	114	0	0	0	0	0	0	8	0	3	0	250	1198
8:45 AM	0	127	16	0	2	136	0	0	0	0	0	0	16	0	2	0	299	1133

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	676	76	0	4	660	0	0	0	0	0	0	20	0	16	4	1456
Heavy Trucks	0	52	16		0	52	0		0	0	0		8	0	8		136
Pedestrians		0				0				8				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 3/6/2018 7:57 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

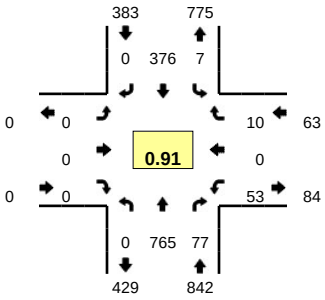
Type of peak hour being reported: Intersection Peak

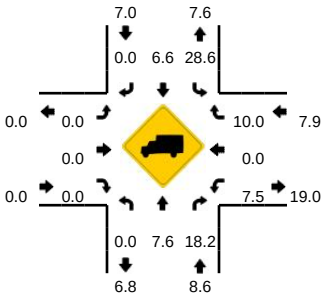
Method for determining peak hour: Total Entering Volume

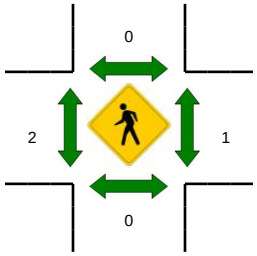
LOCATION: Pennsy Dr -- Polk St
CITY/STATE: Hyattsville, MD

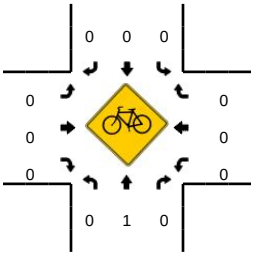
QC JOB #: 14638008
DATE: Tue, Feb 27 2018

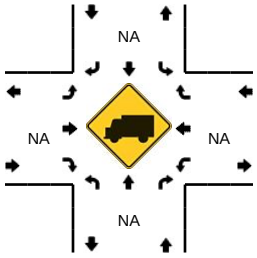
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

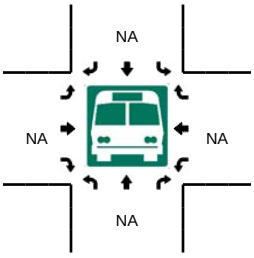












15-Min Count Period Beginning At	Pennsy Dr (Northbound)				Pennsy Dr (Southbound)				Polk St (Eastbound)				Polk St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	180	15	0	2	106	0	0	0	0	0	0	11	0	4	0	318	
4:15 PM	0	149	12	0	2	100	0	0	0	0	0	0	12	0	3	0	278	
4:30 PM	0	163	22	0	0	76	0	0	0	0	0	0	16	0	2	0	279	
4:45 PM	0	149	11	0	2	86	0	0	0	0	0	0	15	0	2	0	265	1140
5:00 PM	0	186	19	0	2	102	0	0	0	0	0	0	14	0	2	0	325	1147
5:15 PM	0	175	20	0	3	83	0	0	0	0	0	0	7	0	0	0	288	1157
5:30 PM	0	204	21	0	1	111	0	0	0	0	0	0	14	0	4	0	355	1233
5:45 PM	0	200	17	0	1	80	0	0	0	0	0	0	18	0	4	0	320	1288

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	816	84	0	4	444	0	0	0	0	0	0	56	0	16	0	1420
Heavy Trucks	0	60	20		4	20	0		0	0	0		4	0	0		108
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

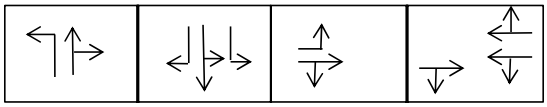
Report generated on 3/6/2018 7:57 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

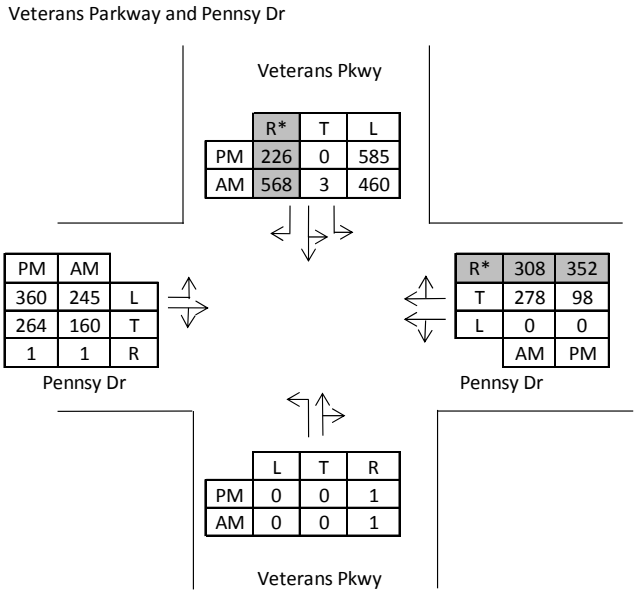
APPENDIX B: CLV CALCULATIONS

CLV Calculation Sheet

Intersection: Veterans Parkway and Pennsy Drive
Scenario: 2018 Existing



Signal Phase diagram



*Right-turns are channelized; not included in the CLV analysis

Existing AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	460	1.00	460	463	0.60	278			278		278
SB-TH	SH	3	-	3								
SB-RT*	1	568	-	568	568	1.00	568		-568	0		
EB-LT	1	245	1.00	245	245	1.00	245	153		398		398
EB-TH	1	160	-	160	160	1.00	160					
EB-RT	SH	1	-	1	1	1.00	1					
WB-LT	SH	0	1.10	0	0	1.00	0	161		161		
WB-TH	2	278	-	278	278	0.55	153	0				
WB-RT*	SH	308	-	308	308	1.00	308	0	-308	0	YES	

CLV Total = **677**
LOS = A

Existing PM

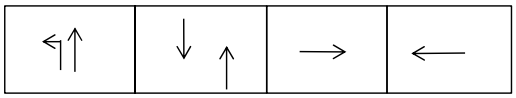
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	585	1.00	585	585	0.60	351			351		351
SB-TH	SH	0	-			1.00						
SB-RT*	1	226	-	226	226	1.00	226		-226	0		
EB-LT	1	360	1.00	360	360	1.00	360	54		414		414
EB-TH	1	264	-	264	264	1.00	264					
EB-RT	SH	1	-	1	1	1.00	1					
WB-LT	SH	0	1.10	0	0	1.00	0	265		265		
WB-TH	2	98	-	98	98	0.55	54	0				
WB-RT	SH	352	-	352	352	1.00	352	0	-352	0	YES	

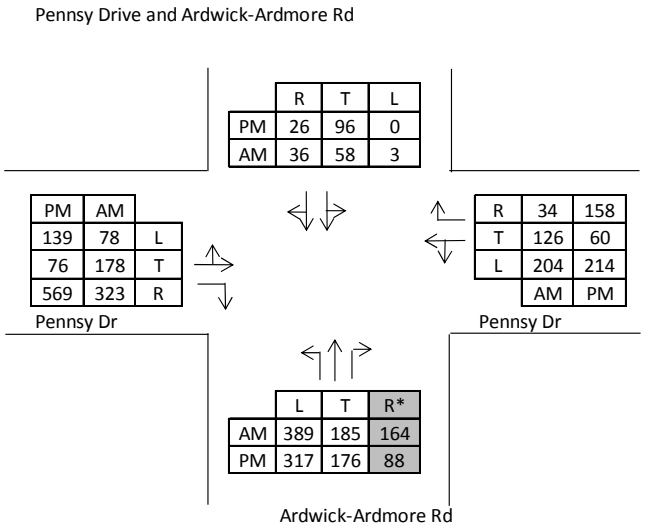
CLV Total = **766**
LOS = A

CLV Calculation Sheet

Intersection: Pennsy Drive and Ardwick- Ardmore Road
Scenario: 2018 Existing

Signal Phase diagram





*Right-turn is channelized; not included in the CLV analysis

Existing AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	389	1.00	389	389	1.00	389					
NB-TH	1	185	-	185	185	1.00	185	3		188		
NB-RT*	1	164		164	164	1.00	164		-164	0		443
SB-LT	SH	3	1.10	3								
SB-TH	2	58	-	58	97	0.55	54	389		443		
SB-RT	SH	36	-	36								
EB-LT	SH	78	1.00	78								
EB-TH	1	178	-	178	256	1.00	256			256		323
EB-RT	1	323	-	323	323	1.00	323			323		
WB-LT	SH	204	1.00	204								
WB-TH	1	126	-	126	330	1.00	330			330		330
WB-RT	1	34	-	34	34	1.00	34			34		

CLV Total = **1,096**
LOS = B

Existing PM

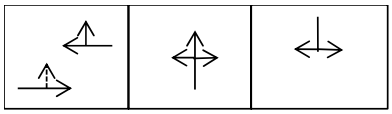
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	317	1.00	317	317	1.00	317					
NB-TH	1	176	-	176	176	1.00	176	0		176		
NB-RT*	1	88		0	88	1.00	88		-88	0		384
SB-LT	SH	0	1.10	0								
SB-TH	2	96	-	96	122	0.55	67	317		384		
SB-RT	SH	26	-	26								
EB-LT	SH	139	1.00	139								
EB-TH	1	76	-	76	215	1.00	215			215		569
EB-RT	1	569	-	569	569	1.00	569			569		
WB-LT	SH	214	1.00	214								
WB-TH	1	60	-	60	274	1.00	274			274		274
WB-RT	1	158	-	158	158	1.00	158			158		

CLV Total = **1,227**
LOS = C

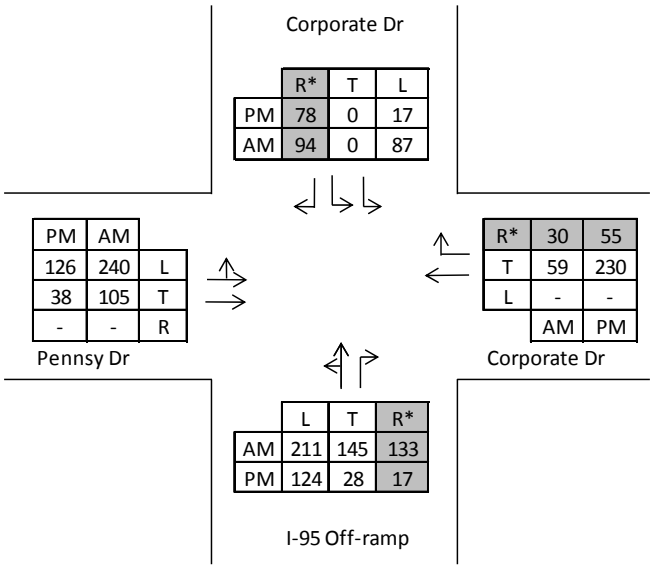
CLV Calculation Sheet

Intersection: Pennsy Drive and Corporate Drive
Scenario: 2018 Existing

Signal Phase diagram



Pennsy Dr and Corporate Dr



*Right-turn is channelized; not included in the CLV analysis

Existing AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	211	1.00	211								
NB-TH	1	145	-	145	356	1.00	356			356		356
NB-RT*	1	133	-	133	133	1.00	133		-133	0		
SB-LT	2	87	1.00	87	87	0.60	52			52		
SB-TH	-	-	-	-	-	-	-					52
SB-RT*	1	94	-	94	94	1.00	94		-94	0		
EB-LT	SH	240	1.10	264							YES	
EB-TH	2	105	-	105	105	1.00	105			105		
EB-RT	-		-									299
WB-LT	-											
WB-TH	1	59	-	59	59	1.00	59	240		299		
WB-RT*	1	30	-	30	30	1.00	30		-30	0		

CLV Total = **707**
LOS = A

Existing PM

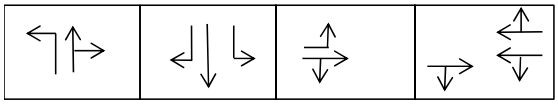
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	124	1.00	124								
NB-TH	1	28	-	28	152	1.00	152			152		152
NB-RT*	1	17	-	17	17	1.00	17		-17	0		
SB-LT	2	17	1.00	17	17	0.60	10			10		
SB-TH	-		-	-	-	-	-					10
SB-RT*	1	78	-	78	78	1.00	78		-78	0		
EB-LT	SH	126	2.00	252							YES	
EB-TH	2	38	-	38	38	1.00	38			38		
EB-RT	-		-									356
WB-LT	-											
WB-TH	1	230	-	230	230	1.00	230	126		356		
WB-RT*	1	55	-	55	55	1.00	55		-55	0		

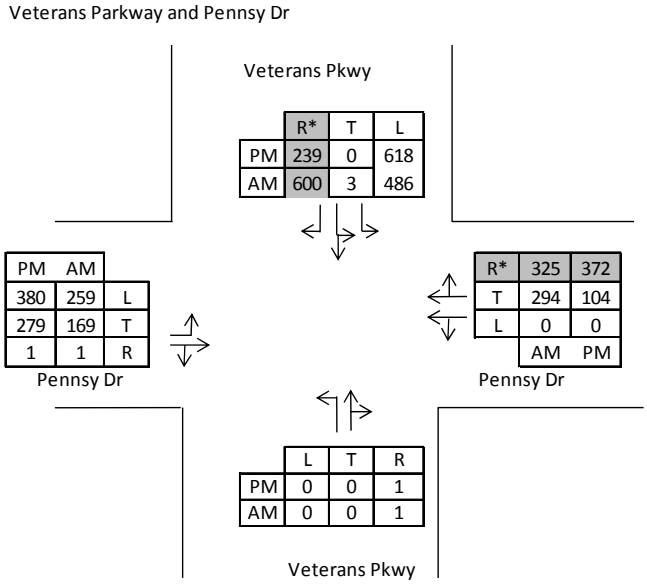
CLV Total = **518**
LOS = A

CLV Calculation Sheet

Intersection: Veterans Parkway and Pennsy Drive
Scenario: 2023 No-Build

Signal Phase diagram





*Right-turn is channelized; not included in the CLV analysis

2023 No-Build AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	486	1.00	486	489	0.60	293			293		293
SB-TH	SH	3	-	3								
SB-RT*	1	600	-	600	600	1.00	600		-600	0		
EB-LT	1	259	1.00	259	259	1.00	259	162		421		421
EB-TH	1	169	-	169	169	1.00	169					
EB-RT	SH	1	-	1	1	1.00	1					
WB-LT	SH	0	1.10	0	0	1.00	0	170		170		
WB-TH	2	294	-	294	294	0.55	162	0				
WB-RT*	SH	325	-	325	325	1.00	325	0	-325	0	YES	

CLV Total = **715**
LOS = A

2023 No-Build PM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	618	1.00	618	618	0.60	371			371		371
SB-TH	SH	0	-									
SB-RT*	1	239	-	239	239	1.00	239		-239	0		
EB-LT	1	380	1.00	380	380	1.00	380	57		437		437
EB-TH	1	279	-	279	279	1.00	279					
EB-RT	SH	1	-	1	1	1.00	1					
WB-LT	SH	0	1.10	0	0	1.00	0	279		279		
WB-TH	2	104	-	104	104	0.55	57	0				
WB-RT*	SH	372	-	372	372	1.00	372	0	-372	0	YES	

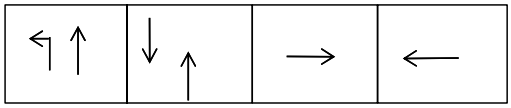
CLV Total = **809**
LOS = A

CLV Calculation Sheet

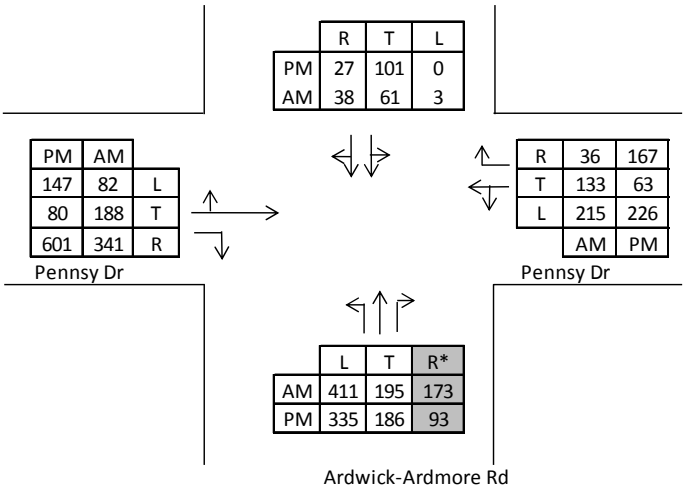
Intersection: Pennsy Drive and Ardwick-Ardmore Road

Scenario: 2023 No-Build

Signal Phase diagram



Pennsy Drive and Ardwick-Ardmore Rd



*Right-turn is channelized; not included in the CLV analysis

2023 No-Build AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	411	1.00	411	411	1.00	411					
NB-TH	1	195	-	195	195	1.00	195	3		198		
NB-RT*	1	173		173	173	1.00	173		-173	0		467
SB-LT	SH	3	1.10	3								
SB-TH	2	61	-	61	102	0.55	56	411		467		
SB-RT	SH	38	-	38								
EB-LT	SH	82	1.00	82								
EB-TH	1	188	-	188	270	1.00	270			270		341
EB-RT	1	341	-	341	341	1.00	341			341		
WB-LT	SH	215	1.00	215								
WB-TH	1	133	-	133	348	1.00	348			348		348
WB-RT	1	36	-	36	36	1.00	36			36		

CLV Total = 1,156

LOS = C

2023 No-Build PM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	335	1.00	335	335	1.00	335					
NB-TH	1	186	-	186	186	1.00	186			186		
NB-RT*	1	93		93	93	1.00	93		-93	0		405
SB-LT	SH	0	1.10	0								
SB-TH	2	101	-	101	128	0.55	70	335		405		
SB-RT	SH	27	-	27								
EB-LT	SH	147	1.00	147								
EB-TH	1	80	-	80	227	1.00	227			227		601
EB-RT	1	601	-	601	601	1.00	601			601		
WB-LT	SH	226	1.00	226								
WB-TH	1	63	-	63	289	1.00	289			289		289
WB-RT	1	167	-	167	167	1.00	167			167		

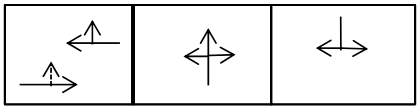
CLV Total = 1,295

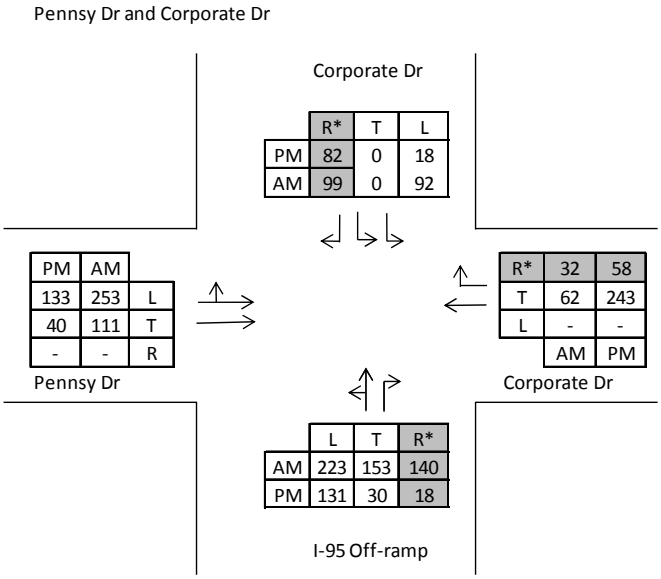
LOS = C

CLV Calculation Sheet

Intersection: Pennsy Drive and Corporate Drive
Scenario: 2023 No-Build

Signal Phase diagram





*Right-turn is channelized; not included in the CLV analysis

2023 No-Build AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	223	1.00	223								
NB-TH	1	153	-	153	376	1.00	376			376		376
NB-RT*	1	140	-	140	140	1.00	140		-140	0		
SB-LT	2	92	1.00	92	92	0.60	55			55		
SB-TH	-	-	-	-	-	-	-					55
SB-RT*	1	99	-	99	99	1.00	99		-99	0		
EB-LT	SH	253	1.10	278							YES	
EB-TH	2	111	-	111	111	1.00	111			111		
EB-RT			-									315
WB-LT												
WB-TH	1	62	-	62	62	1.00	62	253		315		
WB-RT*	1	32	-	32	32	1.00	32		-32	0		

CLV Total = **746**
LOS = A

2023 No-Build PM

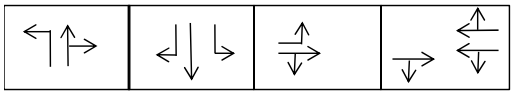
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	131	1.00	131								
NB-TH	1	30	-	30	161	1.00	161			161		161
NB-RT	1	18	-	18	18	1.00	18		-18	0		
SB-LT	2	18	1.00	18	18	0.60	11			11		
SB-TH	-		-	-	-	-	-					11
SB-RT	1	82	-	82	82	1.00	82		-82	0		
EB-LT	SH	133	2.00	266							YES	
EB-TH	2	40	-	40	40	1.00	40			40		
EB-RT			-									376
WB-LT												
WB-TH	1	243	-	243	243	1.00	243	133		376		
WB-RT	1	58	-	58	58	1.00	58		-58	0		

CLV Total = **548**
LOS = A

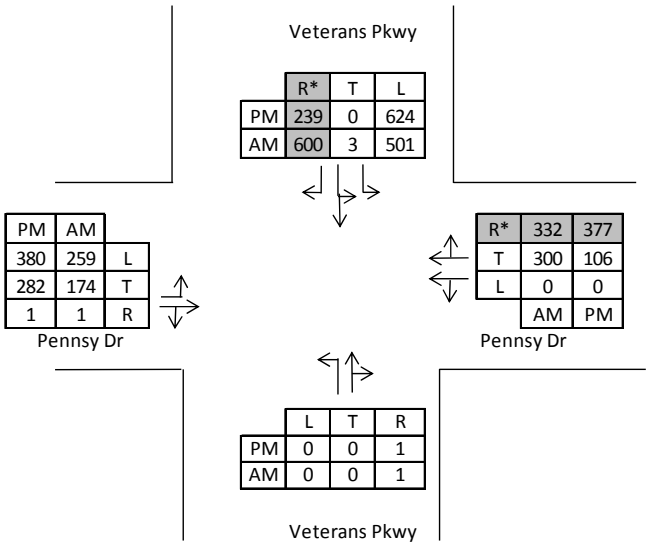
CLV Calculation Sheet

Intersection: Veterans Parkway and Pennsy Drive
Scenario: 2023 Build 400

Signal Phase diagram



Veterans Parkway and Pennsy Dr



*Right-turn is channelized; not included in the CLV analysis

2023 Build 400 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	501	1.00	501	504	0.60	302			302		302
SB-TH	SH	3	-	3								
SB-RT*	1	600	-	600	600	1.00	600		-600	0		
EB-LT	1	259	1.00	259	259	1.00	259	165		424		424
EB-TH	1	174	-	174	174	1.00	174					
EB-RT	SH	0	-			1.00						
WB-LT	SH	0	1.10	0	0	1.00	0	174		174		
WB-TH	2	300	-	300	300	0.55	165	0				
WB-RT*	SH	332	-	332	332	1.00	332	0	-332	0	YES	

CLV Total = 727
LOS = A

2023 Build 400 PM

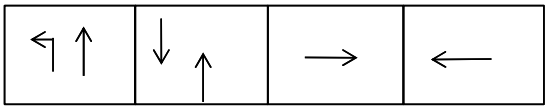
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	624	1.00	624	624	0.60	374			374		374
SB-TH	SH	0	-			1.00						
SB-RT*	1	239	-	239	239	1.00	239		-239	0		
EB-LT	1	380	1.00	380	380	1.00	380	58		438		438
EB-TH	1	282	-	282	282	1.00	282					
EB-RT	SH	1	-	1	1	1.00	1					
WB-LT	SH	0	1.10	0	0	1.00	0	283		283		
WB-TH	2	106	-	106	106	0.55	58	0				
WB-RT	SH	377	-	377	377	1.00	377	0	-377	0	YES	

CLV Total = 813
LOS = A

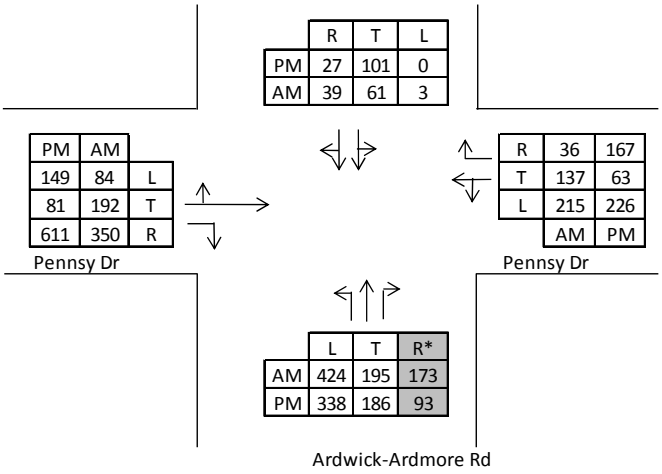
CLV Calculation Sheet

Intersection: Pennsy Drive and Ardwick-Ardmore Road
Scenario: 2023 Build 400

Signal Phase diagram



Pennsy Drive and Ardwick-Ardmore Rd



*Right-turn is channelized; not included in the CLV analysis

2023 Build 400 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	424	1.00	424	424	1.00	424					
NB-TH	1	195	-	195	195	1.00	195	3		198		
NB-RT*	1	173		173	173	1.00	173		-173	0		481
SB-LT	SH	3	1.10	3								
SB-TH	2	61	-	61	103	0.55	57	424		481		
SB-RT	SH	39	-	39								
EB-LT	SH	84	1.00	84								
EB-TH	1	192	-	192	276	1.00	276			276		350
EB-RT	1	350	-	350	350	1.00	350			350		
WB-LT	SH	215	1.00	215								
WB-TH	1	137	-	137	352	1.00	352			352		352
WB-RT	1	36	-	36	36	1.00	36			36		

CLV Total = 1,183
LOS = C

2023 Build 400 PM

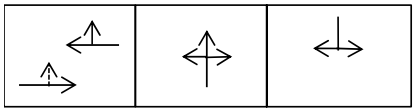
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	338	1.00	338	338	1.00	338			365		
NB-TH	1	186	-	186	186	1.00	186					
NB-RT*	1	93		93	93	1.00	93		-93	0		409
SB-LT	SH	0	1.10	0								
SB-TH	2	101	-	101	128	0.55	71	338		409		
SB-RT	SH	27	-	27								
EB-LT	SH	149	1.00	149								
EB-TH	1	81	-	81	230	1.00	230			230		611
EB-RT	1	611	-	611	611	1.00	611			611		
WB-LT	SH	226	1.00	226								
WB-TH	1	63	-	63	289	1.00	289			289		289
WB-RT	1	167	-	167	167	1.00	167			167		

CLV Total = 1,309
LOS = D

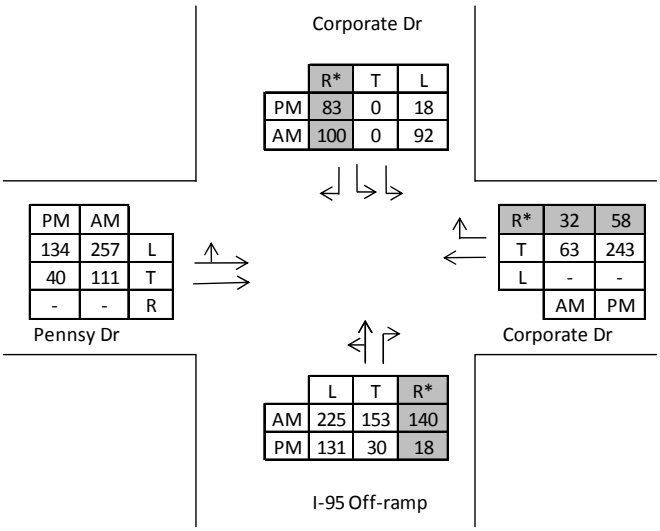
CLV Calculation Sheet

Intersection: Pennsy Drive and Corporate Drive
Scenario: 2023 Build 400

Signal Phase diagram



Pennsy Dr and Corporate Dr



*Right-turn is channelized; not included in the CLV analysis

2023 Build 400 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	225	1.00	225								
NB-TH	1	153	-	153	378	1.00	378			378		378
NB-RT*	1	140	-	140	140	1.00	140		-140	0		
SB-LT	2	92	1.00	92	92	0.60	55			55		
SB-TH	-	-	-	-	-	-	-					55
SB-RT*	1	100	-	100	100	1.00	100		-100	0		
EB-LT	SH	257	1.10	283							YES	
EB-TH	2	111	-	111	111	1.00	111			111		
EB-RT			-									320
WB-LT												
WB-TH	1	63	-	63	63	1.00	63	257		320		
WB-RT*	1	32	-	32	32	1.00	32		-32	0		

