

# NEW CARROLLTON AND LANDOVER YARDS IMPROVEMENTS

## ENVIRONMENTAL ASSESSMENT



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
OCTOBER 2014

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**U.S. DEPARTMENT OF TRANSPORTATION (USDOT) FEDERAL TRANSIT ADMINISTRATION  
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
NEW CARROLLTON AND LANDOVER YARDS IMPROVEMENTS  
ENVIRONMENTAL ASSESSMENT  
ABSTRACT**

The Washington Metropolitan Area Transit Authority (WMATA), in coordination with the Federal Transit Administration (FTA), is proposing the expansion of railcar storage capacity at WMATA's existing New Carrollton Yard and the construction of a new maintenance yard adjacent to the Landover Metrorail Station in Prince George's County, Maryland.

The proposed rail yard improvements at New Carrollton and Landover Metrorail Station would help accommodate the future Metrorail vehicle fleet with additional rail car storage space and limited maintenance functions on the eastern side of the system. The future expanded Metrorail vehicle fleet would also increase the demand for additional track maintenance and associated equipment. Landover Yard would provide additional storage and maintenance facilities space to maintain the tracks under the expanded Metrorail service.

WMATA proposes to undertake the project with the use of Federal funds, and to acquire land for the project from the National Passenger Railroad Corporation (Amtrak) and the Maryland State Highway Administration (SHA).

This Environmental Assessment (EA) documents the proposed improvements and assesses the impacts of the Build Alternative and a No Build Alternative for comparison purposes and is being prepared in accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA) (42 United States Code (USC) 4332(2)(c), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations (CFR) Parts 1500-1508), the joint Federal Highway Administration/FTA regulations (23 CFR Part 771), and other regulations regarding environmental permitting and approval for the project.

A public hearing on the EA will be held at 7:00 p.m. on December 4, 2014 at Fortis College, 4351 Garden City Drive, Landover, MD 20785 to provide citizens and agencies an opportunity to comment on the proposal and its anticipated impacts. Comments may be made orally at the public hearing or submitted in writing. Written comments must be submitted to the Board Secretary, Washington Metropolitan Area Transit Authority, 600 5th Street, NW, Washington, DC 20001.

Following the close of the comment period, a Public Hearing Report will be prepared to document and respond to comments received at the hearing and during the comment period. FTA will review the findings of the EA and respond to comments. FTA will make its formal NEPA determination and the comments will be formally addressed in the NEPA finding.

## NEW CARROLLTON AND LANDOVER YARDS IMPROVEMENTS EA

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- APPENDIX E: Cultural Resources Agency Consultation
- APPENDIX F: Air Quality Technical Memorandum
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## 1.0 NEED FOR PROPOSED ACTION

### 1.1 Introduction

The Washington Metropolitan Area Transit Authority (WMATA), in coordination with the Federal Transit Administration (FTA), is proposing the expansion of railcar storage capacity at WMATA's existing New Carrollton Yard and the construction of a new maintenance yard adjacent to the Landover Metrorail Station in Prince George's County, Maryland. This environmental assessment (EA) describes the proposed project and documents the potential impacts of the project.

Improvements to the existing New Carrollton Yard and construction of the new Landover Yard would support WMATA's adopted vision and plans by providing new Metrorail passenger train car storage and maintenance facilities for the agency's planned fleet expansion. The project would need to be constructed by 2018 to meet additional system improvements associated with the required Metrorail vehicle fleet expansion plans.

### 1.2 Existing Site Backgrounds and Description

#### 1.2.1 New Carrollton

The existing New Carrollton rail yard ("New Carrollton Yard") is approximately 36.8-acres in size and is located at 4440 Garden City Drive in Landover, Maryland. The New Carrollton Yard is the terminal eastern facility on WMATA's Orange Line, roughly one-half mile northwest of the Interstate 95/495 and U.S. Route 50 interchange. See **Figure 1-1** for the existing New Carrollton Yard location and **Figure 1-2** for a map of the existing facility.

New Carrollton Yard was opened in the 1978, and was expanded and improved in 2006. The upgraded facility included a new Service and Inspection (S&I) shop, expanded loop tracks at the north end of the shop and a new stormwater pond. The current New Carrollton Yard consists of the following facilities:

- Ten storage tracks accommodating 80 rail cars in the southeastern corner of the yard;
- Engineering Campaign, S&I, and Train Wash buildings for rail car maintenance and inspection activities;
- Office of Track and Structures (TRST) building for track repair and maintenance-of-way (MOW) equipment;
- Employee parking; and
- Other ancillary facilities.

Access to New Carrollton Yard is provided by a yard access road off of Garden City Drive. New Carrollton Yard is bound by the Amtrak right-of-way to the west, Cobb Road to the north, Garden City Drive to the east, and parking for New Carrollton Metrorail Station to the south.

#### 1.2.2 Landover

The Landover Yard site, currently owned by WMATA, is approximately 18.7-acres in size and is located at 3000 Pennsy Drive in Hyattsville, Maryland. Currently, the site is undeveloped, except for the two southern tracts, which contain surface Park & Ride lots serving the adjacent Landover Metrorail Station. See **Figure 1-1** for the existing Landover location and **Figure 1-3** for a map of the existing site. Access to the Landover Metrorail Station is provided via an entrance from Pennsy Drive. The Landover Yard site is bound by the Amtrak right-of-way to the west and north, an abandoned rail alignment and Pennsy Road to the east and south, and the Landover Metrorail Station and associated parking to the southwest.