CLV Total = 753
LOS = A

2023 Build 400 PM

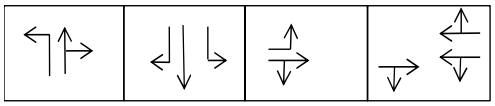
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	131	1.00	131								
NB-TH	1	30	-	30	161	1.00	161			161		161
NB-RT*	1	18	-	18	18	1.00	18		-18	0		
SB-LT	2	18	1.00	18	18	0.60	11			11		
SB-TH	-		-	-	-	-	-					11
SB-RT	1	83	-	83	83	1.00	83		-83	0		
EB-LT	SH	134	2.00	268							YES	
EB-TH	2	40	-	40	40	1.00	40			40		
EB-RT			-									377
WB-LT												
WB-TH	1	243	-	243	243	1.00	243	134		377		
WB-RT	1	58	-	58	58	1.00	58		-58	0		

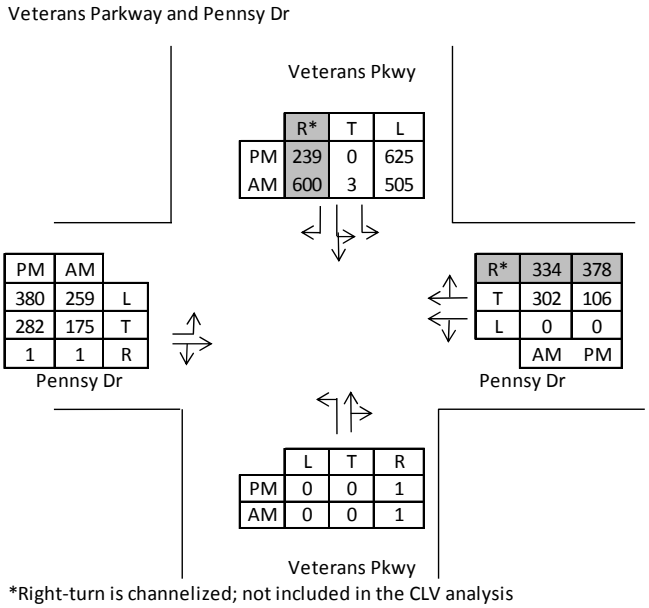
CLV Total = 549
LOS = A

CLV Calculation Sheet

Intersection: Veterans Parkway and Pennsy Drive
Scenario: 2023 Build 500

Signal Phase diagram





*Right-turn is channelized; not included in the CLV analysis

2023 Build 500 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	505	1.00	505	508	0.60	305			305		305
SB-TH	SH	3	-	3								
SB-RT*	1	600	-	600	600	1.00	600		-600	0		
EB-LT	1	259	1.00	259	259	1.00	259	166		425		425
EB-TH	1	175	-	175	175	1.00	175					
EB-RT	SH	1	-			1.00						
WB-LT	SH	0	1.10	0	0	1.00	0	175		175		
WB-TH	2	302	-	302	302	0.55	166	0				
WB-RT*	SH	334	-	334	334	1.00	334	0	-334	0	YES	

CLV Total = 731
LOS = A

2023 Build 500 PM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	625	1.00	625	625	0.60	375			375		375
SB-TH	SH	0	-	0		1.00						
SB-RT*	1	239	-	239	239	1.00	239		-239	0		
EB-LT	1	380	1.00	380	380	1.00	380	58		438		438
EB-TH	1	282	-	282	282	1.00	282					
EB-RT	SH	1	-			1.00						
WB-LT	SH	0	1.10	0	0	1.00	0	282		282		
WB-TH	2	106	-	106	106	0.55	58	0				
WB-RT*	SH	378	-	378	378	1.00	378	0	-378	0	YES	

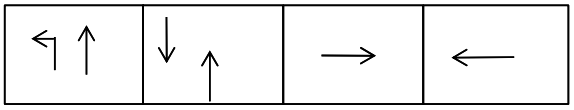
CLV Total = 814
LOS = A

CLV Calculation Sheet

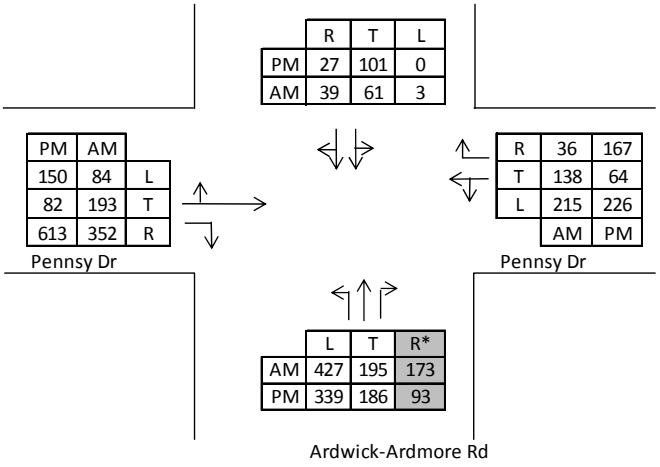
Intersection: Pennsy Drive and Ardwick-Ardmore Road

Scenario: 2023 Build 500

Signal Phase diagram



Pennsy Drive and Ardwick-Ardmore Rd



*Right-turn is channelized; not included in the CLV analysis

2023 Build 500 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	427	1.00	427	427	1	427					
NB-TH	1	195	-	195	195	1	195	3		198		
NB-RT*	1	173		173	173	1	173		-173	0		484
SB-LT	SH	3	1.10	3								
SB-TH	2	61	-	61	104	0.55	57	427		484		
SB-RT	SH	39	-	39								
EB-LT	SH	84	1.00	84								
EB-TH	1	193	-	193	277	1	277			277		352
EB-RT	1	352	-	352	352	1	352			352		
WB-LT	SH	215	1.00	215								
WB-TH	1	138	-	138	353	1	353			353		353
WB-RT	1	36	-	36	36	1	36			36		

CLV Total = 1,189

LOS = C

2023 Build 500 PM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	339	1.00	339	339	1	339					
NB-TH	1	186	-	186	186	1	186			186		
NB-RT*	1	93		93	93	1	93		-93	0		410
SB-LT	SH	0	1.10	0								
SB-TH	2	101	-	101	128	0.55	71	339		410		
SB-RT	SH	27	-	27								
EB-LT	SH	150	1.00	150								
EB-TH	1	82	-	82	231	1	231			231		613
EB-RT	1	613	-	613	613	1	613			613		
WB-LT	SH	226	1.00	226								
WB-TH	1	64	-	64	290	1	290			290		290
WB-RT	1	167	-	167	167	1	167			167		

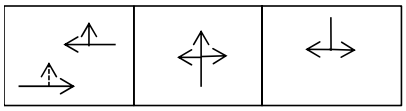
CLV Total = 1,313

LOS = D

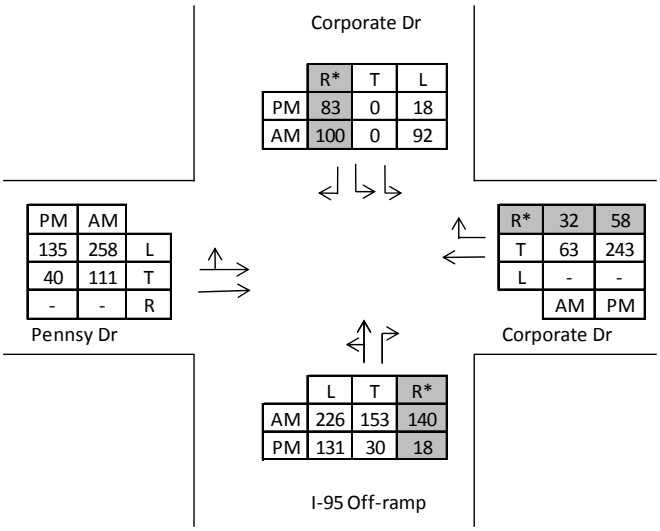
CLV Calculation Sheet

Intersection: Pennsy Drive and Corporate Drive
Scenario: 2023 Build 500

Signal Phase diagram



Pennsy Dr and Corporate Dr



*Right-turn is channelized; not included in the CLV analysis

2023 Build 500 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	226	1	226								
NB-TH	1	153	-	153	379	1	379			379		379
NB-RT*	1	140	-	140	140	1	140		-140	0		
SB-LT	2	92	1	92	92	1	55			55		
SB-TH	-	-	-	-	-	-	-					55
SB-RT*	1	100	-	100	100	1	100		-100	0		
EB-LT	SH	258	1.10	284							YES	
EB-TH	2	111	-	111	111	1.00	111			111		
EB-RT			-									321
WB-LT												
WB-TH	1	63	-	63	63	1	63	258		321		
WB-RT*	1	32	-	32	32	1	32		-32	0		

CLV Total = 755
LOS = A

2023 Build 500 PM

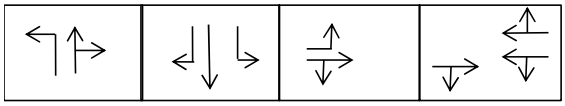
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	131	1	131								
NB-TH	1	30	-	30	161	1	161			161		161
NB-RT*	1	18	-	18	18	1	18		-18	0		
SB-LT	2	18	1	18	18	1	11			11		
SB-TH	-		-	-	-	-	-					11
SB-RT*	1	83	-	83	83	1	83		-83	0		
EB-LT	SH	135	2.00	270							YES	
EB-TH	2	40	-	40	40	1.00	40			40		
EB-RT	-		-									378
WB-LT	-											
WB-TH	1	243	-	243	243	1	243	135		378		
WB-RT*	1	58	-	58	58	1	58		-58	0		

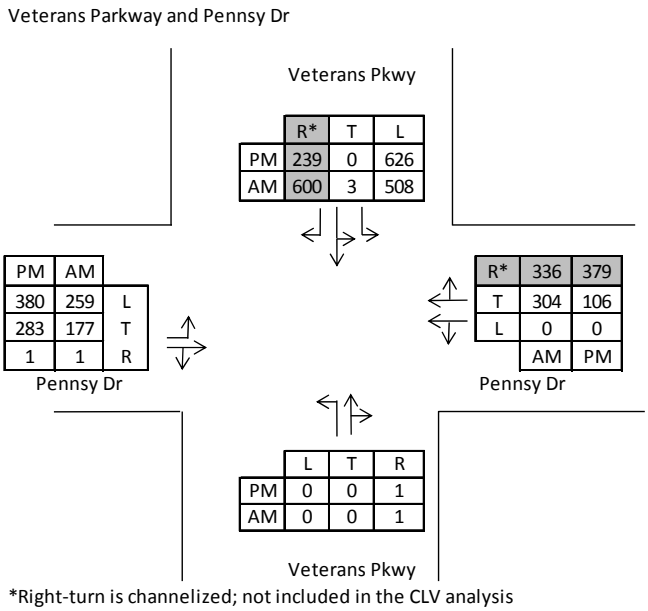
CLV Total = 550
LOS = A

CLV Calculation Sheet

Intersection: Veterans Parkway and Pennsy Drive
Scenario: 2023 Build 600

Signal Phase diagram





*Right-turn is channelized; not included in the CLV analysis

2023 Build 600 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	508	1.00	508	511	0.60	307			307		307
SB-TH	SH	3	-	3								
SB-RT*	1	600	-	600	600	1.00	600		-600	0		
EB-LT	1	259	1.00	259	259	1.00	259	167		426		426
EB-TH	1	177	-	177	177	1.00	177					
EB-RT	SH	0	-			1.00						
WB-LT	SH	0	1.10	0	0	1.00	0	177		177		
WB-TH	2	304	-	304	304	0.55	167	0				
WB-RT*	SH	336	-	336	336	1.00	336	0	-336	0	YES	

CLV Total = 734
LOS = A

2023 Build 600 PM

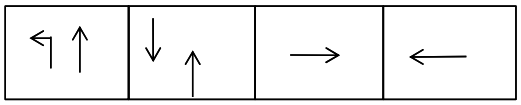
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	626	1.00	626	626	0.60	376			376		376
SB-TH	SH	0	-	0		1.00						
SB-RT*	1	239	-	239	239	1.00	239		-239	0		
EB-LT	1	380	1.00	380	380	1.00	380	58		438		438
EB-TH	1	283	-	283	283	1.00	283					
EB-RT	SH	1	-			1.00						
WB-LT	SH	0	1.10	0	0	1.00	0	283		283		
WB-TH	2	106	-	106	106	0.55	58	0				
WB-RT	SH	379	-	379	379	1.00	379	0	-379	0	YES	

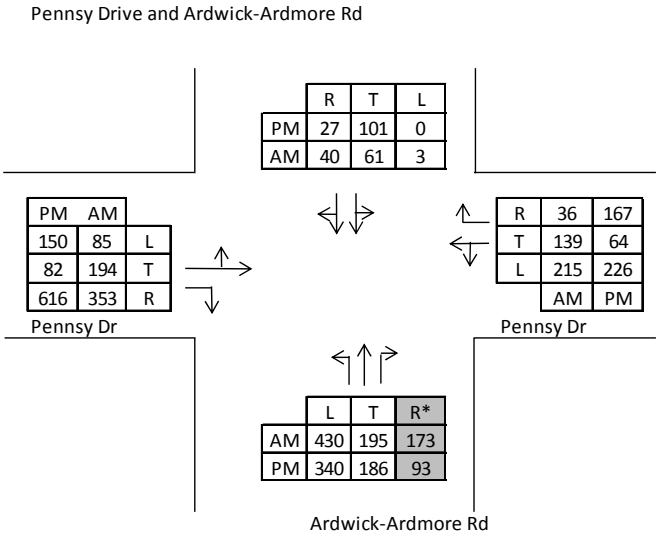
CLV Total = 815
LOS = A

CLV Calculation Sheet

Intersection: Pennsy Drive and Ardwick-Ardmore Road
Scenario: 2023 Build 600

Signal Phase diagram





*Right-turn is channelized; not included in the CLV analysis

2023 Build 600 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	430	1.00	430	430	1	430					
NB-TH	1	195	-	195	195	1	195	3		198		
NB-RT*	1	173		173	173	1	173		-173	0		487
SB-LT	SH	3	1.10	3								
SB-TH	2	61	-	61	104	0.55	57	430		487		
SB-RT	SH	40	-	40								
EB-LT	SH	85	1.00	85								
EB-TH	1	194	-	194	279	1	279			279		353
EB-RT	1	353	-	353	353	1	353			353		
WB-LT	SH	215	1.00	215								
WB-TH	1	139	-	139	354	1	354			354		354
WB-RT	1	36	-	36	36	1	36			36		

CLV Total = 1,194
LOS = C

2023 Build 600 PM

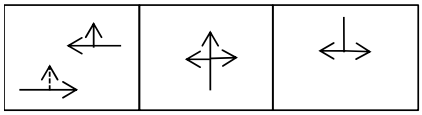
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	340	1.00	340	340	1	340					
NB-TH	1	186	-	186	186	1	186	0		186		
NB-RT*	1	93		93	93	1	93		-93	0		411
SB-LT	SH	0	1.10	0								
SB-TH	2	101	-	101	128	0.55	71	340		411		
SB-RT	SH	27	-	27								
EB-LT	SH	150	1.00	150								
EB-TH	1	82	-	82	232	1	232			232		616
EB-RT	1	616	-	616	616	1	616			616		
WB-LT	SH	226	1.00	226								
WB-TH	1	64	-	64	290	1	290			290		290
WB-RT	1	167	-	167	167	1	167			167		

CLV Total = 1,317
LOS = D

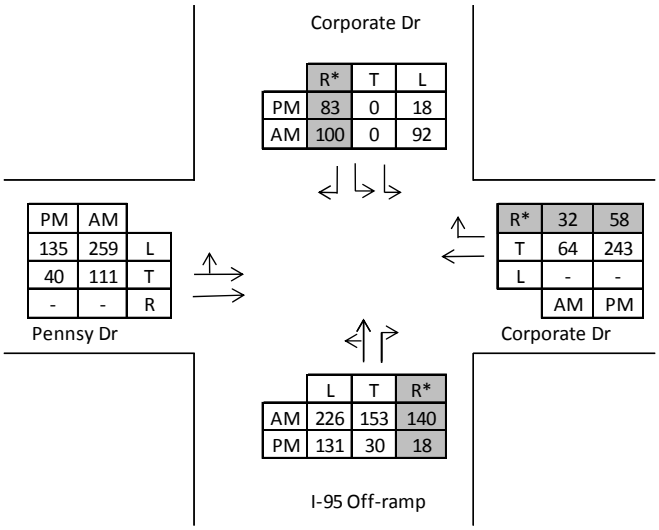
CLV Calculation Sheet

Intersection: Pennsy Drive and Corporate Drive
Scenario: 2023 Build 600

Signal Phase diagram



Pennsy Dr and Corporate Dr



*Right-turn is channelized; not included in the CLV analysis

2023 Build 600 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	226	1.00	226								
NB-TH	1	153	-	153	379	1	379			379		379
NB-RT*	1	140	-	140	140	1	140		-140	0		
SB-LT	2	92	1.00	92	92	1	55			55		
SB-TH	-	-	-	-	-	-	-					55
SB-RT*	1	100	-	100	100	1	100		-100	0		
EB-LT	SH	259	1.10	285							YES	
EB-TH	2	111	-	111	111	1.00	111			111		
EB-RT			-									323
WB-LT												
WB-TH	1	64	-	64	64	1	64	259		323		
WB-RT*	1	32	-	32	32	1	32		-32	0		

CLV Total = 757
LOS = A

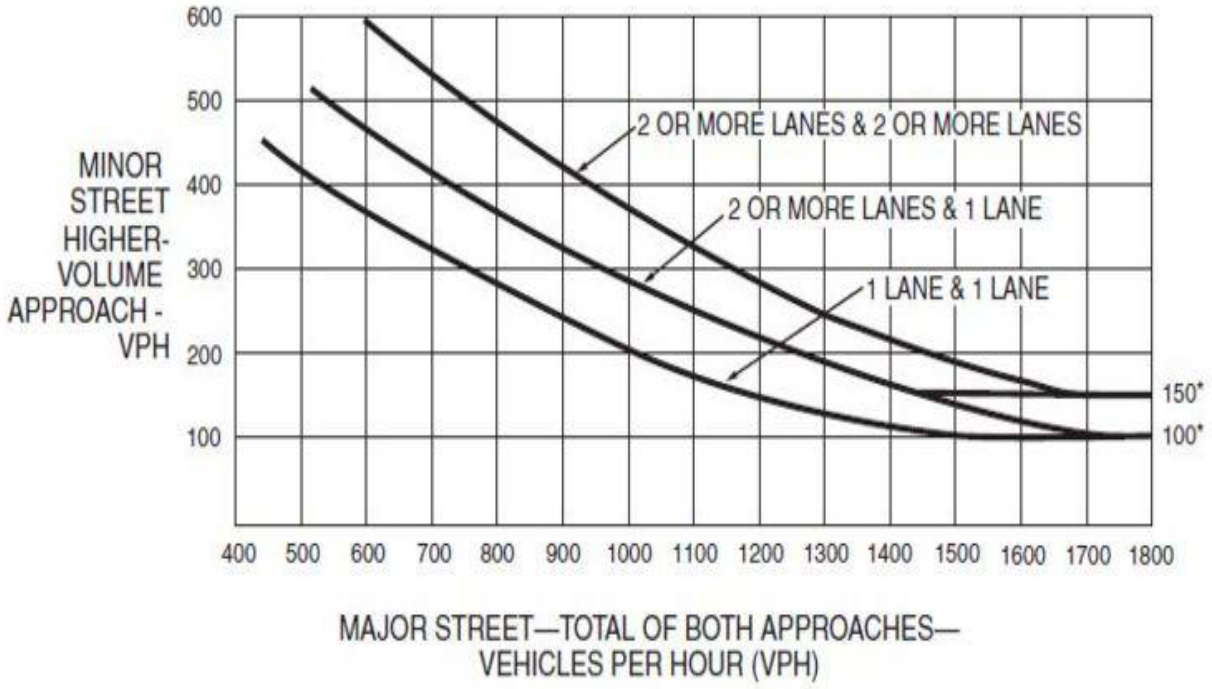
2023 Build 600 PM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	131	1.00	131								
NB-TH	1	30	-	30	161	1	161			161		161
NB-RT*	1	18	-	18	18	1	18		-18	0		
SB-LT	2	18	1.00	18	18	1	11			11		
SB-TH	-		-	-	-	-	-					11
SB-RT*	1	83	-	83	83	1	83		-83	0		
EB-LT	SH	135	2.00	270							YES	
EB-TH	2	40	-	40	40	1.00	40			40		
EB-RT			-									378
WB-LT												
WB-TH	1	243	-	243	243	1	243	135		378		
WB-RT*	1	58	-	58	58	1	58		-58	0		

CLV Total = 550
LOS = A

MUTCD SIGNAL WARRANT

Figure B-1: MUTCD 2009 Edition Part 4 Figure 4C-3: Warrant 3, Peak Hour



*Note: 150 vehicles per hour (vph) applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	42	14	565	56	7	544
Future Vol, veh/h	42	14	565	56	7	544
Conflicting Peds, #/hr	1	0	0	2	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	29	36	9	22	0	10
Mvmt Flow	51	17	689	68	9	663

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1075	381	0	0	759	0
Stage 1	725	-	-	-	-	-
Stage 2	350	-	-	-	-	-
Critical Hdwy	7.38	7.62	-	-	4.1	-
Critical Hdwy Stg 1	6.38	-	-	-	-	-
Critical Hdwy Stg 2	6.38	-	-	-	-	-
Follow-up Hdwy	3.79	3.66	-	-	2.2	-
Pot Cap-1 Maneuver	175	530	-	-	862	-
Stage 1	376	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	172	529	-	-	862	-
Mov Cap-2 Maneuver	172	-	-	-	-	-
Stage 1	375	-	-	-	-	-
Stage 2	600	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.7	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	207	862	-
HCM Lane V/C Ratio	-	-	0.33	0.01	-
HCM Control Delay (s)	-	-	30.7	9.2	0.1
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	1.4	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	54	11	773	77	7	396
Future Vol, veh/h	54	11	773	77	7	396
Conflicting Peds, #/hr	1	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	8	10	8	18	29	7
Mvmt Flow	59	12	849	85	8	435

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1127	469	0	0	935	0
Stage 1	893	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Critical Hdwy	6.96	7.1	-	-	4.68	-
Critical Hdwy Stg 1	5.96	-	-	-	-	-
Critical Hdwy Stg 2	5.96	-	-	-	-	-
Follow-up Hdwy	3.58	3.4	-	-	2.49	-
Pot Cap-1 Maneuver	189	520	-	-	582	-
Stage 1	346	-	-	-	-	-
Stage 2	765	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	185	519	-	-	582	-
Mov Cap-2 Maneuver	185	-	-	-	-	-
Stage 1	346	-	-	-	-	-
Stage 2	751	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31.1	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	208	582	-
HCM Lane V/C Ratio	-	-	0.343	0.013	-
HCM Control Delay (s)	-	-	31.1	11.3	0.1
HCM Lane LOS	-	-	D	B	A
HCM 95th %tile Q(veh)	-	-	1.4	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	44	15	597	59	7	575
Future Vol, veh/h	44	15	597	59	7	575
Conflicting Peds, #/hr	1	0	0	2	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	29	36	9	22	0	10
Mvmt Flow	54	18	728	72	9	701

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1135	402	0	0	802	0
Stage 1	766	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Critical Hdwy	7.38	7.62	-	-	4.1	-
Critical Hdwy Stg 1	6.38	-	-	-	-	-
Critical Hdwy Stg 2	6.38	-	-	-	-	-
Follow-up Hdwy	3.79	3.66	-	-	2.2	-
Pot Cap-1 Maneuver	159	512	-	-	830	-
Stage 1	356	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	156	511	-	-	830	-
Mov Cap-2 Maneuver	156	-	-	-	-	-
Stage 1	355	-	-	-	-	-
Stage 2	585	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	35.3	0	0.2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	189	830	-
HCM Lane V/C Ratio	-	-	0.381	0.01	-
HCM Control Delay (s)	-	-	35.3	9.4	0.1
HCM Lane LOS	-	-	E	A	A
HCM 95th %tile Q(veh)	-	-	1.7	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	57	12	817	81	7	418
Future Vol, veh/h	57	12	817	81	7	418
Conflicting Peds, #/hr	1	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	8	10	8	18	29	7
Mvmt Flow	63	13	898	89	8	459

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1189	495	0	0	988	0
Stage 1	943	-	-	-	-	-
Stage 2	246	-	-	-	-	-
Critical Hdwy	6.96	7.1	-	-	4.68	-
Critical Hdwy Stg 1	5.96	-	-	-	-	-
Critical Hdwy Stg 2	5.96	-	-	-	-	-
Follow-up Hdwy	3.58	3.4	-	-	2.49	-
Pot Cap-1 Maneuver	172	499	-	-	552	-
Stage 1	325	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	168	498	-	-	552	-
Mov Cap-2 Maneuver	168	-	-	-	-	-
Stage 1	325	-	-	-	-	-
Stage 2	739	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	36	0	0.3
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	190	552	-
HCM Lane V/C Ratio	-	-	0.399	0.014	-
HCM Control Delay (s)	-	-	36	11.6	0.1
HCM Lane LOS	-	-	E	B	A
HCM 95th %tile Q(veh)	-	-	1.8	0	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↑↑↑			↑↑↑	
Traffic Vol, veh/h	14	0	13	44	0	15	20	597	59	7	575	18
Future Vol, veh/h	14	0	13	44	0	15	20	597	59	7	575	18
Conflicting Peds, #/hr	0	0	0	1	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	82	92	82	92	82	82	82	82	92
Heavy Vehicles, %	2	2	2	29	2	36	2	9	22	0	10	2
Mvmt Flow	15	0	14	54	0	18	22	728	72	9	701	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1136	1573	361	1179	1548	402	721	0	0	802	0	0
Stage 1	728	728	-	810	810	-	-	-	-	-	-	-
Stage 2	408	845	-	369	738	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	8.08	6.54	7.62	4.14	-	-	4.1	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.08	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	7.08	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.79	4.02	3.66	2.22	-	-	2.2	-	-
Pot Cap-1 Maneuver	157	109	636	118	113	512	877	-	-	830	-	-
Stage 1	381	427	-	287	391	-	-	-	-	-	-	-
Stage 2	591	377	-	555	422	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	144	102	635	110	106	511	876	-	-	830	-	-
Mov Cap-2 Maneuver	144	102	-	110	106	-	-	-	-	-	-	-
Stage 1	363	419	-	273	372	-	-	-	-	-	-	-
Stage 2	544	359	-	532	414	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23	57.2	0.4	0.2
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	876	-	-	229	137	830	-	-
HCM Lane V/C Ratio	0.025	-	-	0.128	0.525	0.01	-	-
HCM Control Delay (s)	9.2	0.2	-	23	57.2	9.4	0.1	-
HCM Lane LOS	A	A	-	C	F	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	2.5	0	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	0	8	57	0	12	9	817	81	7	418	3
Future Vol, veh/h	12	0	8	57	0	12	9	817	81	7	418	3
Conflicting Peds, #/hr	0	0	0	1	0	1	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	91	92	91	92	91	91	91	91	92
Heavy Vehicles, %	2	2	2	8	2	10	2	8	18	29	7	2
Mvmt Flow	13	0	9	63	0	13	10	898	89	8	459	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	945	1483	232	1209	1441	495	463	0	0	988	0	0
Stage 1	476	476	-	963	963	-	-	-	-	-	-	-
Stage 2	469	1007	-	246	478	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.66	6.54	7.1	4.14	-	-	4.68	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.66	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.66	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.58	4.02	3.4	2.22	-	-	2.49	-	-
Pot Cap-1 Maneuver	217	124	770	132	131	499	1095	-	-	552	-	-
Stage 1	539	555	-	263	332	-	-	-	-	-	-	-
Stage 2	544	317	-	719	554	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	205	119	769	126	126	498	1094	-	-	552	-	-
Mov Cap-2 Maneuver	205	119	-	126	126	-	-	-	-	-	-	-
Stage 1	528	544	-	257	325	-	-	-	-	-	-	-
Stage 2	518	310	-	696	543	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.4	54.3	0.2	0.3
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1094	-	-	290	145	552	-	-
HCM Lane V/C Ratio	0.009	-	-	0.075	0.523	0.014	-	-
HCM Control Delay (s)	8.3	0.1	-	18.4	54.3	11.6	0.1	-
HCM Lane LOS	A	A	-	C	F	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	2.5	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↕			↕	
Traffic Vol, veh/h	17	0	17	44	0	15	25	597	59	7	575	22
Future Vol, veh/h	17	0	17	44	0	15	25	597	59	7	575	22
Conflicting Peds, #/hr	0	0	0	1	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	82	92	82	92	82	82	82	82	92
Heavy Vehicles, %	2	2	2	29	2	36	2	9	22	0	10	2
Mvmt Flow	18	0	18	54	0	18	27	728	72	9	701	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1148	1586	364	1189	1562	402	725	0	0	802	0	0
Stage 1	730	730	-	820	820	-	-	-	-	-	-	-
Stage 2	418	856	-	369	742	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	8.08	6.54	7.62	4.14	-	-	4.1	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.08	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	7.08	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.79	4.02	3.66	2.22	-	-	2.2	-	-
Pot Cap-1 Maneuver	154	107	633	115	111	512	874	-	-	830	-	-
Stage 1	380	426	-	283	387	-	-	-	-	-	-	-
Stage 2	583	373	-	555	420	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	140	99	632	105	103	511	873	-	-	830	-	-
Mov Cap-2 Maneuver	140	99	-	105	103	-	-	-	-	-	-	-
Stage 1	359	418	-	267	365	-	-	-	-	-	-	-
Stage 2	531	352	-	529	412	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.7	60.9	0.5	0.2
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	873	-	-	229	132	830	-	-
HCM Lane V/C Ratio	0.031	-	-	0.161	0.545	0.01	-	-
HCM Control Delay (s)	9.3	0.2	-	23.7	60.9	9.4	0.1	-
HCM Lane LOS	A	A	-	C	F	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	2.7	0	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	0	9	57	0	12	10	817	81	7	418	5
Future Vol, veh/h	16	0	9	57	0	12	10	817	81	7	418	5
Conflicting Peds, #/hr	0	0	0	1	0	1	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	91	92	91	92	91	91	91	91	92
Heavy Vehicles, %	2	2	2	8	2	10	2	8	18	29	7	2
Mvmt Flow	17	0	10	63	0	13	11	898	89	8	459	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	949	1487	233	1211	1445	495	465	0	0	988	0	0
Stage 1	477	477	-	965	965	-	-	-	-	-	-	-
Stage 2	472	1010	-	246	480	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.66	6.54	7.1	4.14	-	-	4.68	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.66	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.66	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.58	4.02	3.4	2.22	-	-	2.49	-	-
Pot Cap-1 Maneuver	215	123	769	132	131	499	1093	-	-	552	-	-
Stage 1	538	554	-	262	331	-	-	-	-	-	-	-
Stage 2	542	316	-	719	553	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	202	118	768	126	125	498	1092	-	-	552	-	-
Mov Cap-2 Maneuver	202	118	-	126	125	-	-	-	-	-	-	-
Stage 1	526	543	-	256	323	-	-	-	-	-	-	-
Stage 2	515	308	-	695	542	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.5	54.3	0.2	0.3
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1092	-	-	275	145	552	-	-
HCM Lane V/C Ratio	0.01	-	-	0.099	0.523	0.014	-	-
HCM Control Delay (s)	8.3	0.1	-	19.5	54.3	11.6	0.1	-
HCM Lane LOS	A	A	-	C	F	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	2.5	0	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↑↑↑			↑↑↑	
Traffic Vol, veh/h	20	0	21	44	0	15	30	597	59	7	575	27
Future Vol, veh/h	20	0	21	44	0	15	30	597	59	7	575	27
Conflicting Peds, #/hr	0	0	0	1	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	82	92	82	92	82	82	82	82	92
Heavy Vehicles, %	2	2	2	29	2	36	2	9	22	0	10	2
Mvmt Flow	22	0	23	54	0	18	33	728	72	9	701	29