Figure 1-1: New Carrollton and Landover Site Locations

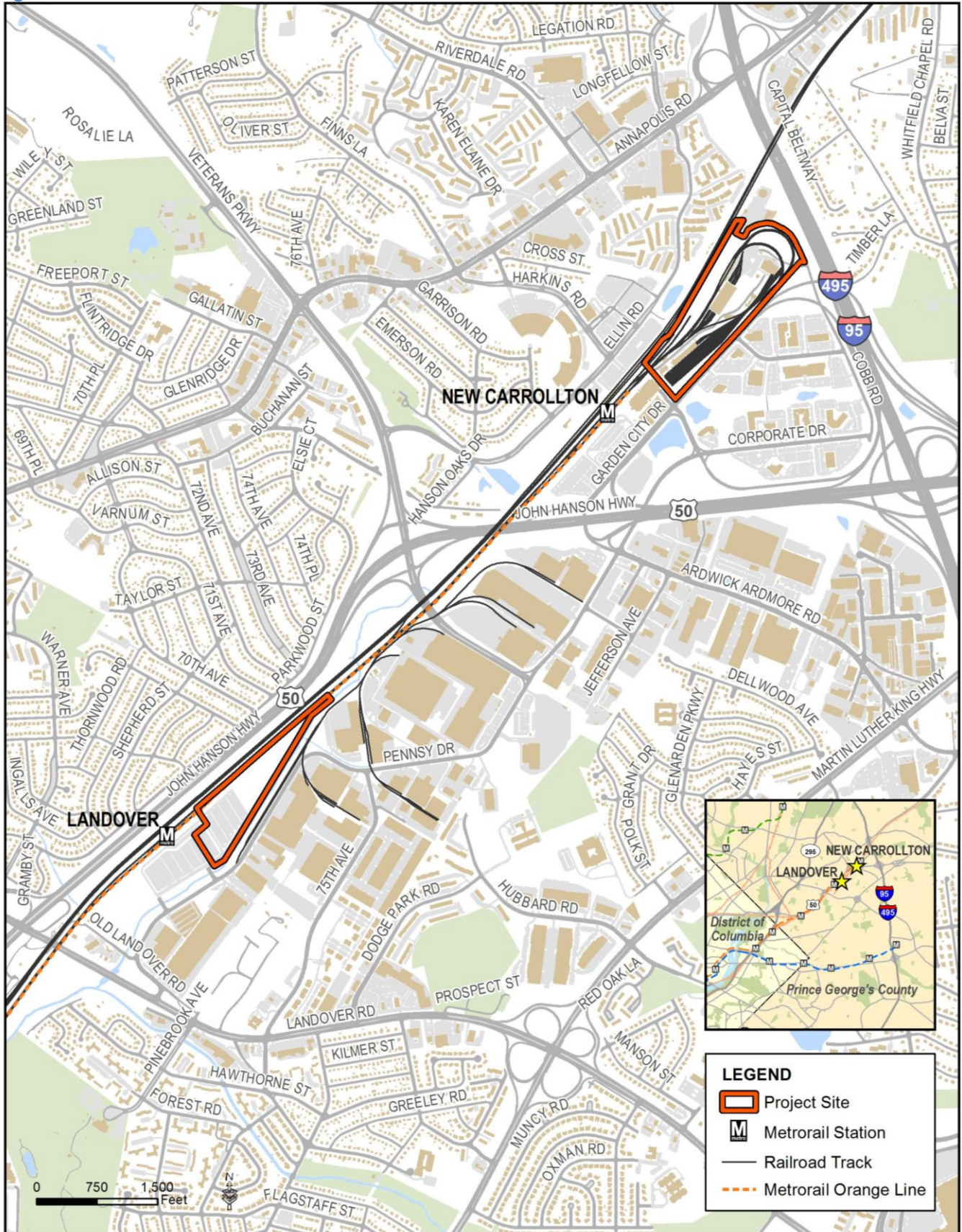


Figure 1-2: New Carrollton Yard Facility

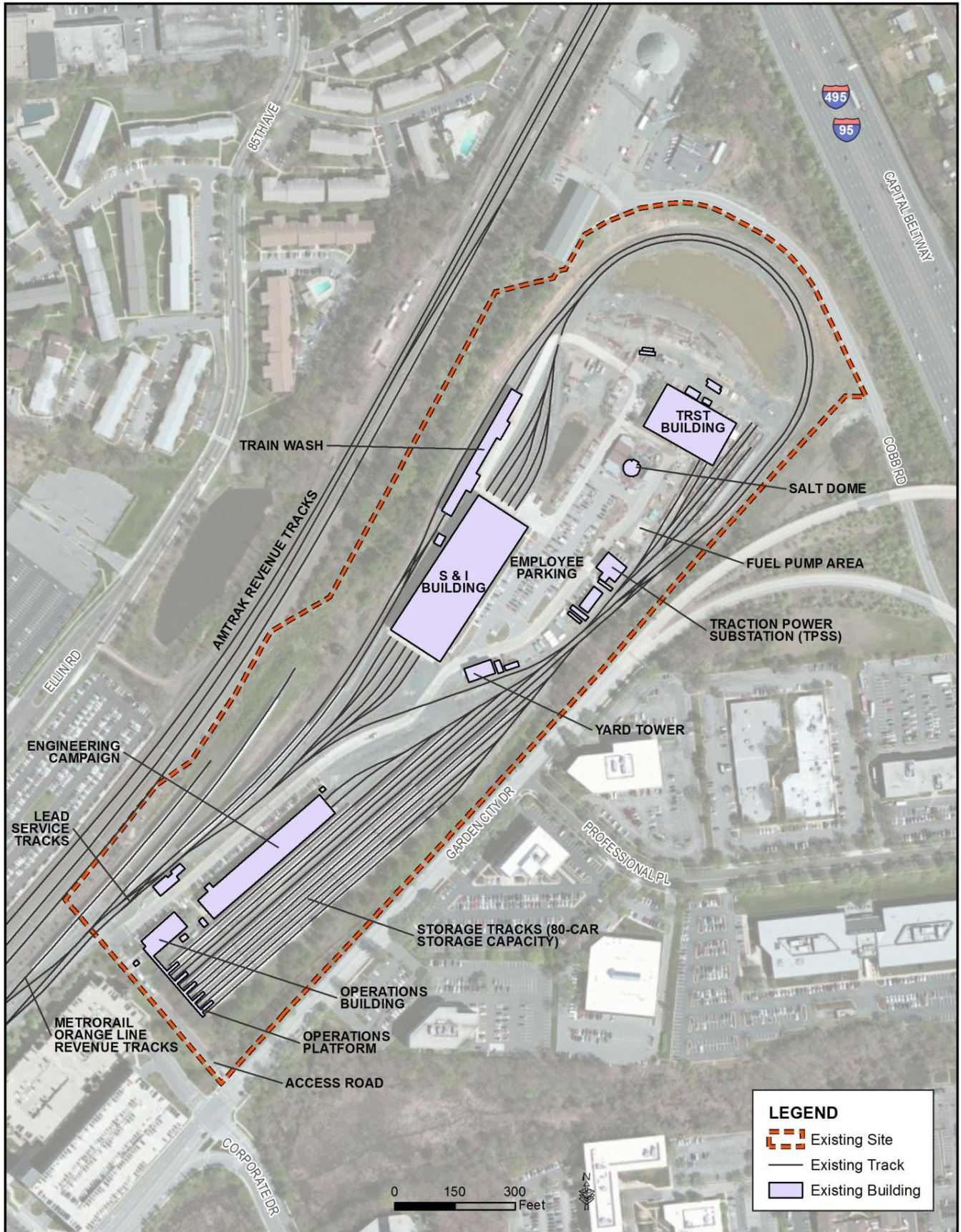
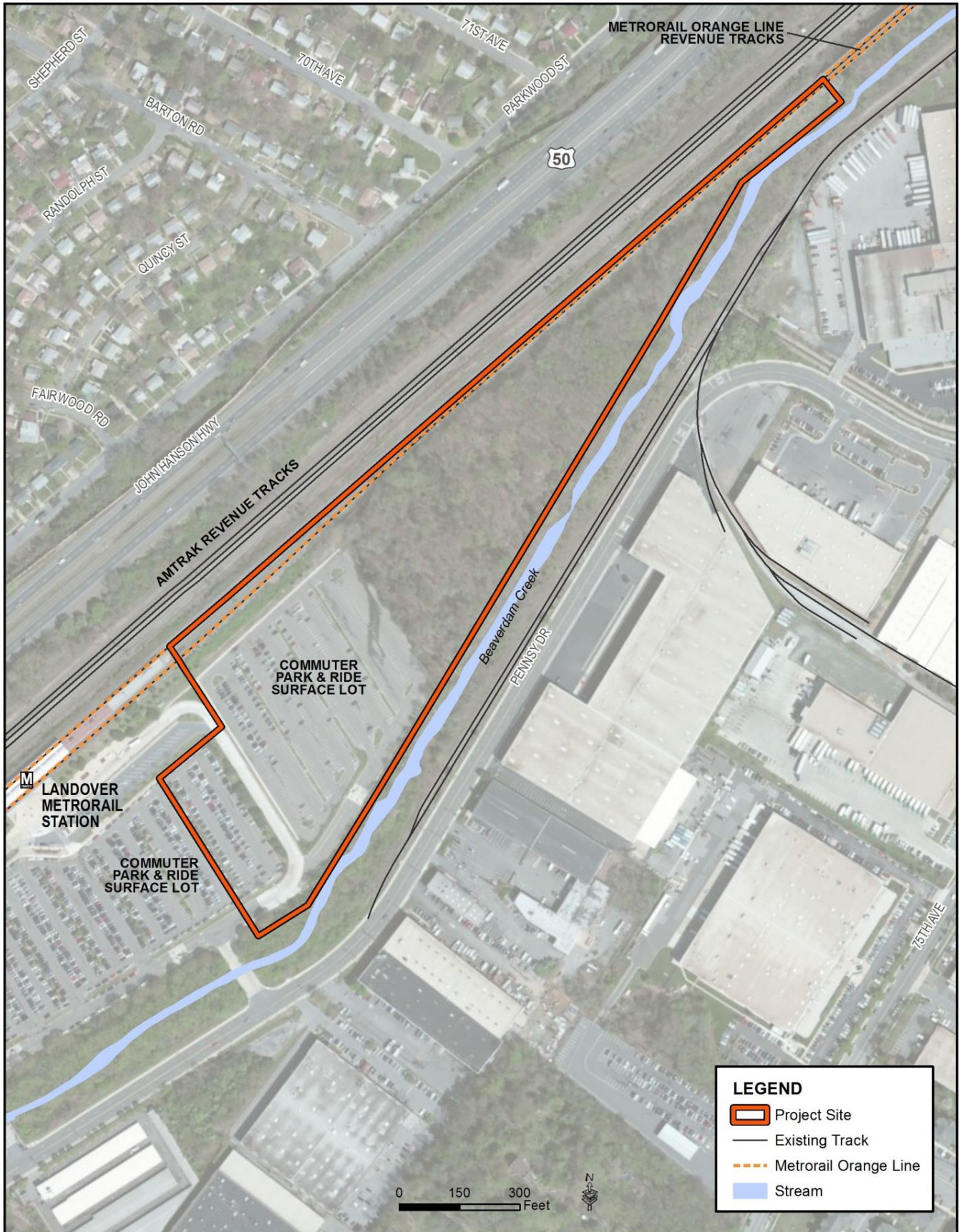


Figure 1-3: Landover Yard Site



### 1.3 Project Background

WMATA has developed several plans in recent years that address additional needs for the Metrorail system to handle regional ridership growth and aging infrastructure.

### 1.4 Project Background

#### 1.4.1 Rail Fleet Management Plan, 2012

In August 2012, WMATA released an update to the *Metrorail Fleet Management Plan* (RFMP). The RFMP establishes the system's current and projected passenger vehicle (or "revenue vehicle") fleet size requirements, including vehicles in operation and required ratio of spare vehicles. The RFMP covers fleet expansion and replacement requirements for a 15-year timeframe, from 2010 to 2025.

By fiscal year 2020, the RFMP forecasts that WMATA rail car storage needs will grow from 1,316 to 1,810 spaces due to the expansion of the rail car fleet. To meet the forecasted rail car storage needs, the RFMP recommends the construction of a new 184-space rail yard (along the Silver line) and the expansion of existing rail yards at West Falls Church, Shady Grove, and New Carrollton.

By 2025, the Metrorail system could experience a "geographic imbalance" in storage capacity, which would result in an increase in deadheading costs and a decrease in operational efficiency. Although WMATA has enough storage spaces across the system to store its total fleet, the location of excess capacity does not match up with the operational need.

To address this geographic imbalance, the RFMP recommends that both Shady Grove and New Carrollton Yards be expanded, and a new rail yard be constructed. The RFMP recommends the addition of 120-spaces of storage tracks at Shady Grove Yard, the addition of 32-spaces of storage at New Carrollton Yard, and the construction of new rail yard with 120-spaces of storage tracks. The additional capacity would provide sufficient rail car storage for expanded service on the Orange and Red lines, and for future expansion.