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1162	1600	366	1200	1579	402	731	0	0	802	0	0
Stage 1	733	733	-	831	831	-	-	-	-	-	-	-
Stage 2	429	867	-	369	748	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	8.08	6.54	7.62	4.14	-	-	4.1	-	-
Critical Hdwy Stg 1	6.54	5.54	-	7.08	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	7.08	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.79	4.02	3.66	2.22	-	-	2.2	-	-
Pot Cap-1 Maneuver	150	105	631	113	108	512	869	-	-	830	-	-
Stage 1	378	424	-	278	383	-	-	-	-	-	-	-
Stage 2	574	368	-	555	418	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	135	96	630	102	99	511	868	-	-	830	-	-
Mov Cap-2 Maneuver	135	96	-	102	99	-	-	-	-	-	-	-
Stage 1	352	416	-	258	356	-	-	-	-	-	-	-
Stage 2	515	342	-	525	410	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.8	64.3	0.6	0.2
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	868	-	-	226	128	830	-	-
HCM Lane V/C Ratio	0.038	-	-	0.197	0.562	0.01	-	-
HCM Control Delay (s)	9.3	0.3	-	24.8	64.3	9.4	0.1	-
HCM Lane LOS	A	A	-	C	F	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	2.8	0	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↑↑↑			↑↑↑	
Traffic Vol, veh/h	19	0	10	57	0	12	12	817	81	7	418	6
Future Vol, veh/h	19	0	10	57	0	12	12	817	81	7	418	6
Conflicting Peds, #/hr	0	0	0	1	0	1	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	91	92	91	92	91	91	91	91	92
Heavy Vehicles, %	2	2	2	8	2	10	2	8	18	29	7	2
Mvmt Flow	21	0	11	63	0	13	13	898	89	8	459	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	954	1492	234	1215	1450	495	466	0	0	988	0	0
Stage 1	478	478	-	969	969	-	-	-	-	-	-	-
Stage 2	476	1014	-	246	481	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.66	6.54	7.1	4.14	-	-	4.68	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.66	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.66	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.58	4.02	3.4	2.22	-	-	2.49	-	-
Pot Cap-1 Maneuver	213	122	768	131	130	499	1092	-	-	552	-	-
Stage 1	537	554	-	261	330	-	-	-	-	-	-	-
Stage 2	539	314	-	719	552	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	200	116	767	124	124	498	1091	-	-	552	-	-
Mov Cap-2 Maneuver	200	116	-	124	124	-	-	-	-	-	-	-
Stage 1	523	543	-	254	321	-	-	-	-	-	-	-
Stage 2	510	305	-	694	541	-	-	-	-	-	-	-

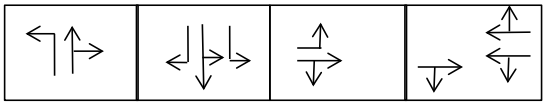
Approach	EB	WB	NB	SB
HCM Control Delay, s	20.2	55.5	0.2	0.3
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1091	-	-	268	143	552	-	-
HCM Lane V/C Ratio	0.012	-	-	0.118	0.53	0.014	-	-
HCM Control Delay (s)	8.3	0.1	-	20.2	55.5	11.6	0.1	-
HCM Lane LOS	A	A	-	C	F	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	2.6	0	-	-

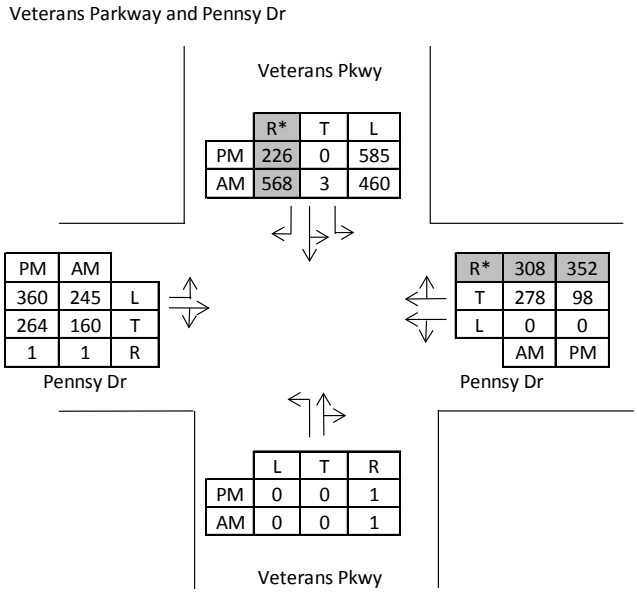
ATTACHMENT C: CLV CALCULATIONS AND HCM RESULTS

CLV Calculation Sheet

Intersection: Veterans Parkway and Pennsy Drive
Scenario: 2018 Existing



Signal Phase diagram



*Right-turns are channelized; not included in the CLV analysis

Existing AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	460	1.00	460	463	0.60	278			278		278
SB-TH	SH	3	-	3								
SB-RT*	1	568	-	568	568	1.00	568		-568	0		
EB-LT	1	245	1.00	245	245	1.00	245	153		398		398
EB-TH	1	160	-	160	160	1.00	160					
EB-RT	SH	1	-	1	1	1.00	1					
WB-LT	SH	0	1.10	0	0	1.00	0	161		161		
WB-TH	2	278	-	278	278	0.55	153	0				
WB-RT*	SH	308	-	308	308	1.00	308	0	-308	0	YES	

CLV Total = 677
LOS = A

Existing PM

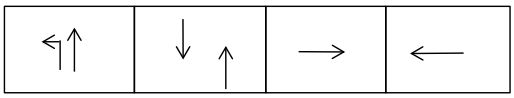
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	585	1.00	585	585	0.60	351			351		351
SB-TH	SH	0	-			1.00						
SB-RT*	1	226	-	226	226	1.00	226		-226	0		
EB-LT	1	360	1.00	360	360	1.00	360	54		414		414
EB-TH	1	264	-	264	264	1.00	264					
EB-RT	SH	1	-	1	1	1.00	1					
WB-LT	SH	0	1.10	0	0	1.00	0	265		265		
WB-TH	2	98	-	98	98	0.55	54	0				
WB-RT	SH	352	-	352	352	1.00	352	0	-352	0	YES	

CLV Total = 766
LOS = A

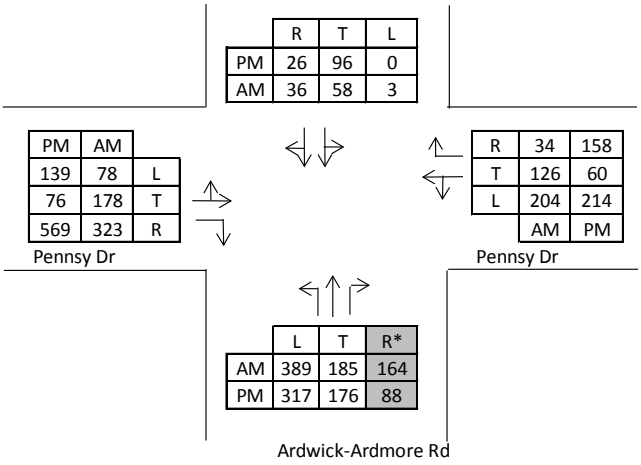
CLV Calculation Sheet

Intersection: Pennsy Drive and Ardwick- Ardmore Road
Scenario: 2018 Existing

Signal Phase diagram



Pennsy Drive and Ardwick-Ardmore Rd



*Right-turn is channelized; not included in the CLV analysis

Existing AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	389	1.00	389	389	1.00	389					
NB-TH	1	185	-	185	185	1.00	185	3		188		
NB-RT*	1	164		164	164	1.00	164		-164	0		443
SB-LT	SH	3	1.10	3								
SB-TH	2	58	-	58	97	0.55	54	389		443		
SB-RT	SH	36	-	36								
EB-LT	SH	78	1.00	78								
EB-TH	1	178	-	178	256	1.00	256			256		323
EB-RT	1	323	-	323	323	1.00	323			323		
WB-LT	SH	204	1.00	204								
WB-TH	1	126	-	126	330	1.00	330			330		330
WB-RT	1	34	-	34	34	1.00	34			34		

CLV Total = **1,096**
LOS = B

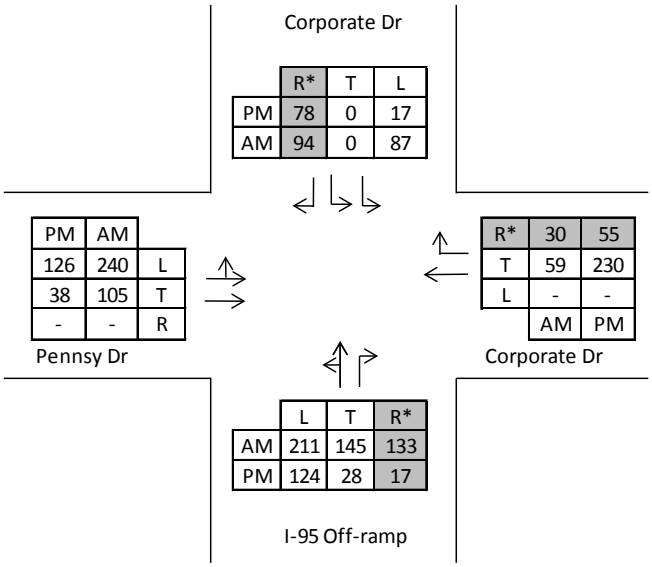
Existing PM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	317	1.00	317	317	1.00	317					
NB-TH	1	176	-	176	176	1.00	176	0		176		
NB-RT*	1	88		0	88	1.00	88		-88	0		384
SB-LT	SH	0	1.10	0								
SB-TH	2	96	-	96	122	0.55	67	317		384		
SB-RT	SH	26	-	26								
EB-LT	SH	139	1.00	139								
EB-TH	1	76	-	76	215	1.00	215			215		569
EB-RT	1	569	-	569	569	1.00	569			569		
WB-LT	SH	214	1.00	214								
WB-TH	1	60	-	60	274	1.00	274			274		274
WB-RT	1	158	-	158	158	1.00	158			158		

CLV Total = **1,227**
LOS = C

CLV Calculation Sheet

Pennsy Dr and Corporate Dr



*Right-turn is channelized; not included in the CLV analysis

Existing AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	211	1.00	211								
NB-TH	1	145	-	145	356	1.00	356			356		356
NB-RT*	1	133	-	133	133	1.00	133		-133	0		
SB-LT	2	87	1.00	87	87	0.60	52			52		
SB-TH	-	-	-	-	-	-	-					52
SB-RT*	1	94	-	94	94	1.00	94		-94	0		
EB-LT	SH	240	1.10	264							YES	
EB-TH	2	105	-	105	105	1.00	105			105		
EB-RT	-		-									299
WB-LT	-											
WB-TH	1	59	-	59	59	1.00	59	240		299		
WB-RT*	1	30	-	30	30	1.00	30		-30	0		

CLV Total = **707**

LOS = A

Existing PM

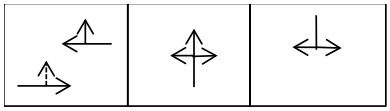
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	124	1.00	124								
NB-TH	1	28	-	28	152	1.00	152			152		152
NB-RT*	1	17	-	17	17	1.00	17		-17	0		
SB-LT	2	17	1.00	17	17	0.60	10			10		
SB-TH	-		-	-	-	-	-					10
SB-RT*	1	78	-	78	78	1.00	78		-78	0		
EB-LT	SH	126	2.00	252							YES	
EB-TH	2	38	-	38	38	1.00	38			38		
EB-RT	-		-									356
WB-LT	-											
WB-TH	1	230	-	230	230	1.00	230	126		356		
WB-RT*	1	55	-	55	55	1.00	55		-55	0		

CLV Total = **518**

LOS = A

Intersection: Pennsy Drive and Corporate Drive
Scenario: 2018 Existing

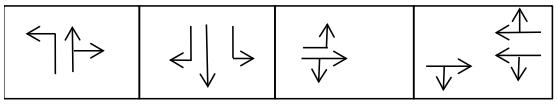
Signal Phase diagram

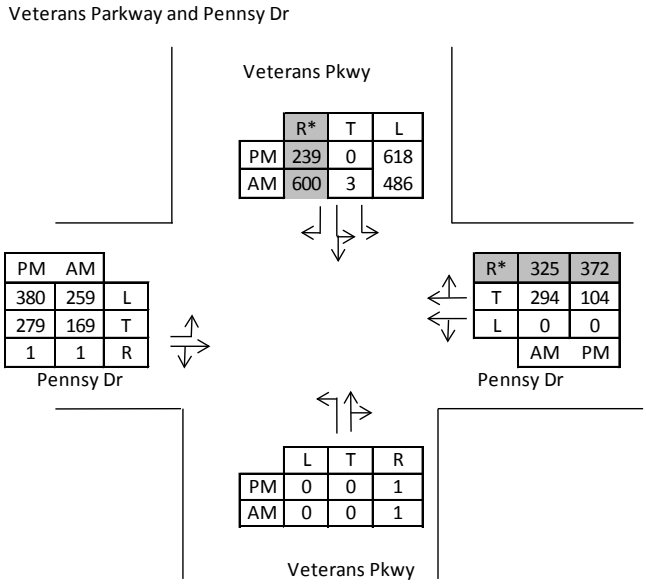


CLV Calculation Sheet

Intersection: Veterans Parkway and Pennsy Drive
Scenario: 2023 No Build

Signal Phase diagram





*Right-turn is channelized; not included in the CLV analysis

2023 No-Build AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	486	1.00	486	489	0.60	293			293		293
SB-TH	SH	3	-	3								
SB-RT*	1	600	-	600	600	1.00	600		-600	0		
EB-LT	1	259	1.00	259	259	1.00	259	162		421		421
EB-TH	1	169	-	169	169	1.00	169					
EB-RT	SH	1	-	1	1	1.00	1					
WB-LT	SH	0	1.10	0	0	1.00	0	170		170		
WB-TH	2	294	-	294	294	0.55	162	0				
WB-RT*	SH	325	-	325	325	1.00	325	0	-325	0	YES	

CLV Total = 715
LOS = A

2023 No-Build PM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	618	1.00	618	618	0.60	371			371		371
SB-TH	SH	0	-									
SB-RT*	1	239	-	239	239	1.00	239		-239	0		
EB-LT	1	380	1.00	380	380	1.00	380	57		437		437
EB-TH	1	279	-	279	279	1.00	279					
EB-RT	SH	1	-	1	1	1.00	1					
WB-LT	SH	0	1.10	0	0	1.00	0	279		279		
WB-TH	2	104	-	104	104	0.55	57	0				
WB-RT*	SH	372	-	372	372	1.00	372	0	-372	0	YES	

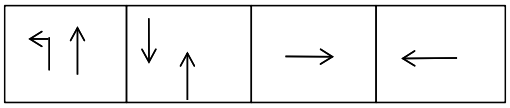
CLV Total = 809
LOS = A

CLV Calculation Sheet

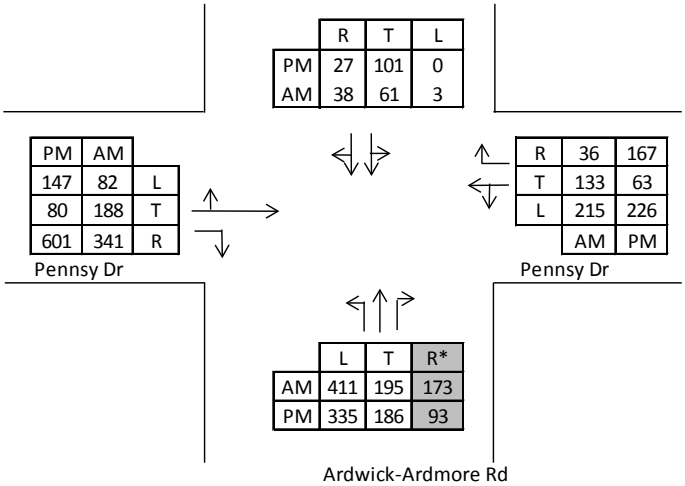
Intersection: Pennsy Drive and Ardwick-Ardmore Road

Scenario: 2023 No Build

Signal Phase diagram



Pennsy Drive and Ardwick-Ardmore Rd



*Right-turn is channelized; not included in the CLV analysis

2023 No-Build AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	411	1.00	411	411	1.00	411					
NB-TH	1	195	-	195	195	1.00	195	3		198		
NB-RT*	1	173		173	173	1.00	173		-173	0		467
SB-LT	SH	3	1.10	3								
SB-TH	2	61	-	61	102	0.55	56	411		467		
SB-RT	SH	38	-	38								
EB-LT	SH	82	1.00	82								
EB-TH	1	188	-	188	270	1.00	270			270		341
EB-RT	1	341	-	341	341	1.00	341			341		
WB-LT	SH	215	1.00	215								
WB-TH	1	133	-	133	348	1.00	348			348		348
WB-RT	1	36	-	36	36	1.00	36			36		

CLV Total = 1,156

LOS = C

2023 No-Build PM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	335	1.00	335	335	1.00	335					
NB-TH	1	186	-	186	186	1.00	186			186		
NB-RT*	1	93		93	93	1.00	93		-93	0		405
SB-LT	SH	0	1.10	0								
SB-TH	2	101	-	101	128	0.55	70	335		405		
SB-RT	SH	27	-	27								
EB-LT	SH	147	1.00	147								
EB-TH	1	80	-	80	227	1.00	227			227		601
EB-RT	1	601	-	601	601	1.00	601			601		
WB-LT	SH	226	1.00	226								
WB-TH	1	63	-	63	289	1.00	289			289		289
WB-RT	1	167	-	167	167	1.00	167			167		

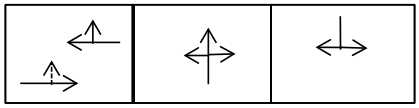
CLV Total = 1,295

LOS = C

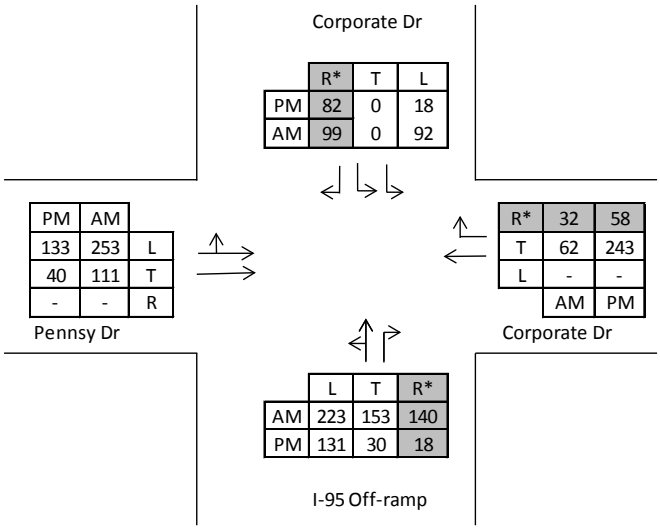
CLV Calculation Sheet

Intersection: Pennsy Drive and Corporate Drive
Scenario: 2023 No Build

Signal Phase diagram



Pennsy Dr and Corporate Dr



*Right-turn is channelized; not included in the CLV analysis

2023 No-Build AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	223	1.00	223								
NB-TH	1	153	-	153	376	1.00	376			376		376
NB-RT*	1	140	-	140	140	1.00	140		-140	0		
SB-LT	2	92	1.00	92	92	0.60	55			55		
SB-TH	-	-	-	-	-	-	-					55
SB-RT*	1	99	-	99	99	1.00	99		-99	0		
EB-LT	SH	253	1.10	278							YES	
EB-TH	2	111	-	111	111	1.00	111			111		
EB-RT			-									315
WB-LT												
WB-TH	1	62	-	62	62	1.00	62	253		315		
WB-RT*	1	32	-	32	32	1.00	32		-32	0		

CLV Total = 746
LOS = A

2023 No-Build PM

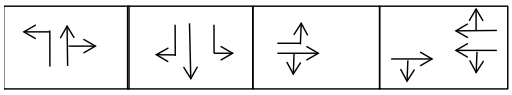
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	131	1.00	131								
NB-TH	1	30	-	30	161	1.00	161			161		161
NB-RT	1	18	-	18	18	1.00	18		-18	0		
SB-LT	2	18	1.00	18	18	0.60	11			11		
SB-TH	-		-	-	-	-	-					11
SB-RT	1	82	-	82	82	1.00	82		-82	0		
EB-LT	SH	133	2.00	266							YES	
EB-TH	2	40	-	40	40	1.00	40			40		
EB-RT			-									376
WB-LT												
WB-TH	1	243	-	243	243	1.00	243	133		376		
WB-RT	1	58	-	58	58	1.00	58		-58	0		

CLV Total = 548
LOS = A

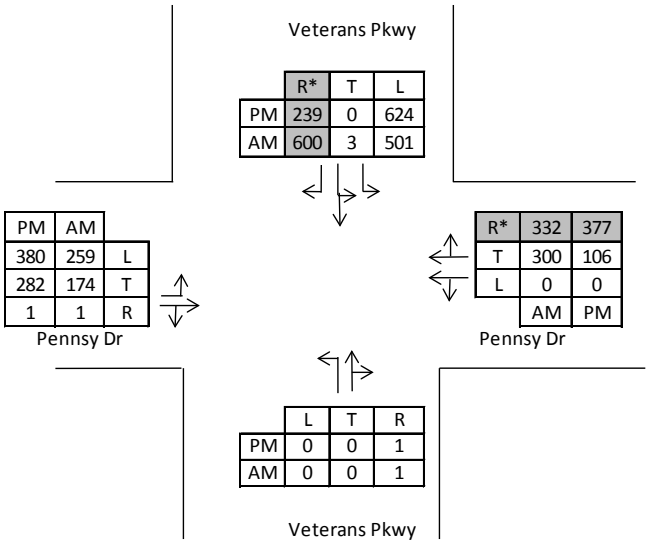
CLV Calculation Sheet

Intersection: Veterans Parkway and Pennsy Drive
Scenario: 2023 Build 400

Signal Phase diagram



Veterans Parkway and Pennsy Dr



*Right-turn is channelized; not included in the CLV analysis

2023 Build 400 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	501	1.00	501	504	0.60	302			302		302
SB-TH	SH	3	-	3								
SB-RT*	1	600	-	600	600	1.00	600		-600	0		
EB-LT	1	259	1.00	259	259	1.00	259	165		424		424
EB-TH	1	174	-	174	174	1.00	174					
EB-RT	SH	0	-			1.00						
WB-LT	SH	0	1.10	0	0	1.00	0	174		174		
WB-TH	2	300	-	300	300	0.55	165	0				
WB-RT*	SH	332	-	332	332	1.00	332	0	-332	0	YES	

CLV Total = 727
LOS = A

2023 Build 400 PM

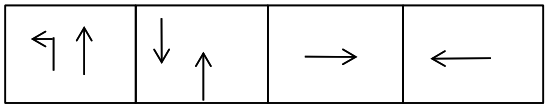
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	624	1.00	624	624	0.60	374			374		374
SB-TH	SH	0	-			1.00						
SB-RT*	1	239	-	239	239	1.00	239		-239	0		
EB-LT	1	380	1.00	380	380	1.00	380	58		438		438
EB-TH	1	282	-	282	282	1.00	282					
EB-RT	SH	1	-	1	1	1.00	1					
WB-LT	SH	0	1.10	0	0	1.00	0	283		283		
WB-TH	2	106	-	106	106	0.55	58	0				
WB-RT	SH	377	-	377	377	1.00	377	0	-377	0	YES	

CLV Total = 813
LOS = A

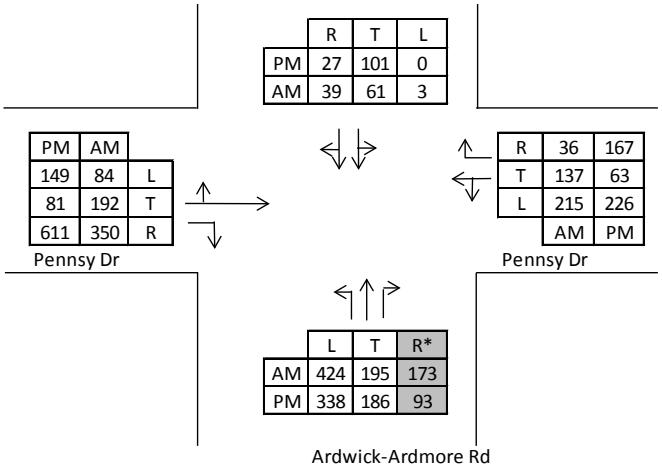
CLV Calculation Sheet

Intersection: Pennsy Drive and Ardwick-Ardmore Road
Scenario: 2023 Build 400

Signal Phase diagram



Pennsy Drive and Ardwick-Ardmore Rd



*Right-turn is channelized; not included in the CLV analysis

2023 Build 400 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	424	1.00	424	424	1.00	424					
NB-TH	1	195	-	195	195	1.00	195	3		198		
NB-RT*	1	173		173	173	1.00	173		-173	0		481
SB-LT	SH	3	1.10	3								
SB-TH	2	61	-	61	103	0.55	57	424		481		
SB-RT	SH	39	-	39								
EB-LT	SH	84	1.00	84								
EB-TH	1	192	-	192	276	1.00	276			276		350
EB-RT	1	350	-	350	350	1.00	350			350		
WB-LT	SH	215	1.00	215								
WB-TH	1	137	-	137	352	1.00	352			352		352
WB-RT	1	36	-	36	36	1.00	36			36		

CLV Total = 1,183
LOS = C

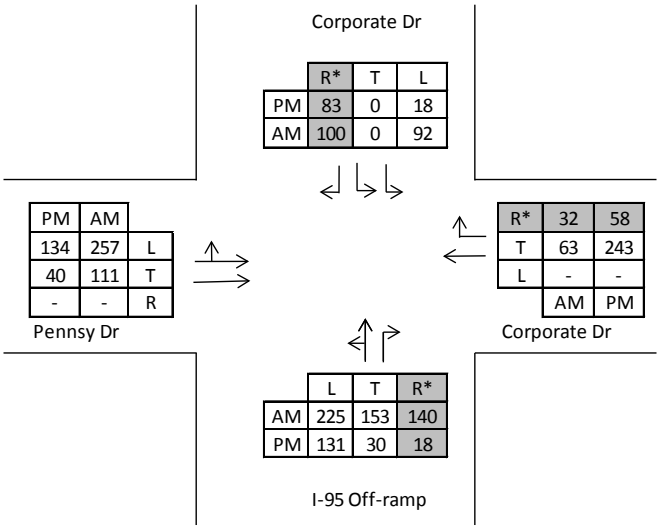
2023 Build 400 PM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	338	1.00	338	338	1.00	338			365		
NB-TH	1	186	-	186	186	1.00	186					
NB-RT*	1	93		93	93	1.00	93		-93	0		409
SB-LT	SH	0	1.10	0								
SB-TH	2	101	-	101	128	0.55	71	338		409		
SB-RT	SH	27	-	27								
EB-LT	SH	149	1.00	149								
EB-TH	1	81	-	81	230	1.00	230			230		611
EB-RT	1	611	-	611	611	1.00	611			611		
WB-LT	SH	226	1.00	226								
WB-TH	1	63	-	63	289	1.00	289			289		289
WB-RT	1	167	-	167	167	1.00	167			167		