Although the Landover Yard site was not identified for improvements under the RFMP, the plan did recommend the need for a new 20-space maintenance shop in the system core.

#### 1.4.2 Momentum, 2013

In June 2013, the WMATA Board of Directors adopted Momentum, a strategic plan to guide decisions and business plans over the next 10 years. As part of an overall long-term strategy to maintain a high level of service for the public, Momentum specifies the goal of 100 percent eight-car trains throughout the system by July 2019. Over the next three decades, the National Capital region is expected to face substantial growth, including a 24 percent increase in population, as the area adds a projected 1.1 million new jobs. As a result, transit crowding and roadway congestion will increase in the region. Ensuring 100 percent eight-car trains by 2020 will address future ridership projections by accommodating up to 35,000 passengers per hour, alleviating congestion along Metrorail lines, and reducing wait times at stations. To operate 100 percent eight-car trains, WMATA must undertake a capital initiative which requires, among other things, additional railcar storage.

#### 1.4.3 Eight-Car Train Implementation Plan, 2014

As a result of Momentum, WMATA developed the Eight-Car Train Implementation Plan in June 2014 to identify the specific Metrorail system projects required to implement and maintain 100 percent eight-car train operations by 2020. One of the projects identified in the Eight-Car Train Implementation Plan as necessary to physically run 100 percent eight-car trains is the set of improvements to the existing New Carrollton Yard and the construction of a new maintenance yard at Landover. To meet the demand of 100 percent eight-car trains, WMATA identified the improvements to both yards to increase capacity of revenue vehicle storage, as well as track equipment and maintenance facilities.

### 1.5 Proposed Action

This project includes two related actions. At New Carrollton Yard, the project would expand storage capacity through the construction of an additional 120 rail car storage spaces and support facilities. The existing Engineering Campaign, S&I, and Train Wash buildings would remain unchanged.

At the Landover Yard site, WMATA would construct a new rail yard (“Landover Yard”), Metrorail commuter parking garage, and support facilities for WMATA’s Car Track and Equipment Maintenance (CTEM) division and the Office of Track and Structures (TRST). Existing CTEM and TRST facilities would be moved from New Carrollton Yard to the newly created Landover Yard. Track maintenance vehicles would be stored in and operate from Landover Yard. No Metrorail revenue vehicles would be stored at Landover Yard.

Refer to **Section 2.2** for specific details of the build-alternative.

### 1.6 Purpose of the New Carrollton and Landover Yards Improvements

The purpose of the project is to provide additional storage capacity and re-organize certain track maintenance functions at WMATA’s rail yards.

### 1.7 Need for the New Carrollton and Landover Yards Improvements

To accommodate the future Metrorail vehicle fleet, WMATA needs to provide additional rail car storage space by 2020. Adding revenue vehicle spaces at New Carrollton Yard would increase the rail car storage capacity on the eastern side of the system, offering a greater balance in storage locations across the Metrorail system, resulting in a decrease in deadheading costs and an increase in operational efficiency. The existing CTEM and TRST facilities at New Carrollton Yard would need to be relocated due to the increase in rail car storage. To accommodate the displaced CTEM and TRST facilities, a new maintenance yard is required. The Landover site provides several characteristics needed for a new CTEM and TRST facility including:

- Proximity to the existing maintenance functions at New Carrollton;
- Space to accommodate a minimum 700-foot lead track to connect the yard to the Metrorail passenger service (or “revenue service”) tracks; and
- Suitable alignment of the revenue service tracks for a new lead track switch connection.

The future expanded Metrorail vehicle fleet will also increase the demand for additional track maintenance and associated equipment. Landover Yard would provide additional storage and maintenance facilities space for CTEM and TRST divisions to maintain the tracks under the expanded Metrorail service. The improvements to New Carrollton Yard and the development of Landover Yard would need to be constructed by 2018 to meet additional system improvements associated with the required Metrorail vehicle fleet expansion plans.

### 1.8 Purpose of the Environmental Assessment

This environmental assessment (EA) is being prepared in accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA) (42 United States Code (USC) 4332(2) (c)), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations (CFR) Parts 1500-1508), the joint Federal Highway Administration/Federal Transit Administration regulations (23 CFR Part 771), and other regulations regarding environmental permitting and approval for the project.

WMATA proposes to undertake the project with the use of Federal funds and to acquire land for the project from the National Passenger Railroad Corporation (Amtrak) and the Maryland State Highway Administration (SHA). FTA will use the EA to consider the potential effects of the proposed project on social, economic and

environmental factors and impacts on identified resources. FTA will issue an environmental finding on the proposed project based on the significance of the potential impacts identified.

### 1.9 Organization of the Environmental Assessment

The environmental assessment is organized into seven chapters:

- Chapter 1 provides an introduction to the project and description of the purpose and need for the project;
- Chapter 2 presents a description of the proposed action, including the build alternative, that would address the purpose and need;
- Chapter 3 presents the environmental impacts that may result from implementation of the project, and the mitigation measures to address potential impacts considered to be adverse;
- Chapter 4 presents WMATA's public and agency consultation and coordination activities for the project;
- Chapter 5 provides a list of acronyms and terms used in the EA; and
- Chapter 6 provides a list of references used in preparing the EA.

### 1.10 Next Steps

Key milestones for the project include the following actions:

- The public comment period for the EA will extend from October 26, 2014 to December 12, 2014.
- A public hearing is planned for December, 2 2014 at [LOCATION]. Following the public hearing, the WMATA Committee will vote to approve the project in February 2015.
- The WMATA Board will vote to approve the project in February 2015.
- The FTA will issue a decision document for the project in March 2015.
- After FTA and the WMATA Board approve the project, construction would begin in 2016 with the proposed improvements constructed by 2018.

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## 2.0 ALTERNATIVES CONSIDERED

This chapter describes the alternatives evaluated in this Environmental Assessment (EA). Two alternatives are presented: the No Build Alternative and the Build Alternative. The Build Alternative includes the same area improvements as the No Build Alternative in addition to construction and operation of the project.

### 2.1 No Build Alternative

The No Build Alternative assumes that operations at New Carrollton Yard would continue, and that no development would occur at the Landover site. In terms of the broader regional transportation network, the No Build Alternative is defined as the existing highway and transit network and committed transportation improvements from the National Capital Region Transportation Planning Board's Financially Constrained Long Range Plan (CLRP). No planned improvements would occur within the project area at New Carrollton Yard or at the Landover site.

Under the No Build Alternative, WMATA would not be able to provide the necessary service and infrastructure improvements as outlined in the Rail Fleet Management Plan (RFMP), Momentum, or the Eight-Car Train Implementation Plan.

### 2.2 Build Alternative

The Build Alternative consists of expansion of rail car storage capacity at New Carrollton Yard and construction of a new rail yard adjacent to and east of the Landover Metrorail Station along with a new parking structure. The proposed Landover Yard would provide storage and maintenance facilities for WMATA's CTEM division and TRST, which currently operate at New Carrollton Yard. As part of the project, the CTEM and TRST functions would move from New Carrollton Yard to Landover Yard. The construction of CTEM and TRST facilities at Landover Yard would precede the demolition of existing CTEM and TRST facilities at New Carrollton Yard. Once CTEM and TRST functions are moved to Landover Yard, the resulting space at New Carrollton Yard would be used to complete the expansion of facilities for rail car storage and equipment storage. The improvements at each site are described individually below. The EA assumes the project would be operational by 2018 to meet Metrorail system vehicle fleet expansion requirements needed by 2020.

The Build Alternative also assumes the planned regional transportation improvements contained in the CLRP that are part of the No Build Alternative.

#### 2.2.1 New Carrollton Yard

The Build Alternative proposes to expand capacity at New Carrollton Yard. The existing S&I and Yard Control Tower functions would remain unchanged. Total numbers of existing and future employees at New Carrollton Yard are summarized in **Table 2-1**.

The following facilities would be constructed within and adjacent to the existing New Carrollton Yard (See **Figure 2-1**):

- Fifteen storage tracks accommodating 120 rail cars:
  - Eight storage tracks accommodating 64 rail cars in the northwest corner of the yard (referred to as the "northwest storage tracks");
  - Seven storage tracks accommodating 56 rail cars in the northeast corner of the yard (referred to as the "northeast storage tracks");
  - Lead service tracks for the storage areas;
- One contractor storage track with access road in the southeast corner of the yard;

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- Two maintenance-of-way (MOW) tracks;
- Reconfigured and expanded employee surface parking in the northern and eastern sections of the yard;
- New operations platform and a pedestrian bridge (connecting to the employee parking lot via an elevator/stair tower) serving the northwest storage tracks;
- Relocation of the existing control tower from the center of the yard to the top of the elevator/stair tower at the location of the pedestrian bridge. The relocated tower would be approximately 40 feet high;
- New operations building for the northeast storage tracks;
- Conversion of the existing Engineering Campaign building to a S&I building (building was originally built as a S&I building); and
- Conversion of an existing operations building to an Automatic Train Control (ATC) building and training facility.