CLV Total = 1,309
LOS = D

CLV Calculation Sheet

Pennsy Dr and Corporate Dr



*Right-turn is channelized; not included in the CLV analysis

2023 Build 400 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	225	1.00	225								
NB-TH	1	153	-	153	378	1.00	378			378		378
NB-RT*	1	140	-	140	140	1.00	140		-140	0		
SB-LT	2	92	1.00	92	92	0.60	55			55		
SB-TH	-	-	-	-	-	-	-					55
SB-RT*	1	100	-	100	100	1.00	100		-100	0		
EB-LT	SH	257	1.10	283							YES	
EB-TH	2	111	-	111	111	1.00	111			111		
EB-RT			-									320
WB-LT												
WB-TH	1	63	-	63	63	1.00	63	257		320		
WB-RT*	1	32	-	32	32	1.00	32		-32	0		

CLV Total = 753

LOS = A

2023 Build 400 PM

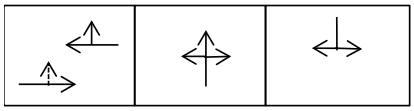
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	131	1.00	131								
NB-TH	1	30	-	30	161	1.00	161			161		161
NB-RT*	1	18	-	18	18	1.00	18		-18	0		
SB-LT	2	18	1.00	18	18	0.60	11			11		
SB-TH	-		-	-	-	-	-					11
SB-RT	1	83	-	83	83	1.00	83		-83	0		
EB-LT	SH	134	2.00	268							YES	
EB-TH	2	40	-	40	40	1.00	40			40		
EB-RT			-									377
WB-LT												
WB-TH	1	243	-	243	243	1.00	243	134		377		
WB-RT	1	58	-	58	58	1.00	58		-58	0		

CLV Total = 549

LOS = A

Intersection: Pennsy Drive and Corporate Drive
Scenario: 2023 Build 400

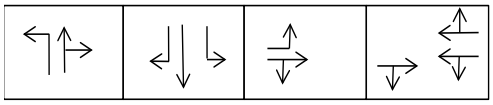
Signal Phase diagram



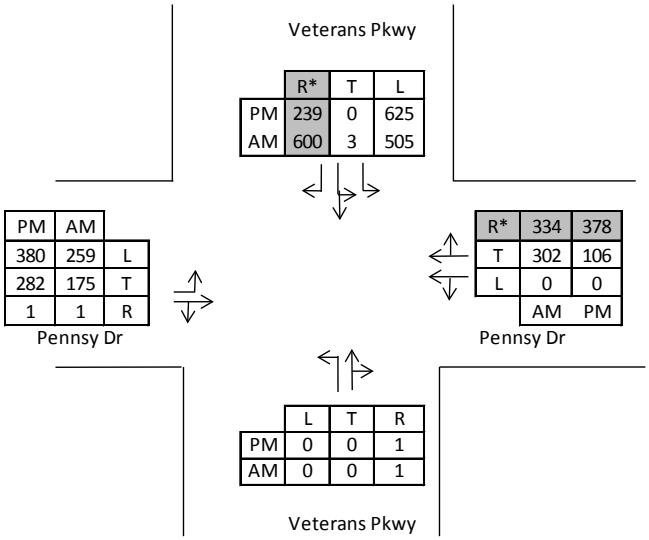
CLV Calculation Sheet

Intersection: Veterans Parkway and Pennsy Drive
Scenario: 2023 Build 500

Signal Phase diagram



Veterans Parkway and Pennsy Dr



*Right-turn is channelized; not included in the CLV analysis

2023 Build 500 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	505	1.00	505	508	0.60	305			305		305
SB-TH	SH	3	-	3								
SB-RT*	1	600	-	600	600	1.00	600		-600	0		
EB-LT	1	259	1.00	259	259	1.00	259	166		425		425
EB-TH	1	175	-	175	175	1.00	175					
EB-RT	SH	1	-			1.00						
WB-LT	SH	0	1.10	0	0	1.00	0	175		175		
WB-TH	2	302	-	302	302	0.55	166	0				
WB-RT*	SH	334	-	334	334	1.00	334	0	-334	0	YES	

CLV Total = 731
LOS = A

2023 Build 500 PM

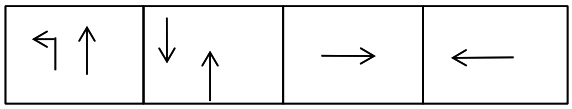
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	625	1.00	625	625	0.60	375			375		375
SB-TH	SH	0	-	0		1.00						
SB-RT*	1	239	-	239	239	1.00	239		-239	0		
EB-LT	1	380	1.00	380	380	1.00	380	58		438		438
EB-TH	1	282	-	282	282	1.00	282					
EB-RT	SH	1	-			1.00						
WB-LT	SH	0	1.10	0	0	1.00	0	282		282		
WB-TH	2	106	-	106	106	0.55	58	0				
WB-RT*	SH	378	-	378	378	1.00	378	0	-378	0	YES	

CLV Total = 814
LOS = A

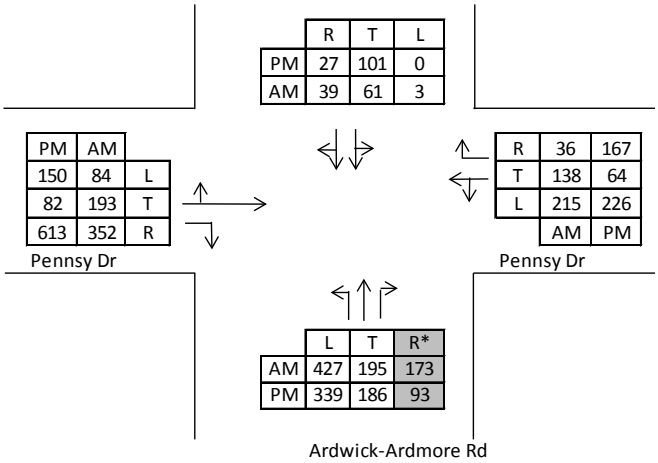
CLV Calculation Sheet

Intersection: Pennsy Drive and Ardwick-Ardmore Road
Scenario: 2023 Build 500

Signal Phase diagram



Pennsy Drive and Ardwick-Ardmore Rd



*Right-turn is channelized; not included in the CLV analysis

2023 Build 500 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	427	1.00	427	427	1	427					
NB-TH	1	195	-	195	195	1	195	3		198		
NB-RT*	1	173		173	173	1	173		-173	0		484
SB-LT	SH	3	1.10	3								
SB-TH	2	61	-	61	104	0.55	57	427		484		
SB-RT	SH	39	-	39								
EB-LT	SH	84	1.00	84								
EB-TH	1	193	-	193	277	1	277			277		352
EB-RT	1	352	-	352	352	1	352			352		
WB-LT	SH	215	1.00	215								
WB-TH	1	138	-	138	353	1	353			353		353
WB-RT	1	36	-	36	36	1	36			36		

CLV Total = 1,189
LOS = C

2023 Build 500 PM

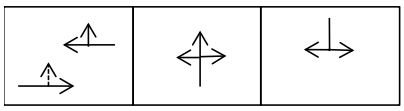
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	339	1.00	339	339	1	339					
NB-TH	1	186	-	186	186	1	186			186		
NB-RT*	1	93		93	93	1	93		-93	0		410
SB-LT	SH	0	1.10	0								
SB-TH	2	101	-	101	128	0.55	71	339		410		
SB-RT	SH	27	-	27								
EB-LT	SH	150	1.00	150								
EB-TH	1	82	-	82	231	1	231			231		613
EB-RT	1	613	-	613	613	1	613			613		
WB-LT	SH	226	1.00	226								
WB-TH	1	64	-	64	290	1	290			290		290
WB-RT	1	167	-	167	167	1	167			167		

CLV Total = 1,313
LOS = D

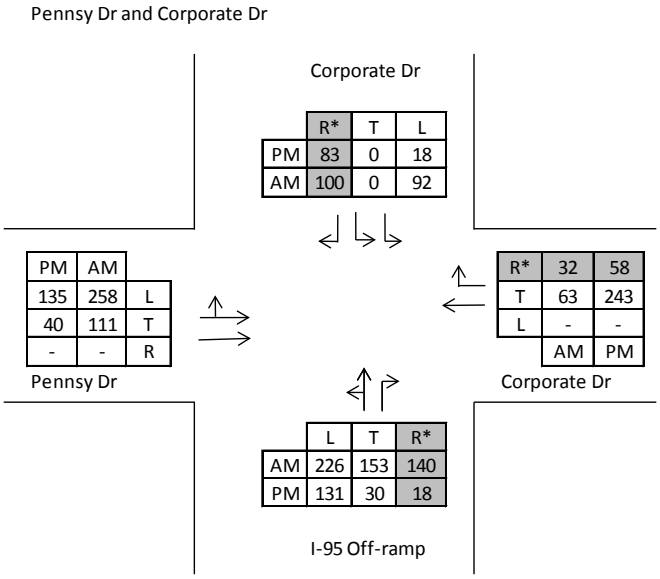
CLV Calculation Sheet

Intersection: Pennsy Drive and Corporate Drive
Scenario: 2023 Build 500

Signal Phase diagram



Pennsy Dr and Corporate Dr



*Right-turn is channelized; not included in the CLV analysis

2023 Build 500 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	226	1	226								
NB-TH	1	153	-	153	379	1	379			379		379
NB-RT*	1	140	-	140	140	1	140		-140	0		
SB-LT	2	92	1	92	92	1	55			55		
SB-TH	-	-	-	-	-	-	-					55
SB-RT*	1	100	-	100	100	1	100		-100	0		
EB-LT	SH	258	1.10	284							YES	
EB-TH	2	111	-	111	111	1.00	111			111		
EB-RT			-									321
WB-LT												
WB-TH	1	63	-	63	63	1	63	258		321		
WB-RT*	1	32	-	32	32	1	32		-32	0		

CLV Total = 755
LOS = A

2023 Build 500 PM

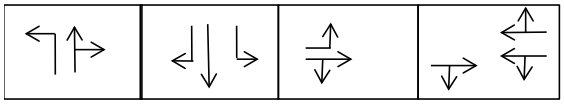
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	131	1	131								
NB-TH	1	30	-	30	161	1	161			161		161
NB-RT*	1	18	-	18	18	1	18		-18	0		
SB-LT	2	18	1	18	18	1	11			11		
SB-TH	-		-	-	-	-	-					11
SB-RT*	1	83	-	83	83	1	83		-83	0		
EB-LT	SH	135	2.00	270							YES	
EB-TH	2	40	-	40	40	1.00	40			40		
EB-RT	-		-									378
WB-LT	-											
WB-TH	1	243	-	243	243	1	243	135		378		
WB-RT*	1	58	-	58	58	1	58		-58	0		

CLV Total = 550
LOS = A

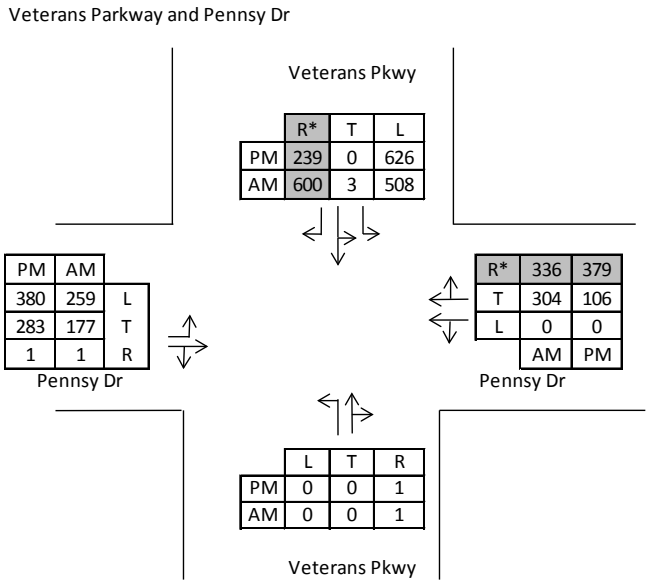
CLV Calculation Sheet

Intersection: Veterans Parkway and Pennsy Drive
Scenario: 2023 Build 600

Signal Phase diagram



Veterans Parkway and Pennsy Dr



*Right-turn is channelized; not included in the CLV analysis

2023 Build 600 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	508	1.00	508	511	0.60	307			307		307
SB-TH	SH	3	-	3								
SB-RT*	1	600	-	600	600	1.00	600		-600	0		
EB-LT	1	259	1.00	259	259	1.00	259	167		426		426
EB-TH	1	177	-	177	177	1.00	177					
EB-RT	SH	0	-			1.00						
WB-LT	SH	0	1.10	0	0	1.00	0	177		177		
WB-TH	2	304	-	304	304	0.55	167	0				
WB-RT*	SH	336	-	336	336	1.00	336	0	-336	0	YES	

CLV Total = 734
LOS = A

2023 Build 600 PM

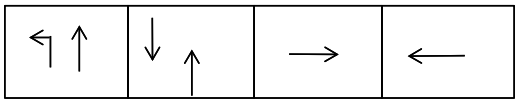
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	0	1.00	0	0	1.00	0					1
NB-TH	1	0	-			1.00						
NB-RT	SH	1	-	1	1	1.00	1			1		
SB-LT	2	626	1.00	626	626	0.60	376			376		376
SB-TH	SH	0	-	0		1.00						
SB-RT*	1	239	-	239	239	1.00	239		-239	0		
EB-LT	1	380	1.00	380	380	1.00	380	58		438		438
EB-TH	1	283	-	283	283	1.00	283					
EB-RT	SH	1	-			1.00						
WB-LT	SH	0	1.10	0	0	1.00	0	283		283		
WB-TH	2	106	-	106	106	0.55	58	0				
WB-RT	SH	379	-	379	379	1.00	379	0	-379	0	YES	

CLV Total = 815
LOS = A

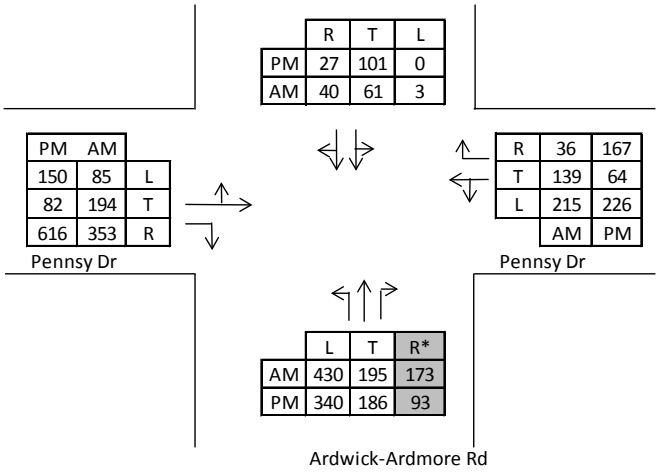
CLV Calculation Sheet

Intersection: Pennsy Drive and Ardwick-Ardmore Road
Scenario: 2023 Build 600

Signal Phase diagram



Pennsy Drive and Ardwick-Ardmore Rd



*Right-turn is channelized; not included in the CLV analysis

2023 Build 600 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	430	1.00	430	430	1	430					
NB-TH	1	195	-	195	195	1	195	3		198		
NB-RT*	1	173		173	173	1	173		-173	0		487
SB-LT	SH	3	1.10	3								
SB-TH	2	61	-	61	104	0.55	57	430		487		
SB-RT	SH	40	-	40								
EB-LT	SH	85	1.00	85								
EB-TH	1	194	-	194	279	1	279			279		353
EB-RT	1	353	-	353	353	1	353			353		
WB-LT	SH	215	1.00	215								
WB-TH	1	139	-	139	354	1	354			354		354
WB-RT	1	36	-	36	36	1	36			36		

CLV Total = 1,194
LOS = C

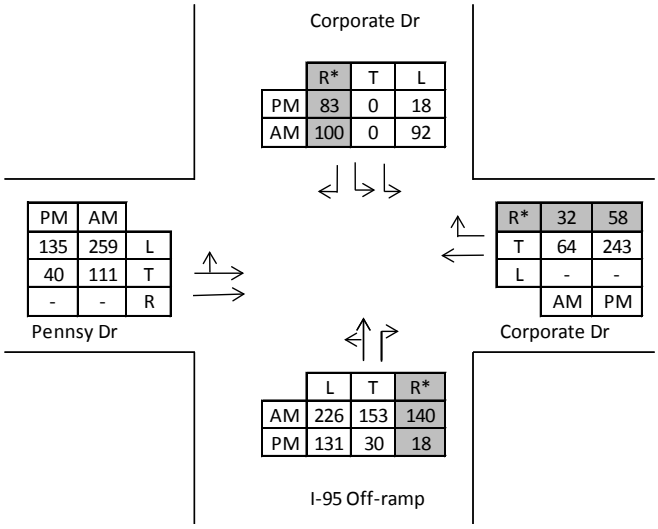
2023 Build 600 PM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	1	340	1.00	340	340	1	340					
NB-TH	1	186	-	186	186	1	186	0		186		
NB-RT*	1	93		93	93	1	93		-93	0		411
SB-LT	SH	0	1.10	0								
SB-TH	2	101	-	101	128	0.55	71	340		411		
SB-RT	SH	27	-	27								
EB-LT	SH	150	1.00	150								
EB-TH	1	82	-	82	232	1	232			232		616
EB-RT	1	616	-	616	616	1	616			616		
WB-LT	SH	226	1.00	226								
WB-TH	1	64	-	64	290	1	290			290		290
WB-RT	1	167	-	167	167	1	167			167		

CLV Total = 1,317
LOS = D

CLV Calculation Sheet

Pennsy Dr and Corporate Dr



*Right-turn is channelized; not included in the CLV analysis

2023 Build 600 AM

Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	226	1.00	226								
NB-TH	1	153	-	153	379	1	379			379		379
NB-RT*	1	140	-	140	140	1	140		-140	0		
SB-LT	2	92	1.00	92	92	1	55			55		
SB-TH	-	-	-	-	-	-	-					55
SB-RT*	1	100	-	100	100	1	100		-100	0		
EB-LT	SH	259	1.10	285							YES	
EB-TH	2	111	-	111	111	1.00	111			111		
EB-RT			-									323
WB-LT												
WB-TH	1	64	-	64	64	1	64	259		323		
WB-RT*	1	32	-	32	32	1	32		-32	0		

CLV Total = **757**

LOS = A

2023 Build 600 PM

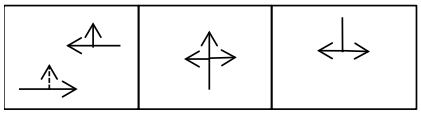
Lane	Number of Lanes/Type	Movement Volume	Shared LT Adjustment Factor	Adjusted Volume	Combined Lane Group Volume	Lane Utilization Factor	Lane Volume	Opposing Volume	Adjustment	Critical Lane Sum	Defacto Lane?	Critical Volume
NB-LT	SH	131	1.00	131								
NB-TH	1	30	-	30	161	1	161			161		161
NB-RT*	1	18	-	18	18	1	18		-18	0		
SB-LT	2	18	1.00	18	18	1	11			11		
SB-TH	-		-	-	-	-	-					11
SB-RT*	1	83	-	83	83	1	83		-83	0		
EB-LT	SH	135	2.00	270							YES	
EB-TH	2	40	-	40	40	1.00	40			40		
EB-RT			-									378
WB-LT												
WB-TH	1	243	-	243	243	1	243	135		378		
WB-RT*	1	58	-	58	58	1	58		-58	0		

CLV Total = **550**

LOS = A

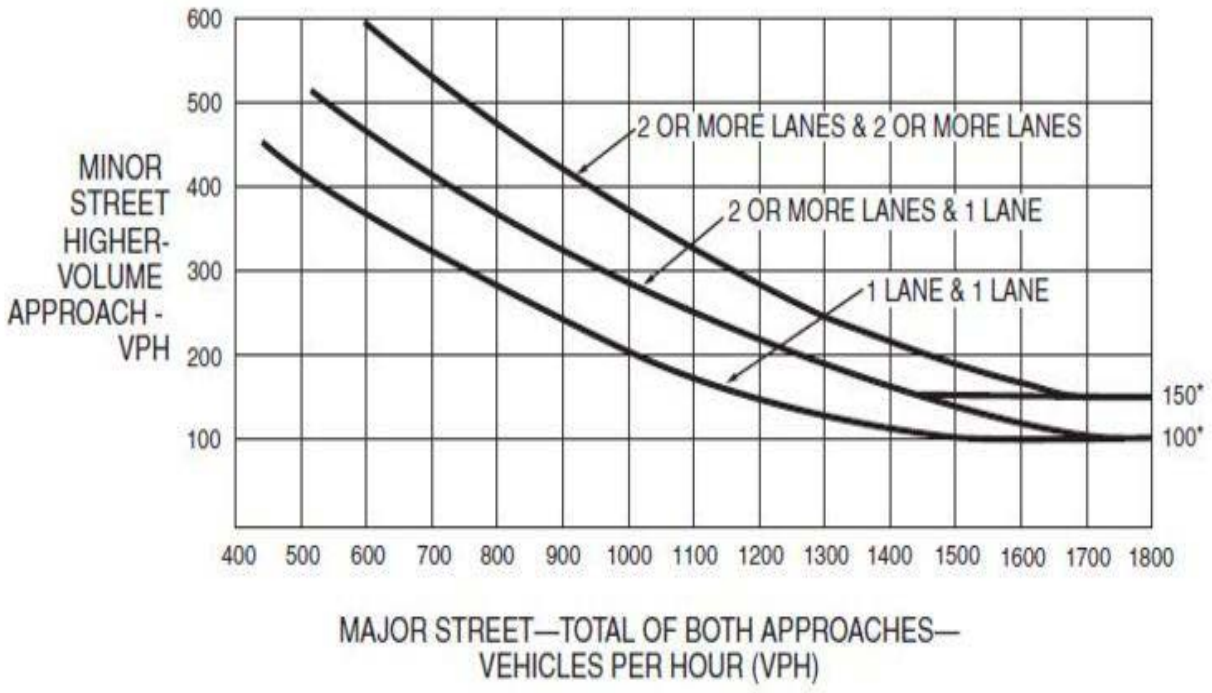
Intersection: Pennsy Drive and Corporate Drive
Scenario: 2023 Build 600

Signal Phase diagram



MUTCD SIGNAL WARRANT

Figure C-1: MUTCD 2009 Edition Part 4 Figure 4C-3: Warrant 3, Peak Hour



*Note: 150 vehicles per hour (vph) applies as the lower threshold volume for a minor-street approach with two or more lanes, and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Appendix G – Air Quality Conformity

Air Quality Technical Memorandum

TPB SR2-2019
July 6, 2018

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, N.E.
Washington, D.C. 20002

RESOLUTION ON AN AMENDMENT TO THE FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM (TIP) THAT IS EXEMPT FROM THE AIR QUALITY CONFORMITY REQUIREMENT TO INCLUDE FUNDING FOR THE FACILITIES MAINTENANCE SUPPORT PROJECT GROUPING, AS REQUESTED BY THE WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY (WMATA)

WHEREAS, the National Capital Region Transportation Planning Board (TPB), which is the metropolitan planning organization (MPO) for the Washington Region, has the responsibility under the provisions of the Fixing America's Surface Transportation (FAST) Act for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area; and

WHEREAS, the TIP is required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) as a basis and condition for all federal funding assistance to state, local and regional agencies for transportation improvements within the Washington planning area; and

WHEREAS, on November 16, 2016 the TPB adopted the FY 2017-2022 TIP; and

WHEREAS, in the attached letter of June 29, 2018 WMATA has requested that the FY 2017-2022 TIP be amended to reduce local funding in FY 2020 by $2.8 million and to add $2.5 million in FY 2021 and $5 million in FY 2022 using local funding; to reduce Section 5307 funding in FY 2020 by $3 million; and to add $130 million in Section 5337 – State of Good Repair (SGR) funding between FY 2020 and FY 2022 for the Facilities Maintenance Support project grouping (TIP ID 5867), as described in the attached materials; and

WHEREAS, this project is exempt from the air quality conformity requirement, as defined in Environmental Protection Agency's (EPA) Transportation Conformity Regulations as of April 2012;

NOW, THEREFORE, BE IT RESOLVED THAT the Steering Committee of the National Capital Region Transportation Planning Board amends the FY 2017-2022 TIP to reduce local funding in FY 2020 by $2.8 million and to add $2.5 million in FY 2021 and $5 million in FY 2022 using local funding; to reduce Section 5307 funding in FY 2020 by $3 million; and to add $130 million in Section 5337-SGR funding between FY 2020 and FY 2022 for the Facilities Maintenance Support project grouping (TIP ID 5867), as described in the attached materials.

Adopted by the Transportation Planning Board Steering Committee at its regular meeting on July 6, 2018

June 29, 2018

The Honorable Charles Allen
Chairman, National Capital Region
Transportation Planning Board
Metropolitan Washington Council of Governments
777 North Capitol Street, N.E., Suite 300
Washington, DC 20002-4201

RE: Approval of an Amendment to the FY 2017-2022 TIP to Update Project Information for TIP ID 5867 for the period FY2020-2022 in order to incorporate the construction of WMATA's Heavy Overhaul Facility

Dear Chairman Allen:

The region's six-year Transportation Improvement Program (TIP) outlines the schedule for obligating federal funds to state and local projects. The purpose of this amendment is to modify the project budget and sources of funds for TIP ID 5867 for the period FY2020-2022, in order to incorporate the construction of WMATA's Heavy Overhaul Facility.

Attachment A is a summary of the proposed FY2020-2022 budget and funding-source information for the TIP ID 5867 amendment. Attachment B shows the FY2020-2022 project budget that is part of the currently adopted TIP as well as the proposed changes to this TIP ID. In FY2020 this TIP ID will increase from $10.8 million to $45.0 million. Currently, in FY2021 and FY2022 this TIP ID does not have a budget. WMATA is adding $32.5 million and 65.0 million, respectively, to account for the expenses related to the construction of WMATA's heavy overhaul facility. WMATA expects to fund this project from both Federal and local funds.

WMATA's TIP projects do not affect the currently approved air quality conformity analysis because these projects are either exempt or not regionally significant in terms of air quality.

WMATA's submission for this FY 2020-2022 TIP amendment is consistent with the FY 2019-2024 Capital Improvement Program that was approved by the WMATA Board of Directors on March 22, 2018. Prior to approval of the CIP, WMATA held a public hearing on its proposed operating and capital budgets, including the proposed sources and uses of its capital funds.

In addition to the requirement of consistency with an approved TIP, the FTA requires that agency's grant applications match the corresponding State

Washington Metropolitan Area Transit Authority

600 Fifth Street, NW
Washington, D.C. 20001
202/962-1234

By Metrorail:
Judiciary Square-Red Line
Gallery Place-Chinatown
Red, Green and Yellow Lines

A District of Columbia Maryland and Virginia Transit Partnership

Transportation Improvement Program (STIP) for that agency. WMATA's TIP is part of the District of Columbia's STIP. If approved by the Transportation Planning Board, WMATA will request that this amendment be reflected in the District of Columbia's STIP as soon as possible.

WMATA requests that the Transportation Planning Board Steering Committee approve this amendment at its July 18, 2018 meeting. Thank you for your continued support of WMATA.

Sincerely,

Yetunde Olumide
Managing Director
Office of Management and Budget Services

Attachments

FY20-2022 Proposed TIP
Attachment A
(In Millions)

Category	TIP Sub-Category	FY	Federal 5307 Grants	Federal 5337 Grants	Federal 5339 Grants	Federal PRIIA Grants	Federal 5310 Grants	VA CMAQ	VA RSTP	DHS	Federal 5312 Grants	Local Funding	Other Sources Non-Fed	Total All Sources
C. Maintenance Facilities	Facilities Maintenance Support - Systemwide Support Equipment, Environmental Compliance Projects, and Administrative Support	FY2020	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	45.0
		FY2021	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	32.5
		FY2022	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	65.0
Total TIP ID 5867			**$0.0**	**$130.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$12.5**	**$0.0**	**$142.5**

FY2020-2022 Revised Budget

Attachment B

(In Millions)

Category	TIP Sub-Category	FY	Approved TIP Budget	Proposed TIP Budget	$ Change	% Change
C. Maintenance Facilities	Facilities Maintenance Support - Systemwide Support Equipment, Environmental Compliance Projects, and Administrative Support	FY2020	10.8	$45.0	34.2	315.5%
		FY2021	0.0	$32.5	32.5	
		FY2022	0.0	$65.0	65.0	
Total TIP ID 5867			**$10.8**	**$142.5**	**$131.7**	**1215.8%**

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
TRANSPORTATION IMPROVEMENT PROGRAM
CAPITAL COSTS (in $1,000)

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: **5867** Agency ID:	Title: **Facilities Maintenance Support – Systemwide Support Equipment, Environmental Compl**								Complete:	
Facility:	DHS	100/0/0	10,613 e	871 e						871
From:										
To:	Local	0/0/100	48,414 e	7,631 e	5,904 e	21,809 e	5,000 e	2,500 e	5,000 e	47,844
	PRIIA	50/0/50	21,071 e							
	Sect. 5337-SGR	80/0/20	3,519 e				40,000 e	30,000 e	60,000 e	130,000
	WIP	0/0/100	1,185 e		15,596 e					15,596
									Total Funds:	***194,311***

Description: Provides funds for:
a. Environmental Compliance Projects: facility or equipment upgrades and/or replacements required to comply with environmental regulatory requirements or directives.
b. Maintenance Bus & Rail Facilities: upgrades, rehabilitation, and/or replacements of systemwide support equipment, financial planning and project administration, to include a new test track, railcar commissioning facility and New Carrollton Yard capacity improvements.