The construction of CTEM and TRST facilities at Landover Yard would precede the demolition of existing CTEM and TRST facilities at New Carrollton Yard. All other proposed facilities at New Carrollton Yard would be constructed during the same phase as the Landover Yard CTEM and TRST facilities except for the proposed northeast storage tracks and ATC facility. Once CTEM and TRST functions moved to Landover Yard, the existing CTEM and TRST facility at New Carrollton Yard would be demolished and the proposed northeast storage tracks and ATC facility would be constructed. During construction, WMATA would not require the shifting of maintenance functions to other yards across the Metrorail system, and all other facilities would continue to operate at New Carrollton Yard.

WMATA would acquire adjacent property from Amtrak and Maryland State Highway Administration (SHA) to accommodate the rail yard expansion. New storage tracks would be constructed within the existing rail yard, as well as on the Amtrak and SHA properties. The expanded facility would be approximately 39.5-acres in size. A project concept is provided in **Figure 2-1**.

**Table 2-1: Existing and Future New Carrollton Yard Employees**

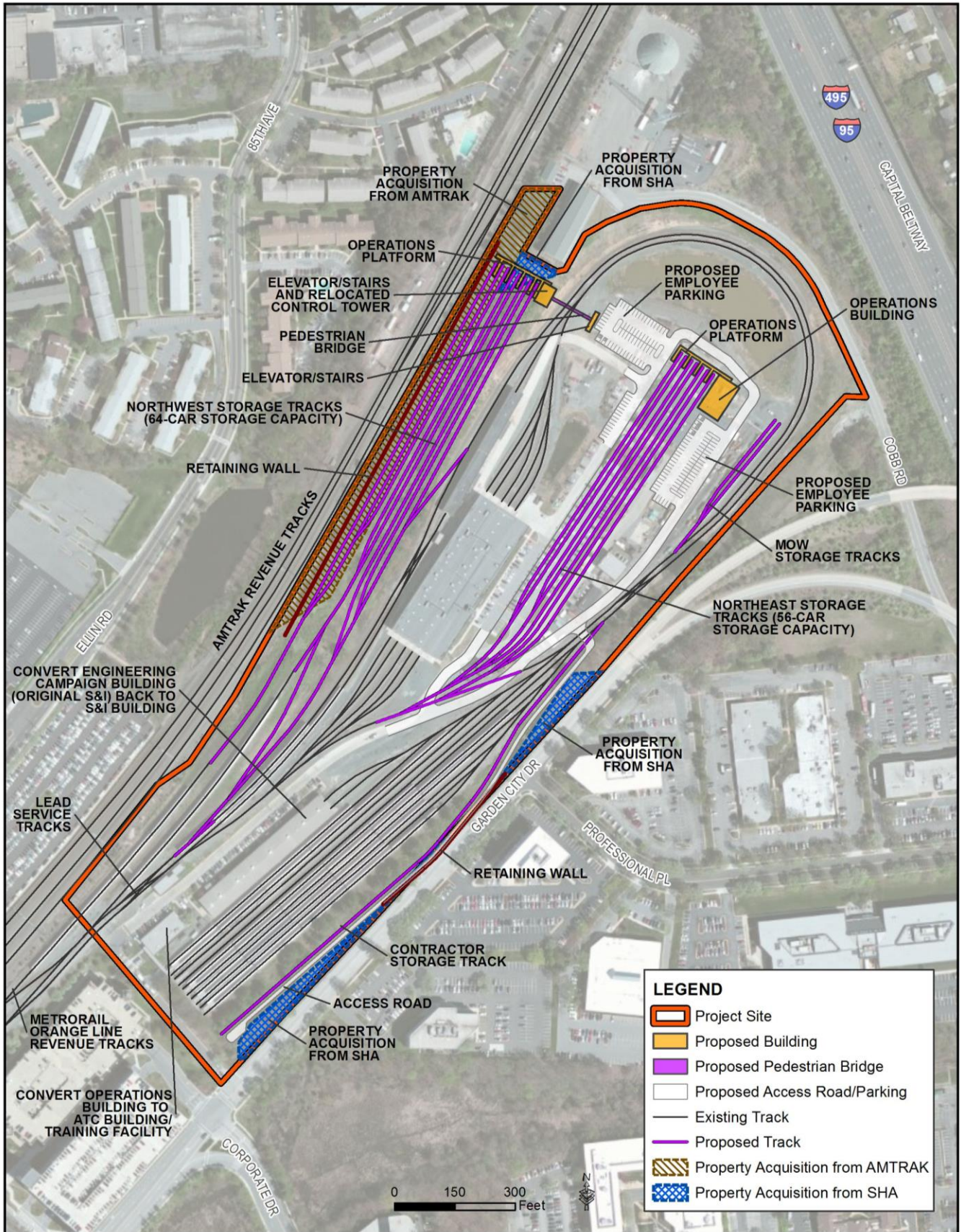
Activity	Existing Employees (2014) <sup>a</sup>	Future Employees (2025) <sup>a</sup>	Hours of Operation <sup>a</sup>
Metrorail Train Operators	83	131	Weekdays 4:00am-1:00am Weekends 6:00am-4:00am
S&I <sup>b</sup>	173	251	24-hour operations
Yard Control Tower	6	6	24-hour operations
CTEM	30	0 <sup>c</sup>	24-hour operations
TRST	78	0 <sup>c</sup>	24-hour operations
<b>Total</b>	<b>370</b>	<b>388</b>	

<sup>a</sup>Employee estimates and hours of operation provided by WMATA Space Needs Program. Hours of operations are assumed to be the same under the existing and future operations.

<sup>b</sup>S&I employee estimates include employees from Car Maintenance (CMNT) and Automatic Train Control (ATC) departments.

<sup>c</sup>Future employees would move to CTEM and TRST facilities at Landover Yard.

Figure 2-1: New Carrollton Yard Project Concept



2.2.2 Landover Yard

The Build Alternative consists of the construction of a rail yard, a Metrorail commuter parking garage, and support facilities for CTEM and TRST at the site. The new commuter parking garage would replace all Metrorail surface Park & Ride spaces removed for the project. Existing CTEM and TRST facilities would be moved from their current location at New Carrollton Yard to the proposed Landover Yard. Track maintenance vehicles of various sizes and function would be stored in and operate from the rail yard. No Metrorail passenger rail cars (revenue vehicles) would be stored at Landover Yard. Approximately 190 employees would be based at Landover Yard.

The following facilities would be constructed at Landover Yard (See **Figure 2-2**):

- Loop track around the southern portion of the rail yard;
- Lead and tail tracks for the rail yard;
- New CTEM and TRST building and eleven storage tracks for track equipment and maintenance vehicles;
- Six-level commuter Park & Ride facility, consisting of 848-spaces to replace the surface spaces displaced by construction. The structure would be constructed on an existing commuter lot, south of the rail yard and separated from the new yard by the Landover Metro Access Road.
- Employee surface parking lot and delivery area in the southern portion of the proposed yard;
- New track crossover on the Metrorail revenue tracks;
- Retaining wall in the southwest corner would be constructed to accommodate the bypass track; and
  - Stormwater management area at the northern end of the rail yard.

The construction of the commuter parking garage would precede the construction of CTEM and TRST facilities at Landover Yard. Although the commuter parking lots at Landover Metrorail Station are not at capacity, WMATA would construct the parking garage first to minimize any inconvenience for Park & Ride customers.

No property acquisition would be necessary for construction of Landover Yard, as the rail yard would be built on land owned by WMATA.

See **Figure 2-2** for the project concept and **Table 2-2** for a summary of existing and future employees at the proposed rail yard.

**Table 2-2: Proposed Landover Yard Employees**

Activity	Existing Employees (2014) <sup>a</sup>	Future Employees (2025) <sup>a</sup>	Hours of Operation <sup>a</sup>
CTEM	0 (30 at New Carrollton Yard) <sup>b</sup>	79	24-hour operations
TRST	0 (78 at New Carrollton Yard) <sup>b</sup>	111	24-hour operations
Total	0 (108 at New Carrollton Yard) <sup>b</sup>	190	

<sup>a</sup> Employee estimates and hours of operation provided by WMATA Space Needs Program.

<sup>b</sup> Existing employees at CTEM and TRST facilities at New Carrollton Yard, who would be transferred to the new Landover Yard. Currently no employees are based at the Landover project site.

Figure 2-2: Proposed Landover Yard Project Concept



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### 3.0 ENVIRONMENTAL CONSEQUENCES

This chapter describes the environmental consequences of the No Build Alternative and Build Alternative and identifies resources not present in the study area, and resources with limited to no potential to be impacted. This section is organized as follows:

- Effects of the No Build Alternative;
- Resources not present in the study area;
- Resources with limited or no potential effects; and,
- Resources with potential effects.

**Table 3-1** lists resources with potential effects, resources with no potential effects, and resources not present in the study area. Resources with potential effects are presented as subsections in the following format:

- Introduction describing the resource analyzed and any applicable laws and regulations for the resource;
- Impacts to the resource at New Carrollton and Landover Yards; and
- Potential mitigation and commitments if applicable.

**Table 3-1: List of Effected and Not Effected Resources**

Resources with Potential Effects	Resources without Effects or with Limited Effects	Resources not Present in the Study Area
Land Use and Zoning	Environmental Justice	Federal or State-Designated Wildlife or Waterfowl Refuges
Consistency with Local Plans	Transportation	Wild & Scenic Rivers
Land Acquisitions and Displacements	Neighborhoods and Community Resources	Navigable Waterways
Waters of the US	Parklands	Federal or State-Listed Endangered Species
Regulated Floodplains	Air Quality	
Wildlife and Vegetation	Noise and Vibration	
Hazardous and Contaminated Materials	Visual and Aesthetics	
Construction Impacts	Safety and Security	
Secondary and Cumulative Impacts	Cultural Resources	
	Soils and Geologic Conditions	
	Utilities	
	Water Quality	

The Existing Conditions Report, provided as Appendix A, describes existing conditions for the following resources:

- Land Use and Zoning
- Local Plans
- Property Ownership
- Environmental Justice
- Neighborhoods and Community Resources
- Parklands
- Soils and Geologic Conditions
- Utilities
- Safety and Security

Technical memoranda are provided as appendices to the EA for further analysis of existing conditions for the following resource areas:

- Transportation (Appendix B)
- Water and Natural Resources (Appendix C)
- Hazardous and Contaminated Materials (Appendix D)
- Cultural Resources (Appendix E)
- Air Quality (Appendix F)
- Noise and Vibration (Appendix G)
- Section 4(f) (Appendix H)

These technical memoranda provide the basis for determining the presence of resources within the study areas and the potential for effects on those resources.

Additionally documentation on the project is provided in Appendix H and Appendix I. The Draft Section 4(f) Evaluation is provided in Appendix H and the project's listing in the Metropolitan Washington Council of Government's (MWCOG) Financially Constrained Long-Range Plan and Transportation Improvement Program are provided in Appendix I.

### 3.1 Effects of No Build Alternative

The No Build Alternative assumes that current operations at New Carrollton Yard would continue, and that WMATA would not develop its property at the Landover Yard site. No potential effect to resources is anticipated. Under the No Build Alternative, WMATA would not be able to provide the necessary service and infrastructure maintenance as outlined in the *RFMP*, *Momentum*, and the *Eight-Car Train Implementation Plan*.

WMATA would not have the capacity to accommodate the storage demand for an expanded rail car fleet. The *RFMP* states that WMATAs existing rail car storage capacity is 1,104 cars. The *RFMP* forecasts that WMATAs rail car storage demand will grow to 1,494 cars by 2020 and to 1,672 cars by 2025.

### 3.2 Resources Not Present in Study Area

The following resources do not exist in the New Carrollton Yard and Landover Yard site study areas and would not be impacted by the Build Alternative:

- Federal or State-Designated Wildlife or Waterfowl Refuges (analysis included in the Draft Section 4(f) evaluation found in Appendix H)
- Wild & Scenic Rivers
- Navigable Waterways
- Federal or State-Listed Endangered Species

No further description of these resources is provided in the EA.



### 3.3 Resources with No Potential Long-Term Effects

The following resources were identified in the study areas, but no impact from the Build Alternative was identified and no further description is provided in the EA:

- Transportation
- Environmental Justice (analysis included in Section 3.7)
- Neighborhoods and Community Resources
- Parklands
- Air Quality
- Noise and Vibration
- Visual and Aesthetics
- Safety and Security
- Soils and Geologic Conditions
- Water Quality
- Utilities
- Section 4(f) properties (further analysis included in the Draft Section 4(f) evaluation found in Appendix H)
  - Based on Section 4(f) of the U.S. Department of Transportation Act, as amended, the proposed improvements at New Carrollton and Landover Yards would not result in permanent use, temporary use, or a constructive use of any Section 4(f) resources.

Although no long-term impacts are anticipated for the resources listed above, there may be temporary, short-term impacts related to construction of the project. Temporary construction impacts are described in further detail in Section 3.13 for the following resources:

- Contaminated Materials
- Noise
- Air Quality
- Water Quality

### 3.4 Land Use and Zoning

This section documents the consistency of the Build Alternative with the existing land use and zoning. See **Appendix A** for the Existing Conditions Report for a comprehensive analysis of the existing land use and zoning.

#### 3.4.1 New Carrollton Yard

##### Existing Land Use

The existing yard is surrounded by transportation uses on three sides. The yard abuts Amtrak's Northeast Corridor to the west, Interstate-95 /495 to the east, and a WMATA parking garage to the south. Industrial land uses are immediately adjacent and to the north of the yard. Southeast of the rail yard is a suburban office park with two to fourteen story buildings and surface parking lots. **Figure 3-1** shows existing land uses around New Carrollton Yard.

##### Existing Zoning

The existing yard and the proposed expansion area are zoned M-X-T (Mixed-Use-Transportation Oriented) and lie entirely within the New Carrollton Transit Development Overlay Zone (TDOZ), a zoning overlay established by the *New Carrollton Transit District Development Plan*. M-X-T allows for a variety of residential, commercial, and employment uses and for potential air-right development of mixed uses over the existing rail yard. The overlay is intended to ensure that the area around the New Carrollton Metrorail Station is available for transit-oriented development opportunities. **Figure 3-2** shows existing zoning around New Carrollton Yard.

The existing yard and the proposed improvements conflict with the M-X-T designation, which allows by-right passenger transportation stations and depots, but prohibits "railroad yards, round houses, car barns and freight stations." Although the yard is not consistent with current zoning, WMATA is exempt from zoning in Prince George's County.

#### 3.4.2 Landover Yard

##### Existing Land Use

The proposed Landover Yard abuts other transportation land uses, including the Landover Metrorail Station, Amtrak's Northeast Corridor and US-50 to the west and north, and industrial land uses to the east and south. The Landover site is currently designated as a forest and transportation land use. **Figure 3-3** shows existing land uses around Landover Yard.

##### Existing Zoning

The Landover Yard site is zoned for light industrial uses (I-1). The proposed yard is not consistent with the I-1 designation, which prohibits rail facilities, such as rail yards, round houses, car barns, and freight yards. **Figure 3-4** shows existing zoning around Landover Yard. Although the proposed yard is not consistent with current zoning, WMATA is exempt from zoning in Prince George's County.