Amendment: Add Funding **Approved on:** 7/6/2018

In FY 2020, reduce local funding by $2.5 million and Sect. 5307 by $3 million, add $40 million in Sect. 5337-SGR. In FY 2021, add $2.5 million in local funding and $30 million in Sect. 5337-SGR In FY 2022, add $5 million in local funding and $60 million in Sect. 5337-SGR.

Amendment: Update FY19 Project Information **Approved on:** 2/21/2018

Amended for consistency with approved WMATA FY2017 – FY2022 Capital Improvement Program and Federal grant applications. For FY2019 funding: Decreased Section 5307 by $3,000 million; increased Local funding by $15,158 million.

Modification: Update FY18 Project Information **Approved on:** 8/9/2017

Modified for consistency with approved WMATA FY2017 - 2022 Capital Improvement Program and federal grant applications. For FY2018 funding; decreased DHS by $1.000 million, decreased WIP by $2.330 million, and increased Local by $1.744 million.

Modification: Update FY2018 Project Information **Approved on:** 4/13/2017

Modified for consistency with WMATAs approved FY 2018 Capital Improvement Program and federal grant applications. For FY 2018 funding: decreased Local funding by $1,134.2; added WIP funding for $1,673.1.

Amendment: Update FY18 Project information **Approved on:** 2/15/2017

This amendment will update FY18 project information to reflect WMATA's FY18 approved budget.

AIR QUALITY TECHNICAL MEMORANDUM

WMATA Heavy Repair & Overhaul Facility
3636 Pennsy Drive, Landover, Maryland

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

July 2018

(This Page Intentionally Left Blank)

TABLE OF CONTENTS

1.0 Introduction....1

2.0 Regulatory Framework and Pollutants....1

2.1 Clean Air Act (42 USC 85)....1
2.2 Transportation Conformity Rule....2

3.0 Methodology....2

3.1 National Ambient Air Quality Standards (NAAQS)....2
3.2 Pollutants of Concern....2
3.3 Impact Analysis....3
3.3.1 Regional Air Quality Conformity Determination....3
3.3.2 Localized Air Quality Impact (Hot Spot Analysis)....3

4.0 Existing Conditions....5

5.0 Environmental Consequences....7

5.1 No Build Alternative....7
5.2 Build Alternative (the project)....7
5.3 Temporary Construction Impacts....7

6.0 References....8

LIST OF FIGURES

Figure 4-1: Beltsville Air Quality Monitoring Station Location....6

LIST OF TABLES

Table 3-1: National and Maryland Ambient Air Quality Standards....3
Table 4-1: Regional Ambient Air Quality....5
Table 5-1: Worst-case Traffic Location....7

LIST OF ATTACHMENTS

Attachment 1: FY 2017-2022 Transportation Improvement Program (TIP) resolution on an amendment

ACRONYMS

AQPP	Air Quality Planning Program
AADT	Annual Average Daily Traffic
BMP	Best Management Practices
CO	carbon monoxide
CAA	Clean Air Act
CASTNET	Clean Air Status and Trends Network
CEQ	Council on Environmental Quality
CLRP	Constrained Long Range Transportation Plan
CFR	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
FTA	Federal Transit Administration
GIS	Geographic Information Systems
HR&O	Heavy repair & overhaul
Pb	lead
LOS	Level of Service
MDE	Maryland Department of the Environment
mph	miles per hour
MWCOG	Metropolitan Washington Council of Governments
NAAQS	National Ambient Air Quality Standards
TPB	National Capital Region Transportation Planning Board
NEPA	National Environmental Policy Act
NO_2	nitrogen dioxide
NO_x	nitrogen oxide
O_3	8-hour ozone
$PM_{2.5}$	particulate matter less than 2.5 microns
PM_{10}	particulate matter less than 10 microns
ROW	Right of Way
SIP	State Implementation Plan
SO_2	sulfur dioxide
So_x	sulfur oxide
TIP	Transportation Improvement Program
VOC	volatile organic compound
WMATA	Washington Metropolitan Area Transit Authority

(This Page Intentionally Left Blank)

1.0 INTRODUCTION

The Washington Metropolitan Area Transit Authority (WMATA) proposes the construction of a new heavy repair and overhaul (HR&O) facility for Metrorail vehicles at 3636 Pennsy Drive in Landover, Maryland. The purpose of the project is to centralize Metrorail car heavy repair and mid-life overhaul activities at a single facility. The project will be funded with Federal funds; the Federal Transit Administration (FTA) is the lead Federal agency.

This technical memorandum identifies the potential air quality effects of the No Build and Build Alternative for the project. The air quality evaluation includes an assessment of the region's attainment status, existing conditions, projected future traffic volumes, and potential future effects on air quality. The memorandum describes the following:

- Project alternatives
- Applicable regulations and guidance
- Methodology
- Existing Conditions
- Environmental Consequences

2.0 REGULATORY FRAMEWORK AND POLLUTANTS

2.1 Clean Air Act (42 USC 85)

The Clean Air Act (CAA), as amended, is the basis for most federal air pollution control programs. Under the CAA, the U.S. Environmental Protection Agency (EPA) regulates air quality nationally. EPA delegates authority to the Maryland Department of the Environmental (MDE) for monitoring and enforcing air quality regulations in the State of Maryland. The *Maryland State Implementation Plan* (SIP), developed in accordance with the CAA, contains the major state-level requirements with respect to transportation in general. The Air Quality Planning Program (AQPP) within MDE is responsible for preparing the SIP and submitting it to EPA for approval.

Any project constructed in the State of Maryland must comply with the National Ambient Air Quality Standards (NAAQS), a set of standards established by EPA under the authority of the CAA for various "criteria" air pollutants described in more detail in the Methodology section (Section 3.0).

The CAA also requires that EPA specify geographic areas of the country that have measured pollutant concentrations exceeding the levels prescribed by the air quality standards (nonattainment areas). EPA classifies non-attainment areas and specifies compliance deadlines for these areas. The Heavy Repair & Overhaul facility (HR&O) project is located in Landover, Prince George's County, which is part of the EPA-defined Metropolitan Washington Air Quality Designation Area. The greater metropolitan Washington area is currently designated as nonattainment for 8-hour ozone (O_3) and a maintenance area (formerly nonattainment) for particulate matter less than 2.5 microns ($PM_{2.5}$) and carbon monoxide (CO). However, the metropolitan Washington area is in attainment for all other criteria pollutants, including particulate matter less than 10 microns (PM_{10}), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb).

2.2 Transportation Conformity Rule

The CAA requires federal agencies (such as FTA) to ensure that their actions conform to the SIP in nonattainment or maintenance areas. Conformity to a SIP (as defined in the CAA) means conformity to a SIP's purpose of reducing the severity and number of violations of the NAAQS in order to achieve attainment of these standards. The federal agency responsible for an action is required to demonstrate that its action conforms to the applicable SIP.

Transportation conformity is a process required of the Metropolitan Washington Council of Governments (MWCOG) and the National Capital Region Transportation Planning Board (TPB), as the region's metropolitan planning organization, to ensure that those transportation activities that are consistent with air quality goals receive federal funding and approval. EPA promulgated the Transportation Conformity Rules under the CAA, as amended (40 CFR Parts 51 and 93).

Transportation conformity is a requirement of the CAA in areas that do not meet the NAAQS or have previously been in violation of the transportation-related NAAQS. Once a previously designated nonattainment area meets the NAAQS and submits plans to demonstrate how the area will continue to meet federal air quality standards, the USEPA can re-designate that area. The transportation conformity requirements are still applicable for up to 20 years after a nonattainment area is re-designated to ensure that the region continues to meet the NAAQS. Therefore, the transportation conformity rule compliance is required to be addressed for nonattainment or maintenance pollutants of O_3, $PM_{2.5}$, and CO on a project level.

For specific transportation projects, the conformity determination must show that the individual project is consistent with the regional conformity determination and that potential localized emission impacts are addressed and are consistent with air quality goals found in the SIP. The state or local transportation agency is responsible for demonstrating that the project-level conformity determination requirements have been met.

3.0 METHODOLOGY

3.1 National Ambient Air Quality Standards (NAAQS)

As described in the previous section, any project constructed in the State of Maryland has to achieve compliance with the NAAQS, a set of standards established by EPA under the authority of the CAA for various "criteria" air pollutants. A transportation conformity determination is also required in areas that do not meet the NAAQS or have previously been in violation of the transportation-related NAAQS; this requirement could be applicable to O_3, CO, and $PM_{2.5}$ for the project. **Table 3-1** lists the NAAQS for the seven criteria pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and Pb.

3.2 Pollutants of Concern

The pollutants that are most relevant to this project are those principally traceable to motor vehicle engines and electrical power plants. In the study area, ambient concentrations of CO and O_3 are predominantly influenced by roadway motor vehicle activity. Emissions of volatile organic compounds (VOCs), nitrogen oxide (NO_x), PM_{10}, and $PM_{2.5}$ come from both mobile and stationary sources, while emissions of sulfur oxides (SO_x) and Pb are associated mainly with various stationary sources. Pollutant emissions from electric-powered transit vehicles are expected to be minor and generally occur well outside the study area. Emissions are expected to be minor partly because of the small proportion of expected future train activity compared with existing and future roadway motor vehicle activity in the project study area. Electricity purchased from the national electrical grid may be produced by either fossil-fueled plants or renewable energy plants, or even both.

Table 3-1: National and Maryland Ambient Air Quality Standards

Pollutant	Standard Type	Averaging Period	Level
Carbon Monoxide (CO)	Primary	8-Hour average	9 ppm (10 mg/m^3)
	Primary	1-Hour average	35 ppm (40 mg/m^3)
Nitrogen Dioxide (NO_2)	Primary and Secondary	Annual arithmetic mean	53 ppb
	Primary	1-Hour average (98th percentile daily max)	100 ppb
Ozone (O_3)	Primary and Secondary	8-Hour average (annual 4th highest daily max)	0.070 ppm (137 µg/m^3)
Sulfur Dioxide (SO_2)	Secondary	3-Hour average	0.5 ppm (1300 µg/m^3)
	Primary	1-Hour average (99th percentile daily max)	75 ppb (0.075 ppm)
Particulate Matter (PM_{10})	Primary and Secondary	24-Hour average	150 µg/m^3
Particulate Matter ($PM_{2.5}$)	Primary	Annual arithmetic mean	12 µg/m^3
	Secondary	Annual arithmetic mean	15 µg/m^3
	Primary and Secondary	24-Hour average (98th percentile)	35 µg/m^3
Lead (Pb)	Primary and Secondary	3-month rolling average	0.15 µg/m^3

Source: https://www.epa.gov/criteria-air-pollutants/naaqs-table

3.3 Impact Analysis

3.3.1 Regional Air Quality Conformity Determination

The project is included in the TPB Constrained Long-Range Transportation Plan (CLRP) for projects planned between 2016 and 2045. The HR&O project is also included in the TPB FY 2017-2022 Transportation Improvement Program (TIP). Since the project comes from a conforming TIP, it is considered in compliance with the transportation conformity rule on a regional level and no further regional emission impact analysis is required for any regional pollutants such as O_3.

3.3.2 Localized Air Quality Impact (Hot Spot Analysis)

To determine whether a localized pollutant emissions "hot-spot" analysis was required for the project with respect to maintenance pollutants $PM_{2.5}$ and CO, the study reviewed the Transportation Conformity guidelines "Procedures for determining localized CO, PM_{10}, and $PM_{2.5}$ concentrations (hot-spot analysis)", as described in 40 CFR 93.123.

$PM_{2.5}$ Impacts

For project-level $PM_{2.5}$ localized impacts, the guideline identifies five categories of projects with potential air quality concerns that would require a hot spot analysis (40 CFR 93.123[b][1]):

- New or expanded highway projects which have a significant number of (or significant increase in) diesel vehicles;
- Projects affecting intersections that are at LOS D, E, or F with a significant number of diesel vehicles, or those which would change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- New bus and rail terminals and transfer points which have a significant number of diesel vehicles congregating at a single location;

- Expanded bus and rail terminals and transfer points which significantly increase the number of diesel vehicles congregating at a single location; and
- Projects in or affecting locations, areas, or categories of sites identified in the applicable $PM_{2.5}$ and PM_{10} implementation plan or implementation plan submission, as appropriate, as the sites of violation or possible violation.

Furthermore, typical sample projects of air quality concern defined by 40 CFR 93.123(b)(1)(i), (iii) and (iv) include:

- A project on a new highway or expressway which serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT) and eight percent or more of such AADT is diesel truck traffic;
- New exit ramps and other highway facility improvements to connect a highway or expressway to a major freight, bus, or intermodal terminal;
- Expansion of an existing highway or other facility which affects a congested intersection (operated at LOS D, E, or F) which has a significant increase in the number of diesel trucks;
- Similar highway projects which involve a significant increase in the number of diesel transit buses and/or diesel trucks;
- A major new bus or intermodal terminal considered to be a "regionally significant project" under 40 CFR 93.1019; and
- An existing bus or intermodal terminal which has a large vehicle fleet where the number of diesel buses increases by 50 percent or more, as measured by bus arrivals.

Since the project would not cause any significant increase in diesel vehicular traffic in the project area or fall into any of the above project categories that have the potential for air quality concern with respect to $PM_{2.5}$, the project would not cause or contribute to a $PM_{2.5}$ violation in the area. Consequently, no further hot spot analysis for $PM_{2.5}$ is warranted.

CO Impacts

For project-level CO impacts, the transportation conformity rule does not apply, because the metropolitan Washington area (where the project is located) has been meeting the CO NAAQS since March 1996. The CAA requires states to submit two 10-year maintenance plans demonstrating that the region will continue to maintain the eight-hour CO standard. The first CO maintenance plan covered 10 years after re-designation (from 1996-2007). The region was required to revise the maintenance plan eight years after re-designation (in this case March 2004). The revised CO maintenance plan covers the period from 2007-2016. The plan demonstrates (using most recent CO data and predictions) that the metropolitan Washington area would continue to meet the standard for that period. After 2016, no CO hot spot analysis will continue to be conducted as part of the maintenance plan development under the transportation conformity rule requirements. Therefore, a CO hot spot analysis per CFR 93.123 project-level transportation conformity requirements is not warranted for this project.

However, for NEPA purposes, since motor vehicle emissions at congested intersections are the predominant source of CO, EPA developed a guideline for assessing potential CO impacts at congested intersections operating

at LOS D, E or F.[1] This guideline was considered in evaluating traffic impacts at congested signalized intersections in the project-level CO impact assessment.

4.0 EXISTING CONDITIONS

Existing conditions were evaluated using data from air quality monitoring stations identified in the vicinity of the study area. MDE maintains an area-wide network of monitoring stations that routinely measure pollutant concentrations in the ambient air. The nearest monitoring station to the HR&O Facility site is part of EPA's Clean Air Status and Trends Network (CASTNET). CASTNET monitoring stations are used by MDE to determine attainment status. MDE and CASTNET stations provide data to assess air quality compliance with the NAAQS proximate to the project study area. **Figure 4-1** shows the location of the closest monitoring station relative to the project sites:

- Site M1 – Beltsville (CASTNET ID BEL116; 12003 Old Baltimore Pike, Beltsville, Prince George's County, MD).

The relevant monitored pollutants are O_3, NO_2, CO, $PM_{2.5}$ and PM_{10}, and SO_2.

As shown in **Table 4-1**, the most recent 3-year monitoring data indicate no exceedances of the NAAQS in the vicinity of the HR&O Facility site, except for ozone, and are consistent with the current attainment and nonattainment designation of the area where the project is located.

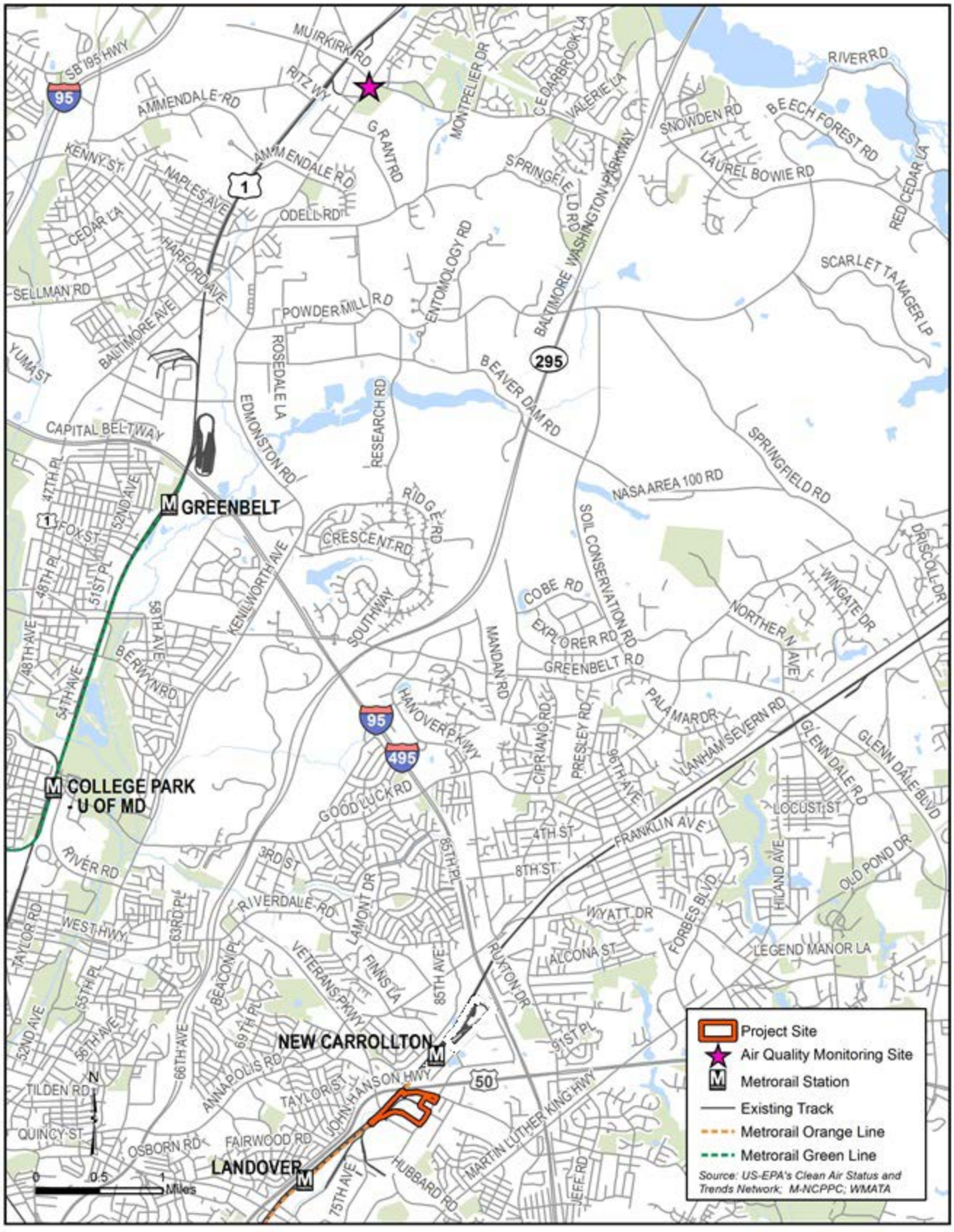
Table 4-1: Regional Ambient Air Quality

Pollutant	Period	NAAQS	2015[1]	2016[1]	2017[1]
Carbon Monoxide (CO)	1-hour	35 ppm	1.5	2.0	1.0
	8-hour	9 ppm	1.0	1.1	0.7
Nitrogen Dioxide (NO_2)	1-hour	100 ppb	42	39	35
	Annual	53 ppb	8.2	7.8	6.6
Ozone (O_3)[2]	8-hour	0.070 ppm	**0.072**	0.070	0.069
Sulfur Dioxide (SO_2)[3]	1-hour	75 ppb	9	5	3
	3-hour	0.03 ppm	NA	NA	NA
Particulate Matter ($PM_{2.5}$)	24-hour	35 µg/m³	24	18	15
	Annual	12 µg/m³	11.2	8.6	7.3
Particulate Matter (PM_{10})	24-hour	150 µg/m³	35	22	26

NOTES:
1. All monitoring levels are from the station located at Howard University's Beltsville Laboratory, 12003 Old Baltimore Pike, Beltsville, Prince George's County.
2. The reported pollutant concentration for ozone is the 4th highest 8-hour level. The EPA standard is applied to the annual fourth-highest daily maximum 8-hour concentration as averaged over 3 years. This refers to the actual measured concentrations. Essentially, the first three highest measured concentrations are exempt.
3. 3-hr average data are not available (NA).
Source: https://www.epa.gov/outdoor-air-quality-data

[1] U.S. Environmental Protection Agency, "User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections", EPA-454/R-92-006 (Revised), Office of Air Quality Planning and Standards, Research Triangle Park, NC, September, 1995

Figure 4-1: Beltsville Air Quality Monitoring Station Location



5.0 ENVIRONMENTAL CONSEQUENCES

5.1 No Build Alternative

Under the No Build Alternative, operations for heavy repair and overhaul of Metrorail Cars will remain at two separate existing WMATA facilities. As no project elements are proposed under the No Build Alternative, no impacts are anticipated to air quality.

5.2 Build Alternative (the project)

Under the Build Alternative, traffic volumes and ambient pollutant concentrations at the HR&O Facility are expected to be comparable to the No Build Alternative.

The traffic analysis conducted for this project indicates that overall congestion at the study intersections show that no signalized intersections currently operate with or are predicted to operate with LOS D, E or F with the exception of Pennsy Drive and Ardwick-Ardmore Road. However, as presented in **Table 5-1**, the relatively low traffic volume increase over the Existing Condition was predicted to be less than eight percent under the 2023 Build Alternative (600 Employees option). This small increase in traffic volumes and delay is not likely to result in any substantial increase in CO hot spot concentrations. Therefore, with the monitored ambient CO levels (**Table 4-1**) well below the NAAQS, it can be reasonably concluded in the absence of a detailed hot spot dispersion modeling analysis that the project would not result in any significant localized CO hot spot impacts.

Table 5-1: Worst-case Traffic Location

Signalized Intersection	Existing		2023 No Build		Worst-case Build	
Pennsy Dr and Ardwick-Ardmore Rd/PM Peak	LOS	Volume	LOS	Volume	LOS	Volume
	C	1,227	C	1,295	D	1,317

The traffic analysis and results are documented in the *Transportation Technical Memorandum* found in **Appendix F** of the DCE.

5.3 Temporary Construction Impacts

Direct emissions from construction equipment are not expected to produce significant adverse effects on local air quality, provided that all equipment is properly operated and maintained. Potential fugitive dust impacts would be mitigated through “good housekeeping” practices, such as water sprays during demolition; wetting, paving, or landscaping exposed earth areas; covering dust-producing materials during transport; limiting dust-producing construction activities during high wind conditions; and providing street sweeping and tire washes for trucks leaving the site.

6.0 REFERENCES

40 CFR 50, National Primary and Secondary Ambient Air Quality Standards.

National Capital Region Transportation Planning Board, *Visualize 2045*, National Capital Region's Financially Constrained Long-Range Transportation Plan (CLRP), November 16, 2016.

National Capital Region Transportation Planning Board, Transportation Improvement Program for the National Capital Region, FY 2017 – 2022, November 16, 2016.

U.S. Environmental Protection Agency, Guidelines for Modeling Carbon Monoxide from Roadway Intersections, Office of Air Quality Planning and Standards, Research Triangle, NC, November 1992.

Appendix H – Hazardous Materials

The EDR Radius Map Report – WMATA HRO Pennsy Drive, June 11, 2018

Wmata Hro Pennsy Drive
3636 Pennsy Drive
Hyattsville, MD 20785

Inquiry Number: 5327967.2s
June 11, 2018

The EDR Radius Map™ Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	50
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

3636 PENNSY DRIVE
HYATTSVILLE, MD 20785

COORDINATES

Latitude (North):	38.9417000 - 38° 56' 30.12''
Longitude (West):	76.8757000 - 76° 52' 32.52''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	337436.3
UTM Y (Meters):	4311772.0
Elevation:	79 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	6051346 WASHINGTON EAST, DC
Version Date:	2014
East Map:	6051310 LANHAM, MD
Version Date:	2014

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150724
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
3636 PENNSY DRIVE
HYATTSVILLE, MD 20785

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1		3636 PENNSY DR	ERNS		TP
A2	GES EXPOSITION SERVI	3636 B PENNSY DR	RCRA-SQG		TP
A3	LANDOVER MD. WAREHOU	3636 PENNSY DR	OCPCASES, HIST UST		TP
A4	TOYS "R" US	3636 PENNSY DRIVE	UST, Financial Assurance		TP
A5	GES EXPOSITION SERVI	3636 B PENNSY DR	FINDS, ECHO		TP
6	GEORGIA PACIFIC FACI	8121 ARDWICK-ARDMORE	OCPCASES, HIST UST	Higher	531, 0.101, NNE
7	CANADA DRY	3600 PENNSY DR	OCPCASES	Higher	730, 0.138, SSE
B8	METRO SUPPLY FACILIT	8201 ARDWICK-ARDMORE	UST, Financial Assurance	Higher	791, 0.150, ENE
B9	WMATA METRO SUPPLY F	8201 ARDWICK ARDMORE	RCRA-LQG	Higher	791, 0.150, ENE
10	QFN #425	3701 PENNSY DRIVE	UST, Financial Assurance	Higher	902, 0.171, East
11	BRODY BROTHERS	3611 PENNSY DRIVE	OCPCASES, UST, HIST UST, Financial Assurance	Higher	936, 0.177, SE
C12	DISTRICT WHOLESALE D	7721 POLK STREET	UST, Financial Assurance	Higher	1113, 0.211, ESE
C13	MCKESSON DRUG CO	7721 POLK ST	RCRA-SQG, FINDS, ECHO	Higher	1113, 0.211, ESE
C14	DIST.WHOLESALE DRUG	7721 POLK ST	HIST UST	Higher	1113, 0.211, ESE
D15	WMATA - CARMEN TURNE	3500 PENNSY DR	AST	Higher	1235, 0.234, South
D16	HECHINGER	3500 PENNSY DR	OCPCASES	Higher	1235, 0.234, South
D17	HECHINGERS	3500 PENNSY DR	OCPCASES, NPDES	Higher	1235, 0.234, South
D18	WMATA - CARMEN TURNE	3500 PENNSY DRIVE	RCRA-SQG, ECHO	Higher	1235, 0.234, South
D19	HECHINGER PROPERTY	3500 PENNSY DRIVE	UST, HIST UST, Financial Assurance	Higher	1235, 0.234, South
20	UNKNOWN TRUCK	ARDWICK-ARDMORE RD A	OCPCASES	Higher	1304, 0.247, ENE
21	MALOUNCE'S TOWING	3722 ARDWICK PLACE	OCPCASES	Higher	1351, 0.256, East
E22	BELTWAY FORD	8300 ARDWICK ARDMORE	OCPCASES	Higher	1476, 0.280, ENE
E23	ELLIOTT WILSON CAPIT	8300 ARDWICK ARDMORE	OCPCASES	Higher	1476, 0.280, ENE
F24	YELLOW FREIGHT	7521 JEFFERSON AVE	OCPCASES	Higher	1515, 0.287, ESE
F25	PARS ICE CREAM CO	7521 JEFFERSON AVE	OCPCASES	Higher	1515, 0.287, ESE
26	MINKOFF CORP.	7601 JEFFERSON AVE	OCPCASES, HIST LUST	Higher	1563, 0.296, ESE
G27	D C TRANSPORTATION/M	3433 PENNSY DR	OCPCASES	Lower	1656, 0.314, South
G28	WMATA - LANDOVER BUS	3433 PENNSY DRIVE	ENG CONTROLS	Lower	1656, 0.314, South
G29	WASHINGTON METRO	3433 PENNSY DR	OCPCASES, HIST UST	Lower	1656, 0.314, South
G30	METRO BUS GARAGE	3433 PENNSY DR	OCPCASES	Lower	1656, 0.314, South
31	HERTZ PENSKE	8318 ARDWICK-ARDMORE	OCPCASES	Higher	2007, 0.380, East
32	C & P TELEPHONE	8316 ARDWICK-ARDMORE	OCPCASES	Higher	2039, 0.386, ENE
H33	UNITED PARCEL SERVIC	8325 ARDWICK ARDMORE	OCPCASES, HIST LUST, NPDES	Higher	2102, 0.398, East
H34	UNITED PARCEL SERVIC	8325 ARDWICK-ARDMORE	OCPCASES	Higher	2102, 0.398, East
H35	UNITED PARCEL SERVIC	8325 ARDWICK ARDMORE	OCPCASES	Higher	2102, 0.398, East
36	HUB FURNITURE / RELI	3400 PENNSY DR	OCPCASES, HIST UST	Lower	2169, 0.411, SSW
37	STIDHAM TIRE CO., IN	3900 WHITETIRE RD	OCPCASES, HIST UST	Higher	2240, 0.424, ENE
38	INSULFORM EAST INC	3421 PENNSY DR	OCPCASES, NPDES	Lower	2377, 0.450, SSW
I39	RYDER TRUCK	2200 BEAVER RD (3901	OCPCASES	Higher	2404, 0.455, ENE

MAPPED SITES SUMMARY

Target Property Address:
3636 PENNSY DRIVE
HYATTSVILLE, MD 20785

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
I40	RYDER TRUCK RENTAL	2200 BEAVER RD (3901	OCPCASES	Higher	2404, 0.455, ENE
I41	RYDER TRUCK RENTAL	3901 WHITETIRE RD	OCPCASES	Higher	2462, 0.466, ENE
42	HERTZ/PENSKE	8333 ARDWICK-ARDMORE	OCPCASES	Higher	2563, 0.485, East

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
3636 PENNSY DR 3636 PENNSY DR PRINCE GEORGES (County), MD	ERNS NRC Report #: 892972	N/A
GES EXPOSITION SERVI 3636 B PENNSY DR LANDOVER, MD 20785	RCRA-SQG EPA ID:: MDR000523117	MDR000523117
LANDOVER MD. WAREHOU 3636 PENNSY DR LANDOVER, MD 20785	OCPCASES Date Closed: 01/02/1997 Facility Status: CLOSED Facility Id: 97-0260PG1 HIST UST Facility Id: 3009717 Tank Status: CURRENTL	N/A
TOYS "R" US 3636 PENNSY DRIVE LANDOVER, MD 20785	UST Facility Id: 6419 Tank Status: Permanently Out of Use Financial Assurance Database: Financial Assurance 2, Date of Government Version: 03/30/2018 Facility Id: 6419	N/A
GES EXPOSITION SERVI 3636 B PENNSY DR LANDOVER, MD 20785	FINDS Registry ID:: 110039529025 ECHO Registry ID: 110039529025	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List

EXECUTIVE SUMMARY

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

State- and tribal - equivalent CERCLIS

SHWS ---------- Notice of Potential Hazardous Waste Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Permitted Solid Waste Disposal Facilities

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

INST CONTROL ---------- Voluntary Cleanup Program Applicants/Participants

State and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing

VCP ---------- Voluntary Cleanup Program Applicants/Participants

State and tribal Brownfields sites

BROWNFIELDS ---------- Eligible Brownfields Properties

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY ---------- Recycling Directory
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
US CDL ---------- National Clandestine Laboratory Register

Local Land Records

LIENS 2 ---------- CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ---------- Hazardous Materials Information Reporting System
SPILLS 90 ---------- SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ---------- RCRA - Non Generators / No Longer Regulated
FUDS ---------- Formerly Used Defense Sites
DOD ---------- Department of Defense Sites
SCRD DRYCLEANERS ---------- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---------- Financial Assurance Information
EPA WATCH LIST ---------- EPA WATCH LIST
2020 COR ACTION ---------- 2020 Corrective Action Program List
TSCA ---------- Toxic Substances Control Act
TRIS ---------- Toxic Chemical Release Inventory System
SSTS ---------- Section 7 Tracking Systems
ROD ---------- Records Of Decision
RMP ---------- Risk Management Plans
RAATS ---------- RCRA Administrative Action Tracking System
PRP ---------- Potentially Responsible Parties
PADS ---------- PCB Activity Database System
ICIS ---------- Integrated Compliance Information System
FTTS ---------- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---- Indian Reservations
FUSRAP ---- Formerly Utilized Sites Remedial Action Program
UMTRA ---- Uranium Mill Tailings Sites
LEAD SMELTERS ---- Lead Smelter Sites
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
US MINES ---- Mines Master Index File
ABANDONED MINES ---- Abandoned Mines
UXO ---- Unexploded Ordnance Sites
DOCKET HWC ---- Hazardous Waste Compliance Docket Listing
FUELS PROGRAM ---- EPA Fuels Program Registered Listing
AIRS ---- Permit and Facility Information Listing
ASBESTOS ---- Asbestos Notification Listing
COAL ASH ---- Coal Ash Disposal Site Listing
DRYCLEANERS ---- Registered Drycleaning Facilities
LEAD ---- Lead Inspection Database
LRP ---- Land Restoration Program
NPDES ---- Wastewater Permit Listing
UIC ---- Underground Injection Wells Database

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS ---- Recovered Government Archive State Hazardous Waste Facilities List
RGA LF ---- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/11/2017 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WMATA METRO SUPPLY F	8201 ARDWICK ARDMORE	ENE 1/8 - 1/4 (0.150 mi.)	B9	13

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/11/2017 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MCKESSON DRUG CO	***7721 POLK ST***	***ESE 1/8 - 1/4 (0.211 mi.)***	***C13***	***22***
WMATA - CARMEN TURNE	***3500 PENNSY DRIVE***	***S 1/8 - 1/4 (0.234 mi.)***	***D18***	***29***

State and tribal leaking storage tank lists

OCPCASES: Cases monitored by the Oil Control Program.

A review of the OCPCASES list, as provided by EDR, and dated 03/30/2018 has revealed that there are 27 OCPCASES sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GEORGIA PACIFIC FACI Date Closed: 12/06/2001 Facility Status: CLOSED Facility Id: 01-1057PG1	***8121 ARDWICK-ARDMORE***	***NNE 0 - 1/8 (0.101 mi.)***	***6***	***12***
CANADA DRY Date Closed: 12/08/2005 Facility Status: CLOSED Facility Id: 01-1859PG1	3600 PENNSY DR	SSE 1/8 - 1/4 (0.138 mi.)	7	12
BRODY BROTHERS Date Closed: 01/21/1992	***3611 PENNSY DRIVE***	***SE 1/8 - 1/4 (0.177 mi.)***	***11***	***20***

Facility Status: CLOSED Facility Id: 92-1540PG1				
HECHINGER Date Closed: 06/19/1990 Facility Status: CLOSED Facility Id: 90-2576PG	3500 PENNSY DR	S 1/8 - 1/4 (0.234 mi.)	D16	25
HECHINGERS Date Closed: 06/23/2004 Date Closed: 03/24/1993 Date Closed: 02/02/1996 Date Closed: 10/28/1999 Date Closed: 04/08/1993 Facility Status: CLOSED Facility Id: 02-0905PG1 Facility Id: 92-0894PG Facility Id: 92-1207PG1 Facility Id: 99-1756PG1 Facility Id: 6-0265PG	***3500 PENNSY DR***	***S 1/8 - 1/4 (0.234 mi.)***	***D17***	***26***
UNKNOWN TRUCK Date Closed: 07/03/1997 Facility Status: CLOSED Facility Id: 97-1974PG1	ARDWICK-ARDMORE RD A	ENE 1/8 - 1/4 (0.247 mi.)	20	35
MALOUNCE'S TOWING Date Closed: 04/05/2002 Facility Status: CLOSED Facility Id: 02-1056PG1	3722 ARDWICK PLACE	E 1/4 - 1/2 (0.256 mi.)	21	35
BELTWAY FORD Date Closed: 12/07/1987 Facility Status: CLOSED Facility Id: 8-0705PG	8300 ARDWICK ARDMORE	ENE 1/4 - 1/2 (0.280 mi.)	E22	36
ELLIOTT WILSON CAPIT Date Closed: 11/06/2001 Facility Status: CLOSED Facility Id: 02-0606PG1	8300 ARDWICK ARDMORE	ENE 1/4 - 1/2 (0.280 mi.)	E23	36
YELLOW FREIGHT Date Closed: 08/09/1994 Facility Status: CLOSED Facility Id: 94-2614PG1	7521 JEFFERSON AVE	ESE 1/4 - 1/2 (0.287 mi.)	F24	36
PARS ICE CREAM CO Date Closed: 08/09/1994 Date Closed: 12/13/2005 Facility Status: CLOSED Facility Id: 92-2004PG1 Facility Id: 05-0442PG2	7521 JEFFERSON AVE	ESE 1/4 - 1/2 (0.287 mi.)	F25	37
MINKOFF CORP. Date Closed: 06/20/2002 Facility Status: CLOSED Facility Id: 92-1964PG1	***7601 JEFFERSON AVE***	***ESE 1/4 - 1/2 (0.296 mi.)***	***26***	***37***
HERTZ PENSKE Date Closed: 04/14/1995 Facility Status: CLOSED	8318 ARDWICK-ARDMORE	E 1/4 - 1/2 (0.380 mi.)	31	41

Facility Id: 95-1881PG1				
C & P TELEPHONE Date Closed: 06/12/1995 Facility Status: CLOSED Facility Id: 93-0946PG	8316 ARDWICK-ARDMORE	ENE 1/4 - 1/2 (0.386 mi.)	32	41
UNITED PARCEL SERVIC Date Closed: 11/06/1992 Facility Status: CLOSED Facility Id: 91-1165PG1	***8325 ARDWICK ARDMORE***	***E 1/4 - 1/2 (0.398 mi.)***	***H33***	***41***
UNITED PARCEL SERVIC Date Closed: 07/24/1987 Facility Status: CLOSED Facility Id: 7-1779PG1	8325 ARDWICK-ARDMORE	E 1/4 - 1/2 (0.398 mi.)	H34	44
UNITED PARCEL SERVIC Date Closed: 01/08/1995 Facility Status: CLOSED Facility Id: 90-0157PG1	8325 ARDWICK ARDMORE	E 1/4 - 1/2 (0.398 mi.)	H35	44
STIDHAM TIRE CO., IN Date Closed: 06/28/2001 Facility Status: CLOSED Facility Id: 92-1572PG1	***3900 WHITETIRE RD***	***ENE 1/4 - 1/2 (0.424 mi.)***	***37***	***45***
RYDER TRUCK Date Closed: 10/29/1991 Facility Status: CLOSED Facility Id: 91-0663PG	2200 BEAVER RD (3901	ENE 1/4 - 1/2 (0.455 mi.)	I39	48
RYDER TRUCK RENTAL Facility Status: CANCELLED Facility Id: 96-0964PG1	2200 BEAVER RD (3901	ENE 1/4 - 1/2 (0.455 mi.)	I40	48
RYDER TRUCK RENTAL Date Closed: 08/09/1994 Facility Status: CLOSED Facility Id: 94-2244PG1	3901 WHITETIRE RD	ENE 1/4 - 1/2 (0.466 mi.)	I41	49
HERTZ/PENSKE Date Closed: 12/10/1998 Facility Status: CLOSED Facility Id: 94-1103PG	8333 ARDWICK-ARDMORE	E 1/4 - 1/2 (0.485 mi.)	42	49

Lower Elevation	Address	Direction / Distance	Map ID	Page
D C TRANSPORTATION/M Date Closed: 03/27/1989 Facility Status: CLOSED Facility Id: 9-0622PG	3433 PENNSY DR	S 1/4 - 1/2 (0.314 mi.)	G27	37
WASHINGTON METRO Date Closed: 05/09/2003 Date Closed: 04/21/2015 Date Closed: 08/23/2011 Date Closed: 05/30/1991 Date Closed: 10/30/2003 **Additional key fields are available in the Map Findings section* Facility Status: CLOSED	***3433 PENNSY DR***	***S 1/4 - 1/2 (0.314 mi.)***	***G29***	***38***

Facility Id: 92-2021PG1
Facility Id: 10-0659PG
Facility Id: 11-0587PG
Facility Id: 91-2297PG1
Facility Id: 00-0327PG1
**Additional key fields are available in the Map Findings section*

METRO BUS GARAGE Date Closed: 08/31/2006 Facility Status: CLOSED Facility Id: 05-0577PG1	3433 PENNSY DR	S 1/4 - 1/2 (0.314 mi.)	G30	40
HUB FURNITURE / RELI Date Closed: 12/28/1995 Date Closed: 06/08/1999 Date Closed: 08/24/2004 Facility Status: CLOSED Facility Id: 95-2404PG1 Facility Id: 98-0210PG1 Facility Id: 05-0051PG1	***3400 PENNSY DR***	***SSW 1/4 - 1/2 (0.411 mi.)***	***36***	***44***
INSULFORM EAST INC Date Closed: 02/11/2014 Date Closed: 03/18/1996 Date Closed: 06/10/1996 Date Closed: 12/15/1999 Date Closed: 04/17/1990 Facility Status: CLOSED Facility Id: 14-0155PG Facility Id: 95-1112PG1 Facility Id: 96-1696PG1 Facility Id: 00-0892PG1 Facility Id: 90-2113PG	***3421 PENNSY DR***	***SSW 1/4 - 1/2 (0.450 mi.)***	***38***	***46***

HIST LUST: In 1999, the Department of the Environment stopped adding new sites to its Recovery Sites Database. Current leaking underground storage tank information maybe found in underground storage tank information maybe found in the OCPCASES database.

A review of the HIST LUST list, as provided by EDR, and dated 03/01/1999 has revealed that there are 2 HIST LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MINKOFF CORP. Open Or Closed: OPEN Case Number: 92-1964PG	***7601 JEFFERSON AVE***	***ESE 1/4 - 1/2 (0.296 mi.)***	***26***	***37***
UNITED PARCEL SERVIC Open Or Closed: CLOSED Case Number: 90-0157PG	***8325 ARDWICK ARDMORE***	***E 1/4 - 1/2 (0.398 mi.)***	***H33***	***41***

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of the Environment's Listing of Underground Storage Tanks Reported in Maryland.

A review of the UST list, as provided by EDR, and dated 03/30/2018 has revealed that there are 5 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
METRO SUPPLY FACILIT Facility Id: 9010 Tank Status: Permanently Out of Use	***8201 ARDWICK-ARDMORE***	***ENE 1/8 - 1/4 (0.150 mi.)***	***B8***	***12***
QFN #425 Facility Id: 19752 Tank Status: Currently In Use	***3701 PENNSY DRIVE***	***E 1/8 - 1/4 (0.171 mi.)***	***10***	***19***
BRODY BROTHERS Facility Id: 1833 Tank Status: Permanently Out of Use	***3611 PENNSY DRIVE***	***SE 1/8 - 1/4 (0.177 mi.)***	***11***	***20***
DISTRICT WHOLESALE D Facility Id: 11499 Tank Status: Permanently Out of Use	***7721 POLK STREET***	***ESE 1/8 - 1/4 (0.211 mi.)***	***C12***	***21***
HECHINGER PROPERTY Facility Id: 8717 Tank Status: Permanently Out of Use	***3500 PENNSY DRIVE***	***S 1/8 - 1/4 (0.234 mi.)***	***D19***	***33***

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of the Environment's Listing of Aboveground Storage Tanks Reported in Maryland.

A review of the AST list, as provided by EDR, and dated 03/30/2018 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WMATA - CARMEN TURNE Facility Id: 2011-OPT-10637	3500 PENNSY DR	S 1/8 - 1/4 (0.234 mi.)	D15	24

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

A review of the ENG CONTROLS list, as provided by EDR, and dated 11/10/2008 has revealed that there is 1 ENG CONTROLS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WMATA - LANDOVER BUS	3433 PENNSY DRIVE	S 1/4 - 1/2 (0.314 mi.)	G28	38

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 11/21/1996 has revealed that there are 4 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GEORGIA PACIFIC FACI	***8121 ARDWICK-ARDMORE***	***NNE 0 - 1/8 (0.101 mi.)***	***6***	***12***
Facility Id: 6009521				
Tank Status: REMOVED				
Tank Status: CURRENTL				
BRODY BROTHERS	***3611 PENNSY DRIVE***	***SE 1/8 - 1/4 (0.177 mi.)***	***11***	***20***
Facility Id: 3010044				
Tank Status: REMOVED				
DIST.WHOLESALE DRUG	7721 POLK ST	ESE 1/8 - 1/4 (0.211 mi.)	C14	24
Facility Id: 3009633				
Tank Status: REMOVED				
HECHINGER PROPERTY	***3500 PENNSY DRIVE***	***S 1/8 - 1/4 (0.234 mi.)***	***D19***	***33***
Facility Id: 3010201				
Tank Status: CURRENTL				

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 12 records.

Site Name	Database(s)
NEW CARROLLTON FEDERAL BUILDING	OCPCASES, NPDES
COLUMBIA PARK DRUM SITE	SHWS
FRESH MADE INC	OCPCASES
GEORGIA PACIFIC CO	OCPCASES
GEORGIA PACIFIC	OCPCASES
U-HAUL	OCPCASES
UNDERGROUND VAULT, WASHINGTON GAS	OCPCASES
UNIVERSAL REALTY SERVICES INC	OCPCASES
METRO SUPPLY	OCPCASES
SURFACE SPILL	OCPCASES
WEST LANHAM HILLS ELEMENTARY SCHOO	OCPCASES
MOBIL	OCPCASES

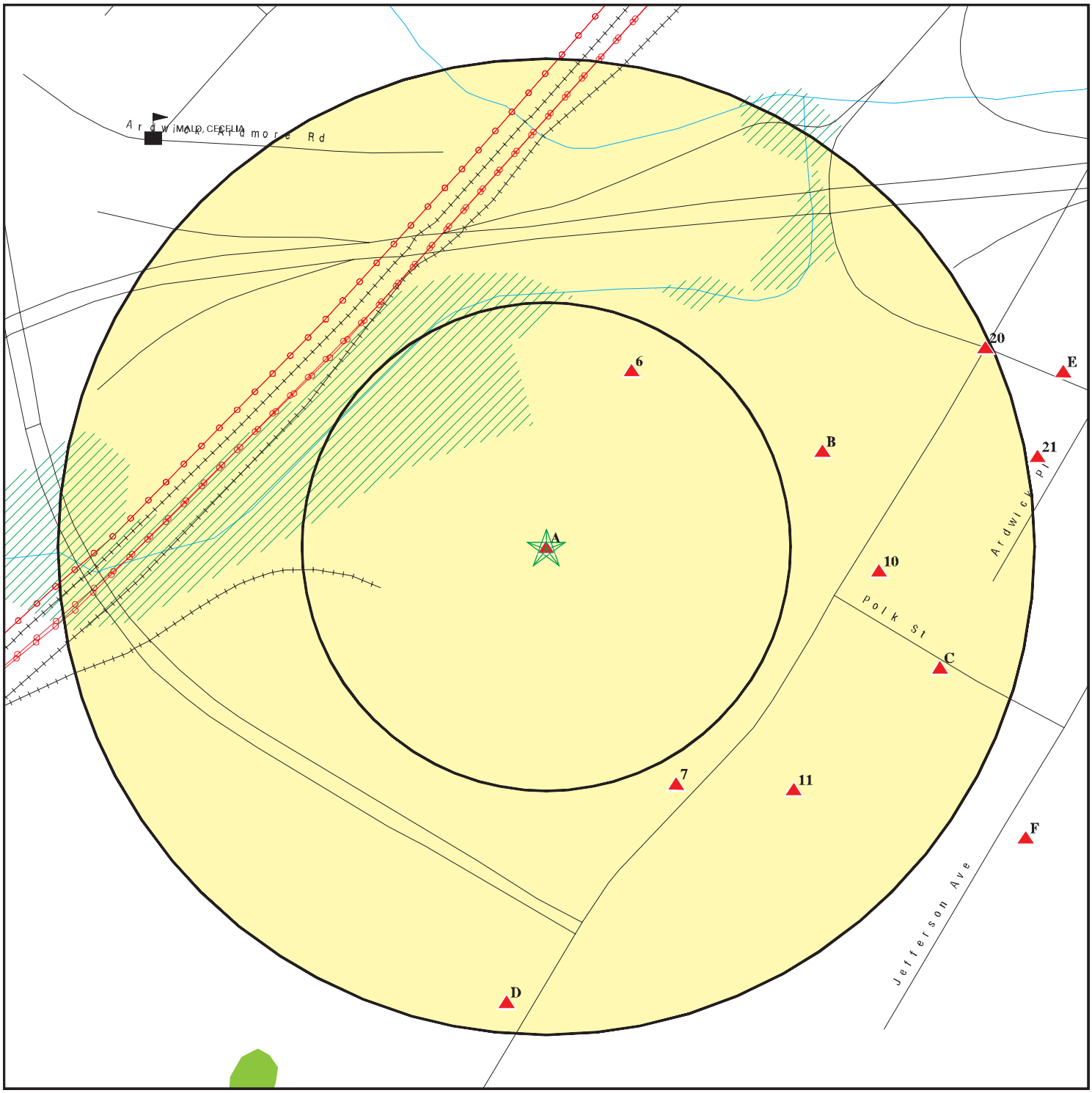
OVERVIEW MAP - 5327967.2S

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Upgradient Area

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Wmata Hro Pennsy Drive	CLIENT:	AECOM
ADDRESS:	3636 Pennsy Drive Hyattsville MD 20785	CONTACT:	Brendan Mcguinness
LAT/LONG:	38.9417 / 76.8757	INQUIRY #:	5327967.2s
		DATE:	June 11, 2018 3:36 pm

DETAIL MAP - 5327967.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

0 1/16 1/8 1/4 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Wmata Hro Pennsy Drive	CLIENT: AECOM
ADDRESS: 3636 Pennsy Drive Hyattsville MD 20785	CONTACT: Brendan Mcguinness
LAT/LONG: 38.9417 / 76.8757	INQUIRY #: 5327967.2s DATE: June 11, 2018 3:37 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	1	NR	NR	NR	1
RCRA-SQG	0.250	1	0	2	NR	NR	NR	3
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP	1	NR	NR	NR	NR	NR	1
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
INDIAN LUST	0.500		0	0	0	NR	NR	0
OCPCASES	0.500	1	1	5	21	NR	NR	28
HIST LUST	0.500		0	0	2	NR	NR	2
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250	1	0	5	NR	NR	NR	6
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	1	NR	NR	1
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
HIST UST	0.250	1	1	3	NR	NR	NR	5
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
ECHO	TP	1	NR	NR	NR	NR	NR	1
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
ASBESTOS	TP		NR	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	TP	1	NR	NR	NR	NR	NR	1
LEAD	TP		NR	NR	NR	NR	NR	0
LRP	0.500		0	0	0	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		8	2	17	24	0	0	51

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target Property **3636 PENNSY DR**
PRINCE GEORGES (County), MD

ERNS **2008892972**
N/A

Site 1 of 5 in cluster A

Actual: 79 ft.

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

A2
Target Property **GES EXPOSITION SERVICES**
3636 B PENNSY DR
LANDOVER, MD 20785

RCRA-SQG **1012179854**
MDR000523117

Site 2 of 5 in cluster A

Actual: 79 ft.

RCRA-SQG:

Date form received by agency:	03/02/2010
Facility name:	GES EXPOSITION SERVICES
Facility address:	3636 B PENNSY DR LANDOVER, MD 20785
EPA ID:	MDR000523117
Mailing address:	PENNSY DR LANDOVER, MD 20785
Contact:	CHRISTY SAPONE
Contact address:	PENNSY DR LANDOVER, MD 20785
Contact country:	US
Contact telephone:	301-583-5000
Telephone ext.:	5009
Contact email:	CSAPONE@GES.COM
EPA Region:	03
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	GES EXPOSITION SERVICES
Owner/operator address:	PENNSY DR LANDOVER, MD 20785
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	09/14/2009
Owner/Op end date:	Not reported
Owner/operator name:	KNICKERBOCKER PROPERTIES C/O LINCOLNPROP
Owner/operator address:	NORTH COURTHOUSE RD SUITE 100 ARLINGTON, VA 22201
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported

GES EXPOSITION SERVICES (Continued) **1012179854**

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/2001
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Historical Generators:

GES EXPOSITION SERVICES (Continued) **1012179854**

Date form received by agency: 09/14/2009
Site name: GES EXPOSITION SERVICES
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

A3 Target Property **LANDOVER MD. WAREHOUSE #5001**
3636 PENNSY DR
LANDOVER, MD 20785

Database(s): **OCPCASES, HIST UST**
EDR ID Number: **S104632972**
EPA ID Number: **N/A**

Site 3 of 5 in cluster A

Actual: 79 ft.

OCPCASES:
Facility ID: 97-0260PG1
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 08/13/1996
Date Closed: 01/02/1997
Release: YES
Cleanup: YES
Registration Number: 6419

Historical UST:
Facility ID: 3009717
Tank ID: 001
Age: 11
Capacity: 10,000
Tank Status: Currently in use
Product: Diesel

A4 Target Property **TOYS "R" US**
3636 PENNSY DRIVE
LANDOVER, MD 20785

Database(s): **UST, Financial Assurance**
EDR ID Number: **U003737317**
EPA ID Number: **N/A**

Site 4 of 5 in cluster A

Actual: 79 ft.

UST:
Facility Id: 6419
Oper Name: Mickey Bunts
Form Name: Mickey Bunts
Form Title: District Manager
Form Date: 12/06/1996
Owner Id: 3904

Owner:
Owner Name: Toys "R" Us
Owner Address: 3636 Pennsy Drive
Owner City: Landover
Owner State: MD
Owner Zip: 20785
Owner Phone: (301) 386-2300
Owner Contact: Mickey Butts

Tanks:
Tank ID: 1

TOYS "R" US (Continued) **U003737317**

Tank Status:	**Permanently Out of Use**
Tank Capacity:	10000
Substance Description:	Diesel
Tank Compartment:	False
Compartment Compartment:	A
Date Intalled:	12/01/1986
Tank Material Desc:	Other
Pipe Material Desc:	Other

MD Financial Assurance 2:

Region:	2
Facility ID:	6419
Self Insured:	False
Insurance:	False
Risk Retention Group:	False
Guarantee:	False
Surety Bonds:	False
Letter of Credit:	False
State Fund:	False
Other Finance:	False
Finacnce Comments:	Not reported
FR Not Listed:	False

A5 **GES EXPOSITION SERVICES** **FINDS** **1012233474**
Target **3636 B PENNSY DR** **ECHO** **N/A**
Property **LANDOVER, MD 20785**

Site 5 of 5 in cluster A

Actual:
79 ft.

FINDS:

Registry ID: 110039529025

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1012233474
Registry ID:	110039529025
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110039529025

6
NNE
< 1/8
0.101 mi.
531 ft.

GEORGIA PACIFIC FACILITY
8121 ARDWICK-ARDMORE RD
LANDOVER, MD 20785

OCPCASES
HIST UST

S104639192
N/A

Relative:
Higher

Actual:
80 ft.

OCPCASES:
Facility ID: 01-1057PG1
Facility Status/Code: CLOSED/Soil Contamination - Motor/Lube Oil
Date Open: 02/01/2001
Date Closed: 12/06/2001
Release: YES
Cleanup: YES
Registration Number: 11800

Historical UST:
Facility ID: 6009521
Tank ID: 001
Age: 24
Capacity: 8,000
Tank Status: Removed
Product: Diesel

Facility ID: 6009521
Tank ID: 002
Age: 1
Capacity: 10,000
Tank Status: Currently in use
Product: Diesel

7
SSE
1/8-1/4
0.138 mi.
730 ft.

CANADA DRY
3600 PENNSY DR
LANDOVER, MD 20785

OCPCASES

S105040658
N/A

Relative:
Higher

Actual:
88 ft.

OCPCASES:
Facility ID: 01-1859PG1
Facility Status/Code: CLOSED/Transfer Accident - Commercial Heating Oil
Date Open: 06/27/2001
Date Closed: 12/08/2005
Release: YES
Cleanup: YES
Registration Number: Not reported

B8
ENE
1/8-1/4
0.150 mi.
791 ft.

METRO SUPPLY FACILITY
8201 ARDWICK-ARDMORE ROAD
LANDOVER, MD 20785

Site 1 of 2 in cluster B

UST
Financial Assurance

U004013703
N/A

Relative:
Higher

Actual:
94 ft.