Figure 3-1: New Carrollton Yard Existing Land Use

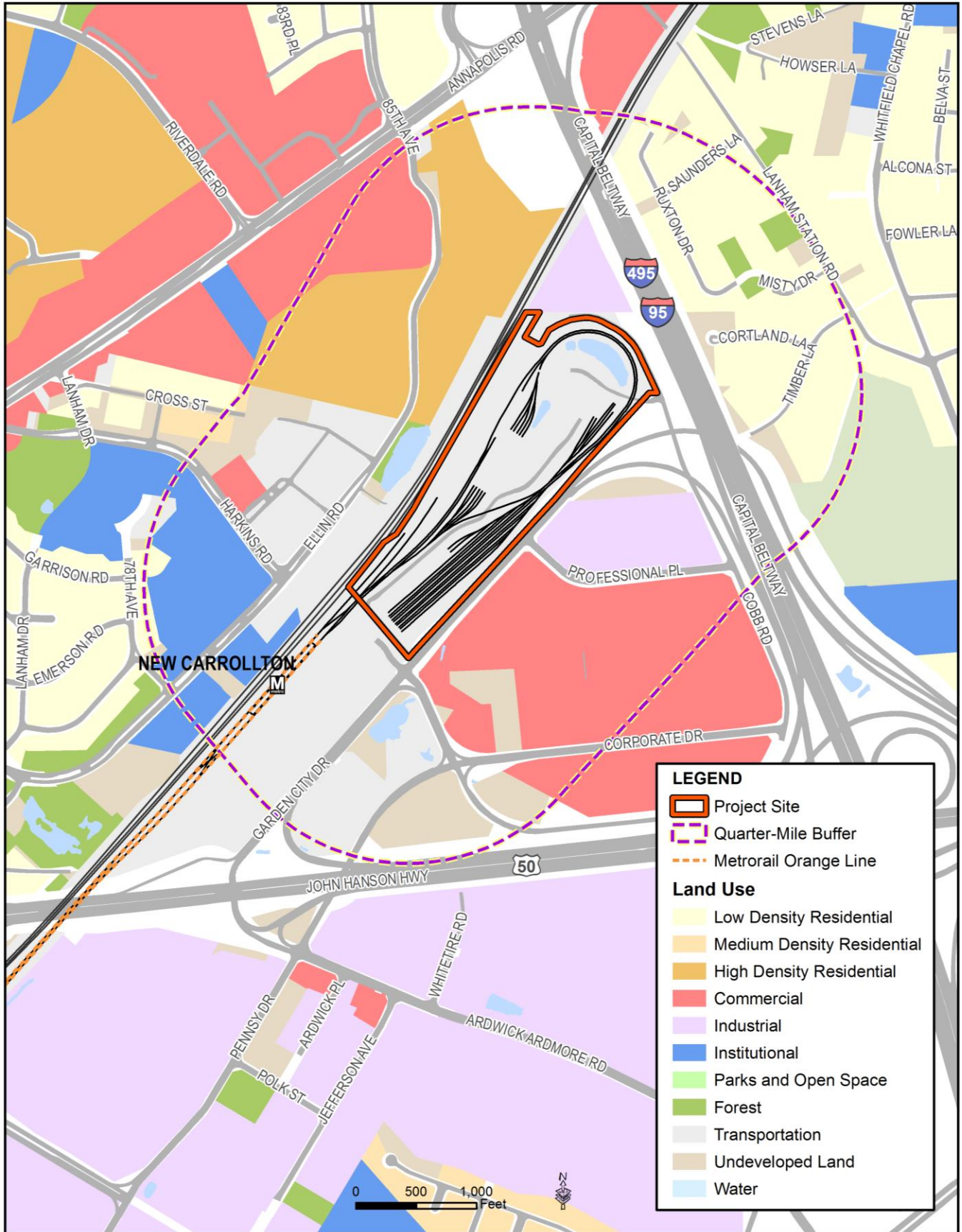


Figure 3-2: New Carrollton Yard Zoning

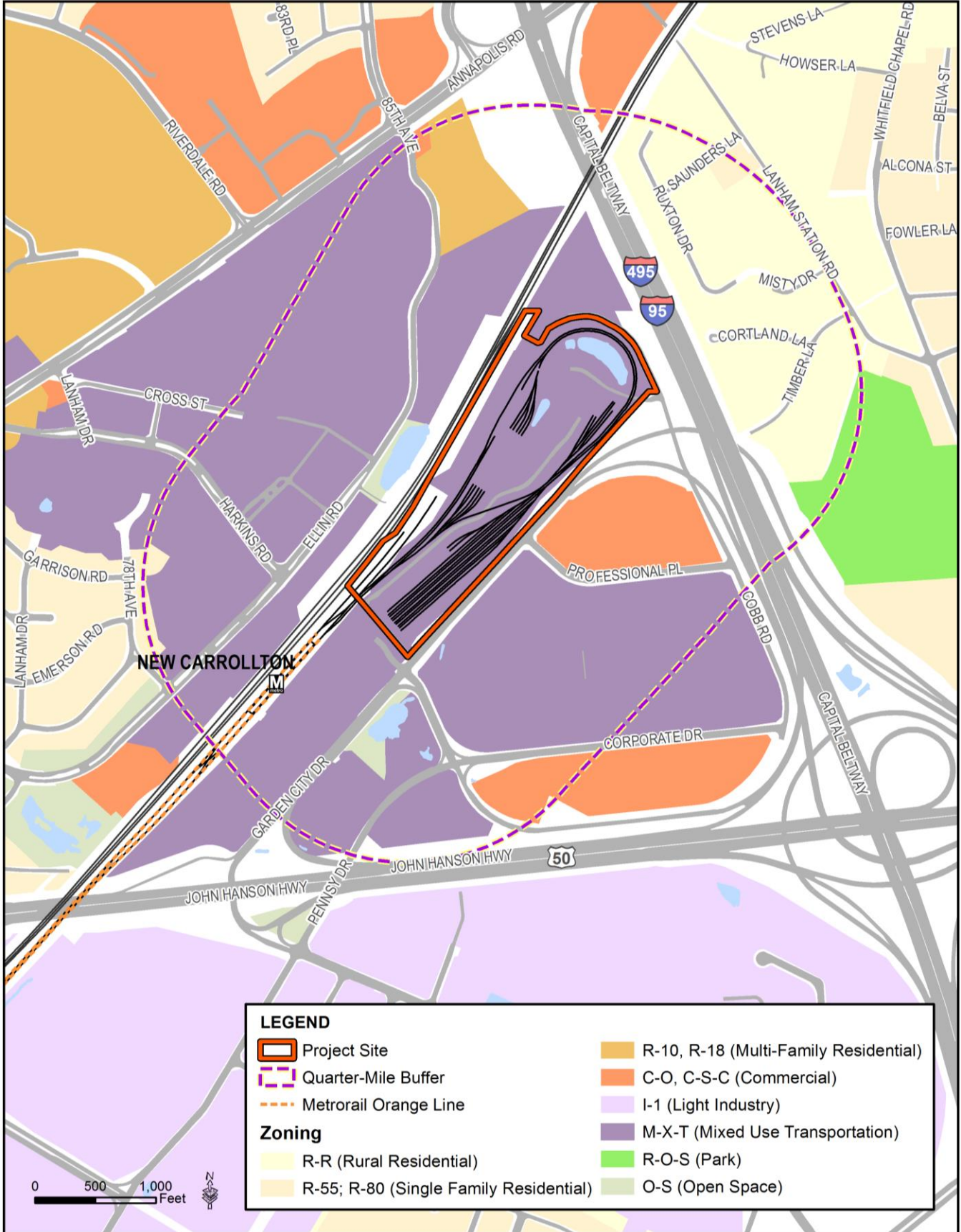
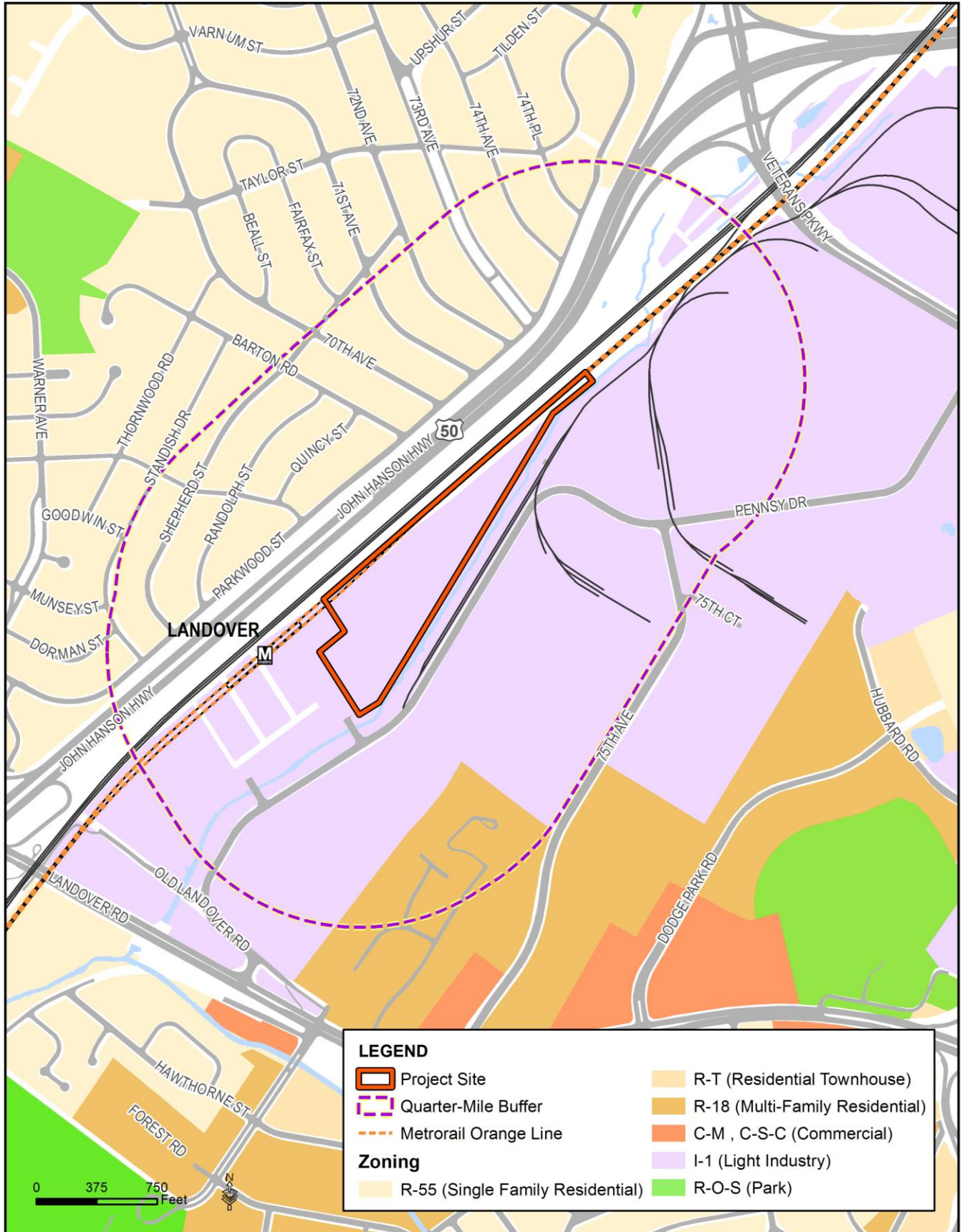


Figure 3-3: Landover Yard Existing Land Use



Figure 3-4: Landover Yard Zoning



### 3.5 Consistency with Local Plans

This section reviews applicable local plans and assesses the consistency of the Build Alternative. The plans include adopted county land use, transportation, and environmental plans. See **Appendix A** for the Existing Conditions Report for a comprehensive analysis of the existing local plans.

#### 3.5.1 New Carrollton Yard

**Table 3-2** lists applicable local plans and potential conflicts between the New Carrollton Yard improvements and provisions contained in the plans.

**Table 3-2: Planning Consistency of Proposed New Carrollton Yard Improvements**

Plan	Description	Author	Year	Build Alternative Conflicts with Plan
Prince George’s County Approved General Plan	Provides recommendations for guiding future development and identifies Regional Transit Centers and Priority Investment Districts.	Maryland-National Capital Park and Planning Commission (M-NCPPC)	2002	None
Approved Countywide Green Infrastructure Plan	Recommends areas for the conservation of environmentally sensitive ecosystems.	M-NCPPC	2005	Portion of proposed site identified as Evaluation Area or Network Gap
Approved Countywide Master Plan of Transportation	Addresses the strategic transportation issues for all modes, and guides policies, programs, facilities, and services to attain the goals of the General Plan.	M-NCPPC	2009	None
Approved New Carrollton Transit District Development Plan and Transit Overlay Zoning Map Amendment	Recommends future transit-oriented development at New Carrollton Metrorail Station. Envisions a new urban center built around the Metrorail station.	M-NCPPC	2010	None
Approved Subregion 4 Master Plan and Sectional Map Amendment	Contains recommendations on land use, environment, transportation systems, parks, historic preservation, and urban design. Seeks to implement the policy goals of the General Plan and envisions New Carrollton as a metropolitan center.	M-NCPPC	2010	None

New Carrollton Yard is consistent with all local plans reviewed, except with Prince George’s County’s adopted *Countywide Green Infrastructure Plan*. The *Countywide Green Infrastructure Plan* designates areas of the green infrastructure network into three categories:

- **Regulated areas** are “places containing environmentally sensitive features that are currently regulated during the land development process (i.e., steep slopes, floodplains).”
- **Evaluation areas** are “places with environmentally sensitive features that are presently not protected under any existing land use regulations.”
- **Network gaps** are “areas critical to the connection of regulated and evaluation areas.”

Portions of the northeast corner of the New Carrollton Yard site are designated as an evaluation area and as a network gap. The county development application for New Carrollton Yard would be reviewed for conformance with the *Countywide Green Infrastructure Plan*.

3.5.2 Landover Yard

Table 3-3 lists applicable local plans and potential conflicts between the proposed Landover Yard and provisions contained in the plans.

Table 3-3: Planning Consistency of Proposed Landover Yard

Plan	Description	Author	Year	Build Alternative Conflicts with Plan
Prince George’s County Approved General Plan	Provides recommendations for guiding future development and identifies Regional Transit Centers and Priority Investment Districts.	M-NCPPC	2002	None
Approved Countywide Green Infrastructure Plan	Recommends areas for the conservation of environmentally sensitive ecosystems.	M-NCPPC	2005	Portions of proposed site designated as Protected Area or Evaluation Area
Approved Countywide Master Plan of Transportation	Addresses the strategic transportation issues for all modes, and guides policies, programs, facilities, and services to attain the goals of the General Plan.	M-NCPPC	2009	None
Approved Subregion 4 Master Plan and Sectional Map Amendment	Contains recommendations on land use, environment, transportation systems, parks, historic preservation, and urban design. Seeks to implement the policy goals of the General Plan and envisions Landover as a mixed-use district.	M-NCPPC	2010	Proposed site is recommended for future mixed-use development
Approved Landover Metro Area and 202 Corridor Sector Plan and Sectional Map Amendment	Envisions Landover as a vibrant, walkable, transit oriented center anchored by a green industrial district and mixed-use development.	M-NCPPC	2014	Proposed site is recommended for future mixed-use development

Landover Yard would not be consistent with three adopted plans:

- *Countywide Green Infrastructure Plan;*
- *Subregion 4 Master Plan and Sectional Map Amendment; and*
- *Landover Metro Area and 202 Corridor Sector Plan and Sectional Map Amendment.*

The *Countywide Green Infrastructure Plan* identifies the entire Landover Yard site as part of the green infrastructure network. Regulated areas identified at Landover are along areas buffering Beaverdam Creek, while the remaining site is designated as either an evaluation area or network gap.

The proposed Landover Yard does not conform with the *Subregion 4 Master Plan* and *Landover Metro Area and 202 Corridor Sector Plan*. The *Subregion 4 Master Plan* and *Landover Metro Area and 202 Corridor Sector Plan* both recommend the proposed rail yard site as part of a future mixed-use commercial and residential development. The plans designate Landover as a regional center, with dense mixed-use development at the Landover Metrorail Station. The *Landover Metro Area and 202 Corridor Sector Plan* envisions a mixed-use commercial and residential area on the site. An amendment to the *Subregion 4 Master Plan* and *Landover Metro Area and 202 Corridor Sector Plan* would need to be developed in coordination with Maryland-National Capital Park and Planning Commission Planning Department and approved by the Prince George’s County Council.



### 3.5.3 Mitigation and Commitments

WMATA will complete the “Mandatory Referral Review” process in coordination with Prince George’s County, and in accordance with County guidance material including the *Adopted Uniform Standards for Mandatory Referral Review* (July 18, 2012). In Maryland, government agencies must submit proposed projects for review and comment. Agencies submitting projects may choose to modify projects based on the comments received.

Section 20-301 of The County’s Regional District Act requires all federal, state, and local governments, and public utilities to submit proposed projects for a mandatory referral review and comment by the Prince George’s County Planning Board. The law requires the Planning Board review “the proposed location, character, grade and extent of any road, park, public way or ground, public (including federal) building or structure, or public utility (whether publicly or privately owned), prior to the project being located, constructed, or authorized”. Through this process, WMATA will address the project’s consistency with local plans. The County would ultimately revise or amend local plans to incorporate the project’s construction.

### 3.6 Land Acquisitions

This section identifies land acquisitions that would be required under the Build Alternative. Land acquisitions are subject to the provisions of the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970* as amended, which ensures that property owners, residents and businesses affected by the acquisition or demolition of real property during the construction of federally funded projects are treated fairly, consistently, and equitably. Relocation assistance would follow the guidelines set forth in Title 49, Part 24 of the Code of Federal Regulations (49 CFR Part 24). See **Appendix A** for the Existing Conditions Report for a comprehensive analysis of land ownership within the study areas.

#### 3.6.1 New Carrollton Yard

As proposed, the Build Alternative would expand the existing yard beyond the property currently owned by WMATA and require property acquisitions of portions of parcels abutting the site. To accommodate the expansion, WMATA would purchase 2.22-acres of land from Amtrak and 0.72-acres of land from Maryland State Highway Administration (SHA) for the expansion of the yard. Both the Amtrak and SHA properties are currently vacant and their acquisition for the Build Alternative would not result in any displacements. **Table 3-4** lists the properties proposed for acquisition. **Figure 3-5** shows the locations of these properties.

Construction of improvements to New Carrollton Yard would occur entirely within the properties identified and no other properties would be occupied for construction.

**Table 3-4: Proposed Property Acquisitions for New Carrollton Expansion**

County Parcel Tax ID	Address	Owner	Acquired Area (Acres)
2247526	Garden City Dr. Lanham, MD 20706	Amtrak	2.22
2247534/2842912	5631 Lanham Station Rd. Lanham, MD	Amtrak	
2261709	Garden City Dr. Lanham, MD 20706	SHA	0.07
Not Applicable <sup>1</sup>	Not Applicable	SHA	0.42
Not Applicable <sup>1</sup>	Not Applicable	SHA	0.23
<b>Total Acreage</b>			<b>2.94</b>

<sup>1</sup>Two proposed property acquisitions do not have parcel tax IDs or addresses as they are segments of Garden City Drive right-of-way owned by SHA.