UST:
Facility Id: 9010
Oper Name: Perry Peckham
Form Name: Joan LeLacheur
Form Title: Manager, Environmental Services
Form Date: 06/23/1999
Owner Id: 2539

METRO SUPPLY FACILITY (Continued) **U004013703**

Owner:
- Owner Name: Washington Metropolitan Area Transit Authority (WMATA)
- Owner Address: Carmen Turner Facility 3500 Pennsy Drive RM C172
- Owner City: Landover
- Owner State: MD
- Owner Zip: 20785
- Owner Phone: (301) 618-7506
- Owner Contact: Carla Grano

Tanks:
- Tank ID: 1
- **Tank Status: Permanently Out of Use**
- Tank Capacity: 500
- Substance Description: Diesel
- Tank Compartment: False
- Compartment Compartment: A
- Date Intalled: Not reported
- Tank Material Desc: Asphalt Coated or Bare Steel
- Pipe Material Desc: Bare or Galvanized Steel

MD Financial Assurance 2:
- Region: 2
- Facility ID: 9010
- Self Insured: False
- Insurance: False
- Risk Retention Group: False
- Guarantee: False
- Surety Bonds: False
- Letter of Credit: False
- State Fund: False
- Other Finance: True
- Finacnce Comments: Local Government Fund
- FR Not Listed: False

B9 **WMATA METRO SUPPLY FACILITY** **RCRA-LQG** **1016141836**
ENE **8201 ARDWICK ARDMORE RD** **MDD985422237**
1/8-1/4 **LANDOVER, MD 20785**
0.150 mi.
791 ft. **Site 2 of 2 in cluster B**

Relative: **Higher**
Actual: **94 ft.**

RCRA-LQG:
- Date form received by agency: 10/11/2017
- Facility name: WMATA METRO SUPPLY FACILITY
- Facility address: 8201 ARDWICK ARDMORE RD
LANDOVER, MD 20785
- EPA ID: MDD985422237
- Mailing address: 3500 PENNSY DR
HYATTSVILLE, MD 20785
- Contact: CARLA GRANO
- Contact address: 3500 PENNSY DRIVE
HYATTSVILLE, MD 20785
- Contact country: US
- Contact telephone: 202-962-5077
- Contact email: CGRANO@WMATA.COM
- EPA Region: 03

WMATA METRO SUPPLY FACILITY (Continued) **1016141836**

Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: WASHINGTON METROPOLITAN AREA TRANSIT AUT
Owner/operator address: 3500 PENNSY DR
HYATTSVILLE, MD 20785
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: 05/20/1981
Owner/Op end date: Not reported

Owner/operator name: WASHINGTON METROPOLITAN AREA TRANSIT AUT
Owner/operator address: 3500 PENNSY DR
HYATTSVILLE, MD 20785
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Municipal
Owner/Operator Type: Operator
Owner/Op start date: 07/27/1981
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No

WMATA METRO SUPPLY FACILITY (Continued) **1016141836**

Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D016
. Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Historical Generators:
Date form received by agency: 10/11/2017
Site name: WMATA METRO SUPPLY FACILITY
Classification: Small Quantity Generator

WMATA METRO SUPPLY FACILITY (Continued) **1016141836**

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D016
. Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 06/01/2016
Site name: WMATA METRO SUPPLY FACILITY
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

WMATA METRO SUPPLY FACILITY (Continued) **1016141836**

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 04/11/2013
Site name: WMATA METRO SUPPLY FACILITY
Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

WMATA METRO SUPPLY FACILITY (Continued) **1016141836**

. Waste code: D008
. Waste name: LEAD

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

Date form received by agency: 05/17/1993
Site name: WMATA METRO SUPPLY FACILITY
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D008
. Waste name: LEAD

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

10
East
1/8-1/4
0.171 mi.
902 ft.

QFN #425
3701 PENNSY DRIVE
LANDOVER, MD 20785

UST **U004130663**
Financial Assurance **N/A**

Relative:
Higher

Actual:
89 ft.

UST:

Facility Id:	19752
Oper Name:	Eric D. Hiltner
Form Name:	Eric D. Hiltner
Form Title:	Environmental Manager
Form Date:	08/25/2015
Owner Id:	1673

Owner:

Owner Name:	Quarles Petroleum Inc.
Owner Address:	1701 Fall Hill Avenue Suite 200
Owner City:	Fredericksburg
Owner State:	VA
Owner Zip:	22401
Owner Phone:	(540) 371-2400
Owner Contact:	Eric D. Hiltner

Tanks:

Tank ID:	1
Tank Status:	**Currently In Use**
Tank Capacity:	14000
Substance Description:	Diesel
Tank Compartment:	True
Compartment Compartment:	B
Date Intalled:	07/01/2008
Tank Material Desc:	Composite (Steel w/ FRP)
Pipe Material Desc:	Flexible Plastic

Tank ID:	1
Tank Status:	**Currently In Use**
Tank Capacity:	11000
Substance Description:	Gasohol
Tank Compartment:	True
Compartment Compartment:	A
Date Intalled:	07/01/2008
Tank Material Desc:	Composite (Steel w/ FRP)
Pipe Material Desc:	Flexible Plastic

MD Financial Assurance 2:

Region:	2
Facility ID:	19752
Self Insured:	False
Insurance:	True
Risk Retention Group:	False
Guarantee:	False
Surety Bonds:	False
Letter of Credit:	False
State Fund:	False
Other Finance:	False
Finacnce Comments:	Policy # UST G27058590-004 Insurer: Illinois Union Ins. Co. Policy Period: 6/1/15 - 6/1/16 (dt)
FR Not Listed:	False

11
SE
1/8-1/4
0.177 mi.
936 ft.

BRODY BROTHERS
3611 PENNSY DRIVE
LANDOVER, MD 20785

OCPCASES
UST
HIST UST
Financial Assurance

U001432787
N/A

Relative:
Higher

Actual:
94 ft.

OCPCASES:

Facility ID:	92-1540PG1
Facility Status/Code:	CLOSED/
Date Open:	01/21/1992
Date Closed:	01/21/1992
Release:	Not reported
Cleanup:	Not reported
Registration Number:	1833

UST:

Facility Id:	1833
Oper Name:	Not reported
Form Name:	Jack Miller
Form Title:	Vice President Operations
Form Date:	01/22/1992
Owner Id:	1210

Owner:

Owner Name:	Besche Oil Company
Owner Address:	P.O. Box 277
Owner City:	Waldorf
Owner State:	MD
Owner Zip:	20604
Owner Phone:	(301) 843-5930
Owner Contact:	Michael A. Besche

Tanks:

Tank ID:	1
Tank Status:	**Permanently Out of Use**
Tank Capacity:	8000
Substance Description:	Gasoline
Tank Compartment:	False
Compartment Compartment:	A
Date Intalled:	01/01/1977
Tank Material Desc:	Not Listed
Pipe Material Desc:	Not Listed

Tank ID:	2
Tank Status:	**Permanently Out of Use**
Tank Capacity:	2000
Substance Description:	Diesel
Tank Compartment:	False
Compartment Compartment:	A
Date Intalled:	01/01/1977
Tank Material Desc:	Not Listed
Pipe Material Desc:	Not Listed

Historical UST:

Facility ID:	3010044
Tank ID:	001
Age:	25

BRODY BROTHERS (Continued) **U001432787**

Capacity: 8,000
Tank Status: Removed
Product: Gasoline

Facility ID: 3010044
Tank ID: 002
Age: 16
Capacity: 2,000
Tank Status: Removed
Product: Diesel

MD Financial Assurance 2:
Region: 2
Facility ID: 1833
Self Insured: False
Insurance: False
Risk Retention Group: False
Guarantee: False
Surety Bonds: False
Letter of Credit: False
State Fund: False
Other Finance: False
Finacnce Comments: Not reported
FR Not Listed: False

C12 **DISTRICT WHOLESALE DRUG CORP./DIV. SPECTRO INC.** **UST** **U003876890**
ESE **7721 POLK STREET** **Financial Assurance** **N/A**
1/8-1/4 **LANDOVER, MD 20785**
0.211 mi.
1113 ft. **Site 1 of 3 in cluster C**

Relative: Higher

Actual: 89 ft.

UST:
Facility Id: 11499
Oper Name: Richard H. Levin
Form Name: Richard H. Levin
Form Title: Vice President
Form Date: 05/05/1986
Owner Id: 7116

Owner:
Owner Name: District Wholesale Drug Corp./Div. Spectro Inc.
Owner Address: 7721 Polk Street
Owner City: Landover
Owner State: MD
Owner Zip: 20785
Owner Phone: (301) 322-1100
Owner Contact: Richard H. Levin

Tanks:
Tank ID: 1
Tank Status: Permanently Out of Use
Tank Capacity: 10000
Substance Description: Gasoline
Tank Compartment: False
Compartment Compartment: A
Date Intalled: 01/01/1972
Tank Material Desc: Unknown

DISTRICT WHOLESALE DRUG CORP./DIV. SPECTRO INC. (Continued) **U003876890**

Pipe Material Desc: Unknown

MD Financial Assurance 2:
Region: 2
Facility ID: 11499
Self Insured: False
Insurance: False
Risk Retention Group: False
Guarantee: False
Surety Bonds: False
Letter of Credit: False
State Fund: False
Other Finance: False
Finacnce Comments: Not reported
FR Not Listed: False

C13 **MCKESSON DRUG CO** **RCRA-SQG 1000864992**
ESE **7721 POLK ST** **FINDS MD0000126516**
1/8-1/4 **LANDOVER, MD 20785** **ECHO**
0.211 mi.
1113 ft. **Site 2 of 3 in cluster C**

Relative: Higher

Actual: 89 ft.

RCRA-SQG:
Date form received by agency: 02/02/1994
Facility name: MCKESSON DRUG CO
Facility address: 7721 POLK ST
LANDOVER, MD 20785
EPA ID: MD0000126516
Contact: GEORGE NEAL
Contact address: 7721 POLK ST
LANDOVER, MD 20785
Contact country: US
Contact telephone: 301-322-1100
Contact email: Not reported
EPA Region: 03
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: MCKESSON CORP
Owner/operator address: 1 POST ST
SAN FRANCISCO, CA 94104
Owner/operator country: Not reported
Owner/operator telephone: 415-983-8300
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

MCKESSON DRUG CO (Continued) **1000864992**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110006505932

Environmental Interest/Information System
MD-RCRA (Maryland - Resource Conservation And Recovery Act Information System) houses state information relating to the Resource Conservation and Recovery Act (RCRA).

RCRAInfo is a national information system that supports the Resource

MCKESSON DRUG CO (Continued) **1000864992**

Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000864992
Registry ID: 110006505932
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110006505932

C14 **DIST.WHOLESALE DRUG CORP.DIV.SPE** **HIST UST** **S104632915**
ESE **7721 POLK ST** **N/A**
1/8-1/4 **LANDOVER, MD 20785**
0.211 mi.
1113 ft. **Site 3 of 3 in cluster C**

Relative: Higher
Actual: 89 ft.

Historical UST:
Facility ID: 3009633
Tank ID: 001
Age: 23
Capacity: 10,000
Tank Status: Removed
Product: Gasoline

D15 **WMATA - CARMEN TURNER FACILITY** **AST** **A100435800**
South **3500 PENNSY DR** **N/A**
1/8-1/4 **LANDOVER, MD 20785**
0.234 mi.
1235 ft. **Site 1 of 5 in cluster D**

Relative: Higher
Actual: 84 ft.

AST:
Facility Id: 2011-OPT-10637
Bill Name: WMATA - Carmen Turner Facility
Bill Addr: 3500 Pennsy Dr; Bldg C
Bill Addr2: WMATA
Bill City/State/Zip: Landover, MD 20785
Bill Phone: Not reported
Owner: Washington Metropolitan Area Transit Authority
Owner Address: 3500 Pennsy Dr
Owner City State Zip: Hyattsville, MD 20785

Tanks:
Tank ID: 1
Capacity: 2000
Product: Diesel Fuel
AI ID: 11854
Permit Type: Oil Operations
Product Description: 2,000-gallon diesel
Owner Phone: 202-962-1234

WMATA - CARMEN TURNER FACILITY (Continued) **A100435800**

Tank ID:	2
Capacity:	500
Product:	Diesel Fuel
AI ID:	11854
Permit Type:	Oil Operations
Product Description:	500-gallon diesel
Owner Phone:	202-962-1234

Tank ID:	3
Capacity:	500
Product:	Motor Oil
AI ID:	11854
Permit Type:	Oil Operations
Product Description:	500-gallon motor oil
Owner Phone:	202-962-1234

Tank ID:	4
Capacity:	1000
Product:	Used Oil
AI ID:	11854
Permit Type:	Oil Operations
Product Description:	1,000-gallon used oil
Owner Phone:	202-962-1234

Tank ID:	5
Capacity:	2000
Product:	No. 2 Fuel
AI ID:	11854
Permit Type:	Oil Operations
Product Description:	2,000-gallon #2 heating oil
Owner Phone:	202-962-1234

Tank ID:	6
Capacity:	2000
Product:	Used Oil
AI ID:	11854
Permit Type:	Oil Operations
Product Description:	2,000-gallon used oil
Owner Phone:	202-962-1234

D16 **HECHINGER** **OCPCASES** **S120842456**
South **3500 PENNSY DR** **N/A**
1/8-1/4 **LANDOVER, MD 20785**
0.234 mi.
1235 ft. **Site 2 of 5 in cluster D**

Relative:
Higher

Actual:
84 ft.

OCPCASES:

Facility ID:	90-2576PG
Facility Status/Code:	CLOSED/
Date Open:	05/23/1990
Date Closed:	06/19/1990
Release:	Not reported
Cleanup:	Not reported
Registration Number:	8717

D17
South
1/8-1/4
0.234 mi.
1235 ft.

HECHINGERS
3500 PENNSY DR
LANDOVER, MD 20785

Site 3 of 5 in cluster D

OCPCASES
NPDES

S104849482
N/A

Relative:
Higher

Actual:
84 ft.

OCPCASES:

Facility ID:	02-0905PG1
Facility Status/Code:	CLOSED/Soil Contamination - Residential Heating Oil
Date Open:	01/11/2002
Date Closed:	06/23/2004
Release:	YES
Cleanup:	YES
Registration Number:	8717

Facility ID:	92-0894PG
Facility Status/Code:	CLOSED/
Date Open:	10/08/1991
Date Closed:	03/24/1993
Release:	Not reported
Cleanup:	Not reported
Registration Number:	8717

Facility ID:	92-1207PG1
Facility Status/Code:	CLOSED/
Date Open:	11/14/1991
Date Closed:	02/02/1996
Release:	Not reported
Cleanup:	Not reported
Registration Number:	8717

Facility ID:	99-1756PG1
Facility Status/Code:	CLOSED/Tank Closure - Motor/Lube Oil
Date Open:	01/20/1999
Date Closed:	10/28/1999
Release:	NO
Cleanup:	NO
Registration Number:	8717

Facility ID:	6-0265PG
Facility Status/Code:	CLOSED/
Date Open:	09/04/1985
Date Closed:	04/08/1993
Release:	Not reported
Cleanup:	Not reported
Registration Number:	8717

NPDES:

Facility Status:	Issued
Bay Trib Number:	Not reported
Watershed:	Not reported
Permit Type:	General Permit
Description:	Not reported
Sic Number:	4111
Permit Number:	Not reported
Npdes Number:	MDR002534
App Description:	Not reported
Latitude/Longitude:	Not reported
Last Issued:	02/20/2015

HECHINGERS (Continued) **S104849482**

Expiration Date:	12/31/2018
Owner Name:	Not reported
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City:	Not reported
Owner State:	Not reported
Owner Zip:	Not reported
Received:	Not reported
Comments:	Not reported

AI ID:	11854
Address 2:	Not reported
SIC Description:	Sector P - Local & Suburban Transit
SIC Code2:	Not reported
SIC Description 2:	Not reported
SIC Code 3:	Not reported
SIC Description 3:	Not reported
Status Date:	02/20/2015
State Number:	12SR2534
Approval Issued Date:	02/20/2015
Effective End Date:	12/31/2018
Facility Status:	Issued
Bay Trib Number:	Not reported
Watershed:	Not reported
Permit Type:	General Permit
Description:	Not reported
Sic Number:	4111
Permit Number:	Not reported
Npdes Number:	MDR002534
App Description:	Not reported
Latitude/Longitude:	Not reported
Last Issued:	02/20/2015
Expiration Date:	12/31/2018
Owner Name:	Not reported
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City:	Not reported
Owner State:	Not reported
Owner Zip:	Not reported
Received:	Not reported
Comments:	Not reported

AI ID:	11854
Address 2:	Not reported
SIC Description:	Sector P - Local & Suburban Transit
SIC Code2:	Not reported
SIC Description 2:	Not reported
SIC Code 3:	Not reported
SIC Description 3:	Not reported
Status Date:	02/20/2015
State Number:	12SR2534
Approval Issued Date:	02/20/2015
Effective End Date:	12/31/2018
Facility Status:	Not reported
Bay Trib Number:	Not reported
Watershed:	Not reported
Permit Type:	Not reported

HECHINGERS (Continued) **S104849482**

Description:	Not reported
Sic Number:	Not reported
Permit Number:	Not reported
Npdes Number:	Not reported
App Description:	Not reported
Latitude/Longitude:	Not reported
Last Issued:	Not reported
Expiration Date:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City:	Not reported
Owner State:	Not reported
Owner Zip:	Not reported
Received:	Received_September2012
Comments:	Application received for Installation of two HB Smith (19A-S/W-07) boilers each rated @ 1.137 MMBtu, one Trance (MCCB040) boiler rated @1.5 MMBtu, and one Trane (MCCB050) rated @ 1.8 MMBtu

AI ID:	Not reported
Address 2:	Not reported
SIC Description:	Not reported
SIC Code2:	Not reported
SIC Description 2:	Not reported
SIC Code 3:	Not reported
SIC Description 3:	Not reported
Status Date:	Not reported
State Number:	Not reported
Approval Issued Date:	Not reported
Effective End Date:	Not reported
Facility Status:	Not reported
Bay Trib Number:	Not reported
Watershed:	Not reported
Permit Type:	Not reported
Description:	Not reported
Sic Number:	Not reported
Permit Number:	Not reported
Npdes Number:	Not reported
App Description:	Not reported
Latitude/Longitude:	Not reported
Last Issued:	Not reported
Expiration Date:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City:	Not reported
Owner State:	Not reported
Owner Zip:	Not reported
Received:	Received_October2012
Comments:	Application received for Installation of four Trane (MCCB100) boilers each rated at 3.0 MMBtu per hour

AI ID:	Not reported
Address 2:	Not reported
SIC Description:	Not reported
SIC Code2:	Not reported
SIC Description 2:	Not reported

HECHINGERS (Continued) **S104849482**

SIC Code 3:	Not reported
SIC Description 3:	Not reported
Status Date:	Not reported
State Number:	Not reported
Approval Issued Date:	Not reported
Effective End Date:	Not reported
Facility Status:	Issued
Bay Trib Number:	Not reported
Watershed:	Not reported
Permit Type:	General Permit
Description:	Not reported
Sic Number:	4111
Permit Number:	Not reported
Npdes Number:	MDR002534
App Description:	Not reported
Latitude/Longitude:	Not reported
Last Issued:	02/20/2015
Expiration Date:	12/31/2018
Owner Name:	Not reported
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City:	Not reported
Owner State:	Not reported
Owner Zip:	Not reported
Received:	Not reported
Comments:	Not reported

AI ID:	11854
Address 2:	Not reported
SIC Description:	Sector P - Local & Suburban Transit
SIC Code2:	Not reported
SIC Description 2:	Not reported
SIC Code 3:	Not reported
SIC Description 3:	Not reported
Status Date:	02/20/2015
State Number:	12SR2534
Approval Issued Date:	02/20/2015
Effective End Date:	12/31/2018

D18 **WMATA - CARMEN TURNER FACILITY** **RCRA-SQG 1011489093**
South **3500 PENNSY DRIVE** **ECHO MDR000521799**
1/8-1/4 **LANDOVER, MD 20785**
0.234 mi.
1235 ft. **Site 4 of 5 in cluster D**

Relative: RCRA-SQG:
Higher

Date form received by agency:	04/11/2013
Facility name:	WMATA - CARMEN TURNER FACILITY
Facility address:	3500 PENNSY DR LANDOVER, MD 20785
EPA ID:	MDR000521799
Contact:	CARLA GRANO
Contact address:	3500 PENNSY DRIVE HYATTSVILLE, MD 20785
Contact country:	US
Contact telephone:	202-962-5077
Contact email:	Not reported
EPA Region:	03
Land type:	State

Actual:
84 ft.

WMATA - CARMEN TURNER FACILITY (Continued) **1011489093**

Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: WASHINGTON METROPOLITAN AREA TRANSIT AUT
Owner/operator address: 3500 PENNSY DR
HYATTSVILLE, MD 20785
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Municipal
Owner/Operator Type: Operator
Owner/Op start date: 03/07/2001
Owner/Op end date: Not reported

Owner/operator name: WASHINGTON METROPOLITAN AREA TRANSIT AUT
Owner/operator address: 3500 PENNSY DR
HYATTSVILLE, MD 20785
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: 03/07/2001
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

WMATA - CARMEN TURNER FACILITY (Continued) **1011489093**

. Waste code: D018
. Waste name: BENZENE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Historical Generators:
Date form received by agency: 03/01/2010
Site name: CARMEN TURNER FACILITY - WMATA
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D009
. Waste name: MERCURY

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL

WMATA - CARMEN TURNER FACILITY (Continued) **1011489093**

BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 03/21/2008
Site name: CARMEN TURNER FACILITY - WMATA
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 03/07/2001
Site name: WMATA - PENNSY DRIVE
Classification: Not a generator, verified

. Waste code: D002
. Waste name: CORROSIVE WASTE

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 12/22/2008
Date achieved compliance: 12/22/2008
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 12/22/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 12/22/2008
Evaluation lead agency: State

ECHO:
Envid: 1011489093
Registry ID: 110037396047
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110037396047

D19 **HECHINGER PROPERTY** **UST** **1001232463**
South **3500 PENNSY DRIVE** **HIST UST** **N/A**
1/8-1/4 **LANDOVER, MD 20785** **Financial Assurance**
0.234 mi.
1235 ft. **Site 5 of 5 in cluster D**

Relative:
Higher

Actual:
84 ft.

UST:

Facility Id:	8717
Oper Name:	Jamie Gutierrez
Form Name:	Lawrence G. Rief
Form Title:	Partner
Form Date:	09/08/1999
Owner Id:	6464

Owner:

Owner Name:	Wicomico Industrial Center Ltd Partnership
Owner Address:	17 W. Pennsylvania Avenue 5th Floor
Owner City:	Towson
Owner State:	MD
Owner Zip:	21204
Owner Phone:	(410) 296-4800
Owner Contact:	Lawrence G. Rief

Tanks:

Tank ID:	1
Tank Status:	**Permanently Out of Use**
Tank Capacity:	20000
Substance Description:	Heating Oil
Tank Compartment:	False
Compartment Compartment:	A
Date Intalled:	10/01/1992
Tank Material Desc:	Cathodically Protected Steel (Coating w/CP - Galvanic)
Pipe Material Desc:	Fiberglass Reinforced Plastic

Tank ID:	2
Tank Status:	**Permanently Out of Use**
Tank Capacity:	2000
Substance Description:	Diesel
Tank Compartment:	False
Compartment Compartment:	A
Date Intalled:	06/01/1989
Tank Material Desc:	Asphalt Coated or Bare Steel
Pipe Material Desc:	Bare or Galvanized Steel

Tank ID:	3
Tank Status:	**Permanently Out of Use**
Tank Capacity:	10000
Substance Description:	Diesel
Tank Compartment:	False
Compartment Compartment:	A
Date Intalled:	06/01/1977
Tank Material Desc:	Cathodically Protected Steel (Coating w/CP - Galvanic)
Pipe Material Desc:	Fiberglass Reinforced Plastic

Tank ID:	4
Tank Status:	**Permanently Out of Use**
Tank Capacity:	10000
Substance Description:	Diesel
Tank Compartment:	False

HECHINGER PROPERTY (Continued) **1001232463**

Compartment Compartment: A
Date Intalled: 06/01/1977
Tank Material Desc: Cathodically Protected Steel (Coating w/CP - Galvanic)
Pipe Material Desc: Fiberglass Reinforced Plastic

Tank ID: 5
Tank Status: **Permanently Out of Use**
Tank Capacity: 2000
Substance Description: Heating Oil
Tank Compartment: False
Compartment Compartment: A
Date Intalled: 06/01/1987
Tank Material Desc: Unknown
Pipe Material Desc: Unknown

Tank ID: 6
Tank Status: **Permanently Out of Use**
Tank Capacity: 500
Substance Description: Used Oil
Tank Compartment: False
Compartment Compartment: A
Date Intalled: 06/01/1977
Tank Material Desc: Asphalt Coated or Bare Steel
Pipe Material Desc: Bare or Galvanized Steel

Tank ID: 7
Tank Status: **Permanently Out of Use**
Tank Capacity: 10000
Substance Description: Gasoline
Tank Compartment: False
Compartment Compartment: A
Date Intalled: 06/01/1977
Tank Material Desc: Asphalt Coated or Bare Steel
Pipe Material Desc: Bare or Galvanized Steel

Historical UST:
Facility ID: 3010201
Tank ID: 001
Age: 19
Capacity: 20,000
Tank Status: Currently in use
Product: Heating Oil

Facility ID: 3010201
Tank ID: 002
Age: 19
Capacity: 2,000
Tank Status: Currently in use
Product: Diesel

Facility ID: 3010201
Tank ID: 003
Age: 19
Capacity: 10,000
Tank Status: Currently in use
Product: Diesel

HECHINGER PROPERTY (Continued) **1001232463**

Facility ID: 3010201
Tank ID: 004
Age: 19
Capacity: 10,000
Tank Status: Currently in use
Product: Diesel

Facility ID: 3010201
Tank ID: 005
Age: 12
Capacity: 500
Tank Status: Currently in use
Product: Used Oil

MD Financial Assurance 2:
Region: 2
Facility ID: 8717
Self Insured: False
Insurance: False
Risk Retention Group: False
Guarantee: False
Surety Bonds: False
Letter of Credit: False
State Fund: False
Other Finance: False
Finacnce Comments: Not reported
FR Not Listed: True

20
ENE
1/8-1/4
0.247 mi.
1304 ft.

UNKNOWN TRUCK **OCPCASES** **S104601561**
ARDWICK-ARDMORE RD AND PENNSY DR **N/A**
LANDOVER, MD 20785

Relative:
Higher

Actual:
93 ft.

OCPCASES:
Facility ID: 97-1974PG1
Facility Status/Code: CLOSED/Transfer Accident Motor/Lube Oil
Date Open: 04/28/1997
Date Closed: 07/03/1997
Release: YES
Cleanup: YES
Registration Number: Not reported

21
East
1/4-1/2
0.256 mi.
1351 ft.

MALOUNCE'S TOWING **OCPCASES** **S105509024**
3722 ARDWICK PLACE **N/A**
LANDOVER, MD 20785

Relative:
Higher

Actual:
102 ft.

OCPCASES:
Facility ID: 02-1056PG1
Facility Status/Code: CLOSED/Dumping
Date Open: 02/19/2002
Date Closed: 04/05/2002
Release: YES
Cleanup: YES

MALOUNCE'S TOWING (Continued) **S105509024**

Registration Number: Not reported

E22 **BELTWAY FORD** **OCPCASES** **S108472821**
ENE **8300 ARDWICK ARDMORE RD** **N/A**
1/4-1/2 **LANDOVER, MD 20785**
0.280 mi.
1476 ft. **Site 1 of 2 in cluster E**

Relative:
Higher

Actual:
95 ft.

OCPCASES:
Facility ID: 8-0705PG
Facility Status/Code: CLOSED/
Date Open: 10/26/1987
Date Closed: 12/07/1987
Release: Not reported
Cleanup: Not reported
Registration Number: 15346

E23 **ELLIOTT WILSON CAPITAL TRUCKS** **OCPCASES** **S105508643**
ENE **8300 ARDWICK ARDMORE RD** **N/A**
1/4-1/2 **LANDOVER, MD 20785**
0.280 mi.
1476 ft. **Site 2 of 2 in cluster E**

Relative:
Higher

Actual:
95 ft.

OCPCASES:
Facility ID: 02-0606PG1
Facility Status/Code: CLOSED/Soil Contamination - Motor/Lube Oil
Date Open: 11/01/2001
Date Closed: 11/06/2001
Release: YES
Cleanup: YES
Registration Number: 15346

F24 **YELLOW FREIGHT** **OCPCASES** **S120842612**
ESE **7521 JEFFERSON AVE** **N/A**
1/4-1/2 **LANDOVER, MD 20785**
0.287 mi.
1515 ft. **Site 1 of 2 in cluster F**

Relative:
Higher

Actual:
98 ft.

OCPCASES:
Facility ID: 94-2614PG1
Facility Status/Code: CLOSED/
Date Open: 04/11/1994
Date Closed: 08/09/1994
Release: Not reported
Cleanup: Not reported
Registration Number: 2788

Facility ID: 94-2614PG1
Facility Status/Code: CLOSED/
Date Open: 04/11/1994
Date Closed: 08/09/1994
Release: Not reported
Cleanup: Not reported
Registration Number: 2788

F25
ESE
1/4-1/2
0.287 mi.
1515 ft.

PARS ICE CREAM CO
7521 JEFFERSON AVE
LANDOVER, MD 20785

Site 2 of 2 in cluster F

OCPCASES | **U002237490**
N/A

Relative:
Higher

Actual:
98 ft.

OCPCASES:

Facility ID:	92-2004PG1
Facility Status/Code:	CLOSED/
Date Open:	03/17/1992
Date Closed:	08/09/1994
Release:	Not reported
Cleanup:	Not reported
Registration Number:	2788

Facility ID:	05-0442PG2
Facility Status/Code:	CLOSED/Dumping
Date Open:	10/04/2004
Date Closed:	12/13/2005
Release:	YES
Cleanup:	YES
Registration Number:	Not reported

26
ESE
1/4-1/2
0.296 mi.
1563 ft.

MINKOFF CORP.
7601 JEFFERSON AVE
LANDOVER, MD 20785

OCPCASES **HIST LUST** | **S103287091**
N/A

Relative:
Higher

Actual:
95 ft.

OCPCASES:

Facility ID:	92-1964PG1
Facility Status/Code:	CLOSED/Tank Closure - Motor/Lube Oil
Date Open:	03/12/1992
Date Closed:	06/20/2002
Release:	YES
Cleanup:	YES
Registration Number:	14258

Historical LUST:

Recover Type:	Monitoring - No active remediation. Sampling of monitoring wells only
County:	PRINCE GEORGE'S
Case Number:	92-1964PG
Open/Closed:	**OPEN**

G27
South
1/4-1/2
0.314 mi.
1656 ft.