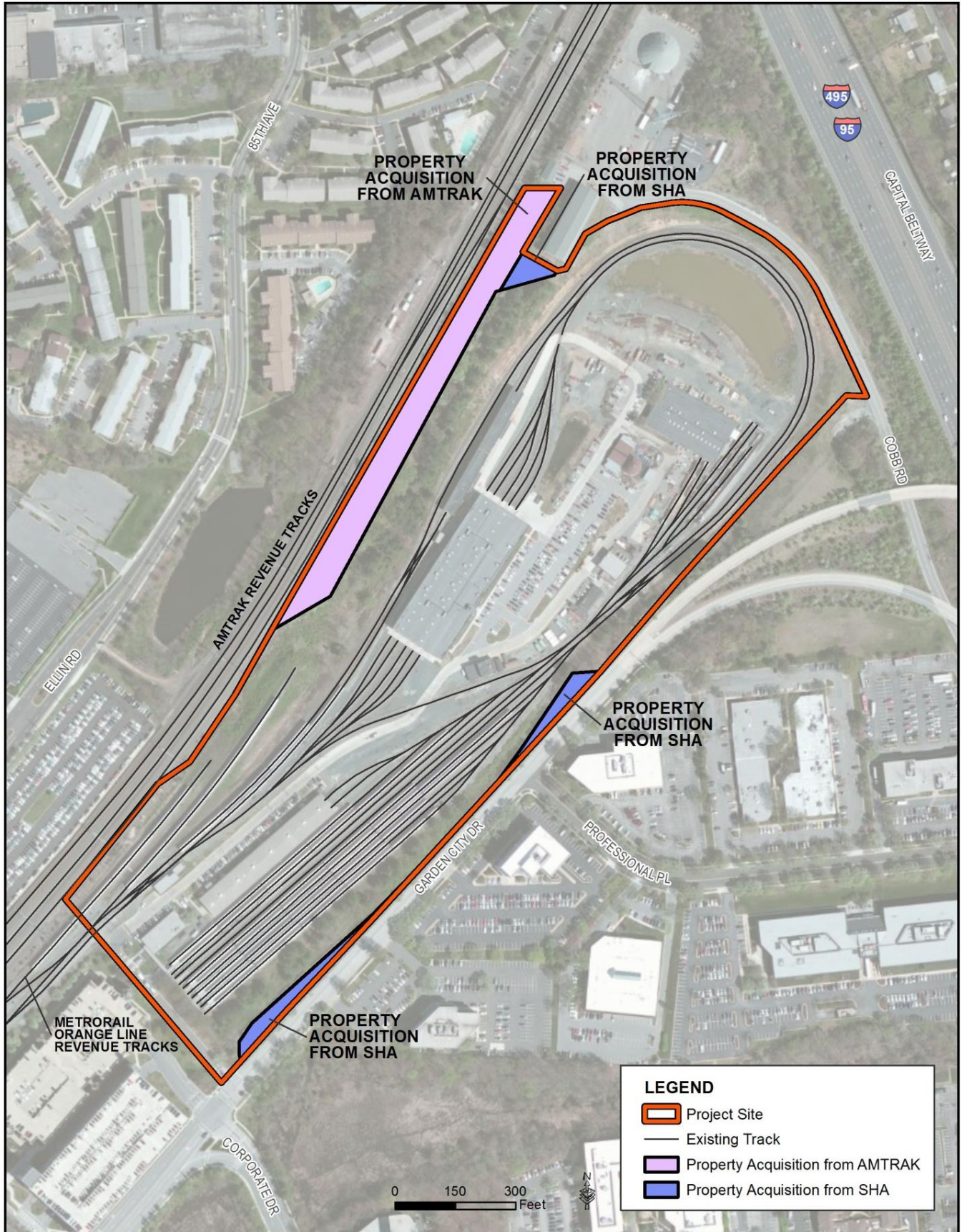
#### 3.6.2 Landover Yard

No land acquisition or displacement would be required to implement the Build Alternative as the site is owned by WMATA. Construction of Landover Yard would occur entirely within WMATA property and no other properties would be occupied for construction.

#### 3.6.3 Mitigation and Commitments

Amtrak and SHA properties would be acquired through the provisions of the *Uniform Relocation Assistance and Real Property Acquisition Act of 1970* as amended and through negotiations with property owners based on property appraisals. If negotiations with any affected property owners are unsuccessful pursuant to the Uniform Relocation and Real Property Acquisition Policies Act, WMATA has the authority to acquire real property by condemnation. As a multistate agency, WMATA’s condemnations are handled by the U.S. Department of Justice. WMATA would use its condemnation authority only if it were unable to come to an agreement with a property owner regarding the terms of the property acquisition or relocation. Both Federal and state laws

Figure 3-5: New Carrollton Property Acquisitions



require that property owners be paid fair market value for their land and improvements, and that property owners be assisted in finding replacement business sites or dwellings.

### 3.7 Environmental Justice

This section identifies the potential effects of the Build Alternative on minority and low-income populations (collectively “EJ populations”). Environmental justice is defined by Executive Order 12898 (EO 12898), *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. EO 12898 requires that federal agencies identify and address disproportionately high and adverse federal impacts on minority and low-income populations. The U.S. Department of Transportation (USDOT) is committed to the principles of environmental justice, which include:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations;
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

An environmental justice analysis was prepared in accordance with the following federal guidance documents:

- USDOT Order 5610.2(a), *Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, May 10, 2012;
- Federal Transit Administration Circular 4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration Recipients*, August 15, 2012; and
- Council on Environmental Quality (CEQ), *Environmental Justice – Guidance under the National Environmental Policy Act (NEPA) of 1969*, December 10, 1997.

The Existing Conditions Report found in **Appendix A** contains additional information.

As defined in **Appendix A**, minority and low-income populations were identified within a quarter-mile radius around the New Carrollton Yard and the Landover Yard site. In addition to the study areas defined, 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).

**Table 3-5** lists the percentages of minority and low-income residents in the quarter-mile study area for both the New Carrollton Yard and the Landover Yard sites in comparison to Prince George’s County and the WMATA Rail Service Area. Approximately 98 percent of the New Carrollton Yard study area population and 95 percent of the Landover Yard site study area population belong to a minority group. In comparison, both study areas have higher percentages of minority populations than Prince George’s County (85 percent) and the WMATA Rail Service Area (58 percent). Additionally, nearly 21.4 percent of the New Carrollton Yard study area and 25.9 percent of the Landover Yard site study area are low-income, which is higher than Prince George’s County (14.8 percent) and the WMATA Rail Service Area (13.9 percent).

**Table 3-5: Minority and Low-Income Populations**

Population Type	New Carrollton Study Area	Landover Study Area	Prince George’s County	WMATA Rail Service Area
Total Population	2,518	2,645	865,443	3,914,222
Minority Population (Percent of Total Population)	2,459 (97.7%)	2,509 (94.9%)	735,204 (85.0%)	2,271,354 (58.0%)
Population for whom poverty status is determined*	2,517	2,594	843,465	3,836,283
Low-Income Population (Percent of Population for whom poverty status is determined)	539 (21.4%)	671 (25.9%)	125,091 (14.8%)	533,455 (13.9%)

\*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 2008-2012.

USDOT Order 5610.2(a) defines a disproportionately high and adverse effect on minority and low-income populations as an impact that “(1) is predominately borne by a minority and/or low-income population, or (2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or low-income population.”

Potential effects to minority and low-income populations, such as traffic, air quality, and noise and vibration, were assessed using the findings of the specific analyses conducted separately for those environmental resources as part of this EA. The methodologies used in those resource analyses and their complete findings are reported in the individual technical memoranda found in the appendices of this report.

**3.7.1 New Carrollton Yard**

There are no human environmental effects, including health, economic, and social effects, on the identified minority and low-income populations within the New Carrollton Yard study area. The land acquisition associated with this site would not displace any low-income populations, minority populations, or minority-owned businesses. Under the Build Alternative, no impacts to neighborhoods, community facilities, air quality, noise, vibration or traffic are anticipated. Most effects of the project would occur during the construction phase, which is described in **Section 3.13** (Construction Impacts). Where there are impacts, WMATA has committed to apply Best Management Practices (BMP) and mitigation measures equally throughout the project. Taking all of these factors into account, the Build Alternative at the New Carrollton Yard would not have “disproportionately high and adverse effects” on minority and low-income populations. The following subsections discuss potential environmental justice impacts from each resource area:

**Land Use and Zoning**

Land use will not change and zoning is unaffected at the existing yard. No impact to environmental justice populations has been identified in relation to existing land use or zoning.

**Land Acquisitions**

To accommodate the yard expansion, WMATA would purchase 2.22-acres of land from Amtrak and 0.72-acres of land from SHA. Acquisition of these properties would not displace any low-income populations, minority populations, or minority-owned businesses.

### Cultural Resources

No cultural resource was identified in the study area. No impact to environmental justice populations has been identified in relation to cultural resources.

### Water Resources and Floodplains

There are no naturally occurring water features, including wetlands, Waters of the US (WOUS), or floodplains, at New Carrollton Yard. Stormwater from the existing facility and proposed expansion will be treated through the use of BMPs in accordance with state and local requirements. Therefore, no impact to environmental justice populations is anticipated related to water resources.

### Wildlife and Vegetation

Expansion of the New Carrollton Yard would affect 3.8 acres of delineated forest stands. The forested areas at the site are highly disturbed and serve primarily as visual landscaping buffers. While the clearing of the forest would be an adverse effect, the clearing would be minor within the context of the larger region and would be mitigated through the State Forest Conservation Fee-In-Lieu Fund. The removal of the forested areas would not change views of New Carrollton Yard from residential communities as the closest communities are already shielded by noise walls. Because the forest at New Carrollton Yard is highly disturbed, would be mitigated through the State Forest Conservation Fee-In-Lieu Fund, and would not change the visual setting of the yard of the closest residential communities, the removal of 3.8 acres of forest would not have a disproportionately high and adverse impact on environmental justice populations.

### Hazardous and Contaminated Materials

Impacts from asbestos containing materials and petroleum impacted materials would be mitigated in accordance with applicable Federal, state and local regulations and would not impact environmental justice populations.

### Construction Impacts

Noise levels from construction vehicles and equipment may create a temporary nuisance at some receptors and construction activities would follow the noise criteria specified in Prince George's County Code (*Subtitle 19, Pollution, Division 2, Noise Control, Section 19-120*) and in Section 16.7 of the *WMATA Manual Design Criteria*. Some of the closest residential communities would be shielded by existing noise walls along the rail corridor from the construction activities proposed at New Carrollton Yard.

Air pollution sources include direct emissions from construction equipment and trucks, increased emissions from motor vehicles on streets due to disruption of traffic flow, and fugitive dust emissions. These impacts would be temporary and affect only the immediate vicinity of the construction sites and their access routes. In addition, construction access to New Carrollton Yard would be through a light industrial/business park and not require disturbance of any residential communities.

WMATA would comply with applicable local, state, or federal laws for these and other construction-related impacts and would use BMPs to minimize or mitigate these impacts. Therefore, there is no disproportionately high and adverse impact