D C TRANSPORTATION/METRO GARAGE
3433 PENNSY DR
LANDOVER, MD 20785

Site 1 of 4 in cluster G

OCPCASES | **S108474168**
N/A

Relative:
Lower

Actual:
70 ft.

OCPCASES:

Facility ID:	9-0622PG
Facility Status/Code:	CLOSED/
Date Open:	10/13/1988
Date Closed:	03/27/1989
Release:	Not reported
Cleanup:	Not reported
Registration Number:	8970

G28 **WMATA - LANDOVER BUS DIVISION** **ENG CONTROLS** **S109325994**
South **3433 PENNSY DRIVE** **N/A**
1/4-1/2 **PRINCE GEORGES, MD 20785**
0.314 mi.
1656 ft. **Site 2 of 4 in cluster G**

Relative: ENG CONTROLS:
Lower Material: Double Walled

Actual:
70 ft.

G29 **WASHINGTON METRO** **OCPCASES** **S104641702**
South **3433 PENNSY DR** **HIST UST** **N/A**
1/4-1/2 **LANDOVER, MD 20785**
0.314 mi.
1656 ft. **Site 3 of 4 in cluster G**

Relative: OCPCASES:
Lower

Actual:
70 ft.

Facility ID: 92-2021PG1
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 03/19/1992
Date Closed: 05/09/2003
Release: YES
Cleanup: YES
Registration Number: 8970

Facility ID: 10-0659PG
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 06/08/2010
Date Closed: 04/21/2015
Release: YES
Cleanup: YES
Registration Number: 8970

Facility ID: 11-0587PG
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 04/18/2011
Date Closed: 08/23/2011
Release: NO
Cleanup: NO
Registration Number: 8970

Facility ID: 91-2297PG1
Facility Status/Code: CLOSED/Transfer Accident Motor/Lube Oil
Date Open: 05/30/1991
Date Closed: 05/30/1991
Release: Not reported
Cleanup: Not reported
Registration Number: 8970

Facility ID: 00-0327PG1
Facility Status/Code: CLOSED/Tank Test Failure - Motor/Lube Oil
Date Open: 08/17/1999
Date Closed: 10/30/2003
Release: NO
Cleanup: NO
Registration Number: 8970

Facility ID: 03-1677PG
Facility Status/Code: CLOSED/Retrofit/Repair - Motor/Lube Oil
Date Open: 04/22/2003
Date Closed: 01/27/2012

WASHINGTON METRO (Continued) **S104641702**

Release: YES
Cleanup: YES
Registration Number: 8970

Historical UST:
Facility ID: 6016166
Tank ID: 001
Age: 7
Capacity: 10000
Tank Status: Currently in use
Product: Other

Facility ID: 6016166
Tank ID: 002
Age: 7
Capacity: 10000
Tank Status: Currently in use
Product: Other

Facility ID: 6016166
Tank ID: 003
Age: 7
Capacity: 8000
Tank Status: Currently in use
Product: Other

Facility ID: 6016166
Tank ID: 004
Age: 7
Capacity: 6000
Tank Status: Currently in use
Product: Other

Facility ID: 6016166
Tank ID: 005
Age: 7
Capacity: 20000
Tank Status: Currently in use
Product: Diesel

Facility ID: 6016166
Tank ID: 006
Age: 7
Capacity: 20000
Tank Status: Currently in use
Product: Diesel

Facility ID: 6016166
Tank ID: 007
Age: 7
Capacity: 20000
Tank Status: Currently in use
Product: Diesel

Facility ID: 6016166
Tank ID: 008
Age: 7

WASHINGTON METRO (Continued) **S104641702**

Capacity: 6000
Tank Status: Currently in use
Product: Gasoline

Facility ID: 6016166
Tank ID: 009
Age: 7
Capacity: 6000
Tank Status: Currently in use
Product: Gasoline

Facility ID: 6016166
Tank ID: 010
Age: 7
Capacity: 20000
Tank Status: Currently in use
Product: Heating Oil

Facility ID: 6016166
Tank ID: 011
Age: 7
Capacity: 4000
Tank Status: Currently in use
Product: Used Oil

Facility ID: 6016166
Tank ID: 012
Age: 7
Capacity: 1000
Tank Status: Currently in use
Product: Diesel

G30 **METRO BUS GARAGE** **OCPCASES** **S120841752**
South **3433 PENNSY DR** **N/A**
1/4-1/2 **LANDOVER, MD 20785**
0.314 mi.
1656 ft. **Site 4 of 4 in cluster G**

Relative: **Lower**

Actual: **70 ft.**

OCPCASES:
Facility ID: 05-0577PG1
Facility Status/Code: CLOSED/Tank Test Failure - Motor/Lube Oil
Date Open: 11/01/2004
Date Closed: 08/31/2006
Release: YES
Cleanup: YES
Registration Number: 8970

31
East
1/4-1/2
0.380 mi.
2007 ft.

HERTZ PENSKE
8318 ARDWICK-ARDMORE RD
LANDOVER, MD 20785

OCPCASES

S104606540
N/A

Relative:
Higher

Actual:
98 ft.

OCPCASES:
Facility ID: 95-1881PG1
Facility Status/Code: CLOSED/C-15
Date Open: 02/21/1995
Date Closed: 04/14/1995
Release: Not reported
Cleanup: Not reported
Registration Number: 5289

32
ENE
1/4-1/2
0.386 mi.
2039 ft.

C & P TELEPHONE
8316 ARDWICK-ARDMORE RD
LANDOVER, MD 20785

OCPCASES

S104610763
N/A

Relative:
Higher

Actual:
88 ft.

OCPCASES:
Facility ID: 93-0946PG
Facility Status/Code: CLOSED/
Date Open: 11/13/1992
Date Closed: 06/12/1995
Release: Not reported
Cleanup: Not reported
Registration Number: 17597

H33
East
1/4-1/2
0.398 mi.
2102 ft.

UNITED PARCEL SERVICE - LANDOVER #2
8325 ARDWICK ARDMORE RD
LANDOVER, MD 20785

Site 1 of 3 in cluster H

OCPCASES
HIST LUST
NPDES

S101183404
N/A

Relative:
Higher

Actual:
94 ft.

OCPCASES:
Facility ID: 91-1165PG1
Facility Status/Code: CLOSED/
Date Open: 12/11/1990
Date Closed: 11/06/1992
Release: Not reported
Cleanup: Not reported
Registration Number: 5114

Historical LUST:
Recover Type: Monitoring - No active remediation. Sampling of monitoring wells only
County: PRINCE GEORGE'S
Case Number: 90-0157PG
Open/Closed: CLOSED

NPDES:
Facility Status: Issued
Bay Trib Number: Not reported
Watershed: Anacostia River - 02140205
Permit Type: General Permit
Description: Not reported

UNITED PARCEL SERVICE - LANDOVER #2 (Continued) **S101183404**

Sic Number:	4215
Permit Number:	Not reported
Npdes Number:	MDR000858
App Description:	Not reported
Latitude/Longitude:	Not reported
Last Issued:	05/28/2015
Expiration Date:	12/31/2018
Owner Name:	Not reported
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City:	Not reported
Owner State:	Not reported
Owner Zip:	Not reported
Received:	Not reported
Comments:	Not reported

AI ID:	8286
Address 2:	Not reported
SIC Description:	Sector P - small parcel distribution center
SIC Code2:	Not reported
SIC Description 2:	Not reported
SIC Code 3:	Not reported
SIC Description 3:	Not reported
Status Date:	05/28/2015
State Number:	12SR0858
Approval Issued Date:	05/28/2015
Effective End Date:	12/31/2018
Facility Status:	History
Bay Trib Number:	Not reported
Watershed:	Anacostia River - 02140205
Permit Type:	General Permit
Description:	Not reported
Sic Number:	4215
Permit Number:	Not reported
Npdes Number:	MDR000858
App Description:	Not reported
Latitude/Longitude:	Not reported
Last Issued:	02/25/2003
Expiration Date:	11/30/2007
Owner Name:	Not reported
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City:	Not reported
Owner State:	Not reported
Owner Zip:	Not reported
Received:	Not reported
Comments:	Not reported

AI ID:	8286
Address 2:	Not reported
SIC Description:	Courier Services, Except by Air
SIC Code2:	Not reported
SIC Description 2:	Not reported
SIC Code 3:	Not reported
SIC Description 3:	Not reported
Status Date:	05/27/2015
State Number:	02SW0858

UNITED PARCEL SERVICE - LANDOVER #2 (Continued) **S101183404**

Approval Issued Date:	02/25/2003
Effective End Date:	05/27/2015
Facility Status:	Issued
Bay Trib Number:	Not reported
Watershed:	Anacostia River - 02140205
Permit Type:	General Permit
Description:	Not reported
Sic Number:	4215
Permit Number:	Not reported
Npdes Number:	MDR000858
App Description:	Not reported
Latitude/Longitude:	Not reported
Last Issued:	05/28/2015
Expiration Date:	12/31/2018
Owner Name:	Not reported
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City:	Not reported
Owner State:	Not reported
Owner Zip:	Not reported
Received:	Not reported
Comments:	Not reported

AI ID:	8286
Address 2:	Not reported
SIC Description:	Sector P - small parcel distribution center
SIC Code2:	Not reported
SIC Description 2:	Not reported
SIC Code 3:	Not reported
SIC Description 3:	Not reported
Status Date:	05/28/2015
State Number:	12SR0858
Approval Issued Date:	05/28/2015
Effective End Date:	12/31/2018
Facility Status:	Issued
Bay Trib Number:	Not reported
Watershed:	Anacostia River - 02140205
Permit Type:	General Permit
Description:	Not reported
Sic Number:	4215
Permit Number:	Not reported
Npdes Number:	MDR000858
App Description:	Not reported
Latitude/Longitude:	Not reported
Last Issued:	05/28/2015
Expiration Date:	12/31/2018
Owner Name:	Not reported
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City:	Not reported
Owner State:	Not reported
Owner Zip:	Not reported
Received:	Not reported
Comments:	Not reported

AI ID:	8286
Address 2:	Not reported

UNITED PARCEL SERVICE - LANDOVER #2 (Continued) **S101183404**

SIC Description: Sector P - small parcel distribution center
SIC Code2: Not reported
SIC Description 2: Not reported
SIC Code 3: Not reported
SIC Description 3: Not reported
Status Date: 05/28/2015
State Number: 12SR0858
Approval Issued Date: 05/28/2015
Effective End Date: 12/31/2018

H34 **UNITED PARCEL SERVICE** **OCPCASES** **S108472136**
East **8325 ARDWICK-ARDMORE RD** **N/A**
1/4-1/2 **LANDOVER, MD 20785**
0.398 mi.
2102 ft. **Site 2 of 3 in cluster H**

Relative: **Higher**
Actual: **94 ft.**

OCPCASES:
Facility ID: 7-1779PG1
Facility Status/Code: CLOSED/
Date Open: 03/09/1987
Date Closed: 07/24/1987
Release: Not reported
Cleanup: Not reported
Registration Number: 5114

H35 **UNITED PARCEL SERVICE** **OCPCASES** **S106610048**
East **8325 ARDWICK ARDMORE RD (7631 JEFFERSON ST)** **N/A**
1/4-1/2 **LANDOVER, MD 20785**
0.398 mi.
2102 ft. **Site 3 of 3 in cluster H**

Relative: **Higher**
Actual: **94 ft.**

OCPCASES:
Facility ID: 90-0157PG1
Facility Status/Code: CLOSED/
Date Open: 07/25/1989
Date Closed: 01/08/1995
Release: Not reported
Cleanup: Not reported
Registration Number: 5114

---

36 **HUB FURNITURE / RELIABLE DELIVERY SERVICE** **OCPCASES** **1001702927**
SSW **3400 PENNSY DR** **HIST UST** **N/A**
1/4-1/2 **LANDOVER, MD 20785**
0.411 mi.
2169 ft.

Relative: **Lower**
Actual: **68 ft.**

OCPCASES:
Facility ID: 95-2404PG1
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 05/02/1995
Date Closed: 12/28/1995
Release: Not reported
Cleanup: Not reported
Registration Number: 5603

Facility ID: 98-0210PG1

HUB FURNITURE / RELIABLE DELIVERY SERVICE (Continued) **1001702927**

Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 07/30/1997
Date Closed: 06/08/1999
Release: YES
Cleanup: YES
Registration Number: 5603

Facility ID: 05-0051PG1
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 07/14/2004
Date Closed: 08/24/2004
Release: NO
Cleanup: NO
Registration Number: 5603

Historical UST:
Facility ID: 6009507
Tank ID: 001
Age: 31
Capacity: 10,000
Tank Status: Currently in use
Product: Heating Oil

Facility ID: 6009507
Tank ID: 002
Age: 31
Capacity: 10,000
Tank Status: Currently in use
Product: Heating Oil

Facility ID: 6009507
Tank ID: 003
Age: 11
Capacity: 10,000
Tank Status: Currently in use
Product: Gasoline

Facility ID: 6009507
Tank ID: 004
Age: 11
Capacity: 10,000
Tank Status: Currently in use
Product: Gasoline

37
ENE
1/4-1/2
0.424 mi.
2240 ft.

STIDHAM TIRE CO., INC.
3900 WHITETIRE RD
LANDOVER, MD 20785

OCPCASES **S104633236**
HIST UST **N/A**

Relative:
Higher

Actual:
86 ft.

OCPCASES:
Facility ID: 92-1572PG1
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 01/24/1992
Date Closed: 06/28/2001
Release: YES
Cleanup: YES

STIDHAM TIRE CO., INC. (Continued) **S104633236**

Registration Number: 12461

Historical UST:
Facility ID: 3010121
Tank ID: 001
Age: 29
Capacity: 4,000
Tank Status: Removed
Product: Gasoline

Facility ID: 3010121
Tank ID: 002
Age: 25
Capacity: 4,000
Tank Status: Removed
Product: Gasoline

Facility ID: 3010121
Tank ID: 003
Age: 12
Capacity: 275
Tank Status: Removed
Product: Used Oil

38
SSW
1/4-1/2
0.450 mi.
2377 ft.

INSULFORM EAST INC
3421 PENNSY DR
LANDOVER, MD 20785

OCPCASES **S104599183**
NPDES **N/A**

Relative:
Lower

Actual:
76 ft.

OCPCASES:
Facility ID: 14-0155PG
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 09/03/2013
Date Closed: 02/11/2014
Release: YES
Cleanup: YES
Registration Number: 14984

Facility ID: 95-1112PG1
Facility Status/Code: CLOSED/Other (Specify)
Date Open: 11/02/1994
Date Closed: 03/18/1996
Release: Not reported
Cleanup: Not reported
Registration Number: 14984

Facility ID: 96-1696PG1
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 03/06/1996
Date Closed: 06/10/1996
Release: Not reported
Cleanup: Not reported
Registration Number: 14984

Facility ID: 00-0892PG1
Facility Status/Code: CLOSED/Dumping

INSULFORM EAST INC (Continued) **S104599183**

Date Open: 11/15/1999
Date Closed: 12/15/1999
Release: YES
Cleanup: YES
Registration Number: 14984

Facility ID: 90-2113PG
Facility Status/Code: CLOSED/
Date Open: 04/17/1990
Date Closed: 04/17/1990
Release: Not reported
Cleanup: Not reported
Registration Number: 14984

NPDES:
Facility Status: History
Bay Trib Number: Not reported
Watershed: Not reported
Permit Type: General Permit
Description: Not reported
Sic Number: Not reported
Permit Number: Not reported
Npdes Number: MDR002339
App Description: Not reported
Latitude/Longitude: Not reported
Last Issued: 12/20/2012
Expiration Date: 12/21/2012
Owner Name: Not reported
Owner Address: Not reported
Owner Address 2: Not reported
Owner City: Not reported
Owner State: Not reported
Owner Zip: Not reported
Received: Not reported
Comments: Not reported

AI ID: 89063
Address 2: Not reported
SIC Description: Not reported
SIC Code2: Not reported
SIC Description 2: Not reported
SIC Code 3: Not reported
SIC Description 3: Not reported
Status Date: 01/12/2015
State Number: 02SW2339
Approval Issued Date: 12/20/2012
Effective End Date: 01/12/2015
Facility Status: Not reported
Bay Trib Number: Not reported
Watershed: Not reported
Permit Type: Not reported
Description: Not reported
Sic Number: Not reported
Permit Number: Not reported
Npdes Number: Not reported
App Description: Not reported
Latitude/Longitude: Not reported

INSULFORM EAST INC (Continued) **S104599183**

Last Issued:	Not reported
Expiration Date:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City:	Not reported
Owner State:	Not reported
Owner Zip:	Not reported
Received:	Received_Februrary2016
Comments:	Issued 033-2770-9-1448 & 1449 Simple PTC for (1) Emergency Generator
AI ID:	Not reported
Address 2:	Not reported
SIC Description:	Not reported
SIC Code2:	Not reported
SIC Description 2:	Not reported
SIC Code 3:	Not reported
SIC Description 3:	Not reported
Status Date:	Not reported
State Number:	Not reported
Approval Issued Date:	Not reported
Effective End Date:	Not reported

I39 **RYDER TRUCK** **OCPCASES** **S116599513**
ENE **2200 BEAVER RD (3901 WHITETIRE RD)** **N/A**
1/4-1/2 **LANDOVER, MD 20785**
0.455 mi.
2404 ft. **Site 1 of 3 in cluster I**

Relative: **Higher**
Actual: **95 ft.**

OCPCASES:

Facility ID:	91-0663PG
Facility Status/Code:	CLOSED/
Date Open:	09/28/1990
Date Closed:	10/29/1991
Release:	Not reported
Cleanup:	Not reported
Registration Number:	4947

I40 **RYDER TRUCK RENTAL** **OCPCASES** **S104598597**
ENE **2200 BEAVER RD (3901 WHITETIRE RD)** **N/A**
1/4-1/2 **LANDOVER, MD 20785**
0.455 mi.
2404 ft. **Site 2 of 3 in cluster I**

Relative: **Higher**
Actual: **95 ft.**

OCPCASES:

Facility ID:	96-0964PG1
Facility Status/Code:	CANCELLED/
Date Open:	11/17/1995
Date Closed:	Not reported
Release:	Not reported
Cleanup:	Not reported
Registration Number:	4947

I41
ENE
1/4-1/2
0.466 mi.
2462 ft.

RYDER TRUCK RENTAL
3901 WHITETIRE RD
LANDOVER, MD 20785

Site 3 of 3 in cluster I

OCPCASES **S121712804**
N/A

Relative:
Higher

Actual:
96 ft.

OCPCASES:

Facility ID:	94-2244PG1
Facility Status/Code:	CLOSED/
Date Open:	03/07/1994
Date Closed:	08/09/1994
Release:	Not reported
Cleanup:	Not reported
Registration Number:	4947

Facility ID:	94-2244PG1
Facility Status/Code:	CLOSED/
Date Open:	03/07/1994
Date Closed:	08/09/1994
Release:	Not reported
Cleanup:	Not reported
Registration Number:	4947

42
East
1/4-1/2
0.485 mi.
2563 ft.

HERTZ/PENSKE
8333 ARDWICK-ARDMORE RD
LANDOVER, MD 20785

OCPCASES **S120842589**
N/A

Relative:
Higher

Actual:
105 ft.

OCPCASES:

Facility ID:	94-1103PG
Facility Status/Code:	CLOSED/Tank Closure - Motor/Lube Oil
Date Open:	10/12/1993
Date Closed:	12/10/1998
Release:	YES
Cleanup:	YES
Registration Number:	5289

Facility ID:	94-1103PG
Facility Status/Code:	CLOSED/Tank Closure - Motor/Lube Oil
Date Open:	10/12/1993
Date Closed:	12/10/1998
Release:	YES
Cleanup:	YES
Registration Number:	5289

Count: 12 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
COLUMBIA PARK	S101517463	COLUMBIA PARK DRUM SITE	GEORGE PALMER HWY & COLUMB	20785	SHWS
LANDOVER	S104613809	FRESH MADE INC	75TH AVE	20785	OCPCASES
LANDOVER	S104618265	GEORGIA PACIFIC CO	8121 ARDMORE ARDWICK RD	20785	OCPCASES
LANDOVER	S120842613	GEORGIA PACIFIC	8121 ARDMORE-ARDWICK RD	20785	OCPCASES
LANDOVER	S104849777	U-HAUL	8210 ARDMORE-ARDWICK RD	20785	OCPCASES
LANDOVER	S121369724	UNDERGROUND VAULT, WASHINGTON GAS	ARDWICK ARDMORE RD (38.928709-	20785	OCPCASES
LANDOVER	S110358288	UNIVERSAL REALTY SERVICES INC	8500 ARDWICK ARDMORE RD	20706	OCPCASES
LANDOVER	S104597643	METRO SUPPLY	8201 ARDWICK-ARDMORE RD	20706	OCPCASES
LANDOVER	S104603487	SURFACE SPILL	2500-3000 BLK OF PENNSY DR	20785	OCPCASES
LANHAM	S104614536	WEST LANHAM HILLS ELEMENTARY SCHOO	78TH AVE	20706	OCPCASES
LANHAM	S109355915	NEW CARROLLTON FEDERAL BUILDING	5000 ELLIN RD	20706	OCPCASES, NPDES
LANHAM	S108475300	MOBIL	9071 LANHAM RD	20706	OCPCASES

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 66

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 66

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/16/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 78

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 73

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Notice of Potential Hazardous Waste Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 10/01/2009
Date Data Arrived at EDR: 12/11/2009
Date Made Active in Reports: 12/14/2009
Number of Days to Update: 3

Source: Department of the Environment
Telephone: 410-537-3000
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Permitted Solid Waste Disposal Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/27/2018
Date Data Arrived at EDR: 05/02/2018
Date Made Active in Reports: 05/17/2018
Number of Days to Update: 15

Source: Department of the Environment
Telephone: 410-537-3375
Last EDR Contact: 04/26/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Annually

State and tribal leaking storage tank lists

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/06/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

OCPCASES: Oil Control Program Cases
Cases monitored by the Oil Control Program. these cases can be leaking underground storage tanks and other belowground releases, leaking aboveground storage tanks, spills and inspections.

Date of Government Version: 03/30/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 05/07/2018
Number of Days to Update: 34
Source: Department of Environment
Telephone: 410-537-3433
Last EDR Contact: 06/07/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Semi-Annually

HIST LUST: Recovery Sites

In 1999, the Department of the Environment stopped adding new sites to its Recovery Sites Database. Current leaking underground storage tank information maybe found in the OCPCASES database.

Date of Government Version: 03/01/1999
Date Data Arrived at EDR: 03/22/1999
Date Made Active in Reports: 04/16/1999
Number of Days to Update: 25

Source: Department of the Environment
Telephone: 410-537-3433
Last EDR Contact: 02/19/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

UST: Registered Underground Storage Tank List

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 03/30/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 05/07/2018
Number of Days to Update: 34

Source: Department of the Environment
Telephone: 410-537-3433
Last EDR Contact: 04/02/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

AST: Permitted Aboveground Storage Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 03/30/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 05/07/2018
Number of Days to Update: 34

Source: Department of The Environment
Telephone: 410-537-3000
Last EDR Contact: 06/07/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 134

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 01/13/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Controls Site listing
Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/10/2008
Date Data Arrived at EDR: 11/21/2008
Date Made Active in Reports: 12/17/2008
Number of Days to Update: 26
Source: Department of the Environment
Telephone: 410-537-3422
Last EDR Contact: 06/07/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Varies

INST CONTROL: Voluntary Cleanup Program Applicants/Participants
Sites included in the Voluntary Cleanup Program Applicants/Participants listing that have Deed Restrictions.

Date of Government Version: 03/09/2018
Date Data Arrived at EDR: 03/15/2018
Date Made Active in Reports: 04/10/2018
Number of Days to Update: 26
Source: Department of the Environment
Telephone: 410-537-3493
Last EDR Contact: 06/07/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Applicants/Participants
The Voluntary Cleanup Program, administrated by the Dept. of the Environment, streamlines the environmental cleanup process for sites, usually industrial or commercial properties, that are contaminated, or perceived to be contaminated, by hazardous substances. Developers and lenders are provided with certain limitations on liability and participants in the program are provided certainty in the process by knowing exactly what will be required.

Date of Government Version: 03/09/2018
Date Data Arrived at EDR: 03/15/2018
Date Made Active in Reports: 04/10/2018
Number of Days to Update: 26
Source: Dept. of the Environment
Telephone: 410-537-3000
Last EDR Contact: 06/07/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Semi-Annually

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Eligible Brownfields Properties
The Site Assessment Section of the State Superfund Division is responsible for conducting federally funded assessments of eligible brownfields properties. These assessments are undertaken to determine whether there are environmental cleanup requirements at these sites.

Date of Government Version: 01/02/2018
Date Data Arrived at EDR: 03/16/2018
Date Made Active in Reports: 04/10/2018
Number of Days to Update: 25

Source: Department of Environment
Telephone: 410-537-3000
Last EDR Contact: 06/04/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/21/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Directory

A listing of recycling facilities.

Date of Government Version: 03/15/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/07/2018
Number of Days to Update: 48

Source: Department of the Environment
Telephone: 410-631-3314
Last EDR Contact: 03/15/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/30/2018
Next Scheduled EDR Contact: 05/14/2018
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/04/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

Historical UST: Historical UST Registered Database

In 1997 the Department of the Environment sent out registration forms to all the owner's listed in the UST database. Once they got the registration forms back they entered the information into a new UST database. we call this database UST. Because not all owners returned their forms, we kept the old UST database and labeled it HIST UST so that we would not be missing any past UST records. This listing is no longer updated or maintained by the agency. It is current through November 1996.

Date of Government Version: 11/21/1996
Date Data Arrived at EDR: 09/10/1997
Date Made Active in Reports: 10/22/1997
Number of Days to Update: 42

Source: Department of Environment
Telephone: 410-537-3433
Last EDR Contact: 05/15/2000
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 94

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 73

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 07/15/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/15/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 01/11/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/08/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/23/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/09/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 94

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/20/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/09/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/07/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/04/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/03/2018
Date Data Arrived at EDR: 01/04/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 99

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 79

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 01/25/2018
Date Data Arrived at EDR: 02/28/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 72

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/31/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 87

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/21/2018
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 28

Source: EPA
Telephone: (215) 814-5000
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 02/25/2018
Date Data Arrived at EDR: 03/17/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 06/01/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 73

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 30

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

AIRS: Permit and Facility Information Listing

A listing of permitted facilities and emissions information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 10/18/2017
Date Made Active in Reports: 11/10/2017
Number of Days to Update: 23

Source: Department of the Environment
Telephone: 410-537-3220
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ASBESTOS: Asbestos Notification Listing
Asbestos sites

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 04/17/2018
Date Made Active in Reports: 05/17/2018
Number of Days to Update: 30

Source: Department of the Environment
Telephone: 410-537-3809
Last EDR Contact: 03/15/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing
Coal combustion byproduct site locations.

Date of Government Version: 08/13/2010
Date Data Arrived at EDR: 01/05/2011
Date Made Active in Reports: 01/31/2011
Number of Days to Update: 26

Source: Department of the Environment
Telephone: 410-537-3507
Last EDR Contact: 03/23/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Varies

DRYCLEANERS: Registered Drycleaning Facilities
A listing of registered drycleaning facilities.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 01/11/2018
Date Made Active in Reports: 02/06/2018
Number of Days to Update: 26

Source: Department of the Environmental
Telephone: 410-537-3220
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information.

Date of Government Version: 12/14/2016
Date Data Arrived at EDR: 06/02/2017
Date Made Active in Reports: 06/30/2017
Number of Days to Update: 28

Source: Department of the Environment
Telephone: 410-537-3345
Last EDR Contact: 04/26/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for storage tank sites.

Date of Government Version: 03/30/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 05/07/2018
Number of Days to Update: 34

Source: Department of the Environment
Telephone: 410-537-3461
Last EDR Contact: 04/02/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

LEAD: Lead Inspection Database
The Childhood Lead Poisoning Prevention Program data of lead inspection for the state.

Date of Government Version: 03/30/2018
Date Data Arrived at EDR: 04/04/2018
Date Made Active in Reports: 05/07/2018
Number of Days to Update: 33

Source: Department of Environment, Lead Poisoning Prevention Program
Telephone: 410-537-3000
Last EDR Contact: 03/23/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Annually

LRP: Land Restoration Program
A listing of Land Restoration Program sites. Site types included in the database are: Voluntary Cleanup Program, National Priority List, Brownfields, Site Assessment, Formerly Used Defense Site, State Master List, Non Master List, Groundwater Investigation and Federal Facility.

Date of Government Version: 02/06/2018
Date Data Arrived at EDR: 03/07/2018
Date Made Active in Reports: 04/10/2018
Number of Days to Update: 34

Source: Department of the Environment
Telephone: 410-537-3000
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

NPDES: Wastewater Permit Listing
A listing of wastewater permit locations.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 22

Source: Department of the Environment
Telephone: 410-537-3507
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Semi-Annually

UIC: Underground Injection Wells Database
A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

Date of Government Version: 02/07/2018
Date Data Arrived at EDR: 02/16/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 27

Source: Department of the Environment
Telephone: 410-537-3507
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of the Environment
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/16/2014
Number of Days to Update: 199

Source: Department of the Environment
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland from 1995-1999..

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of the Environment
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Providers
Source: Department of Human Resources
Telephone: 410-767-7805

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION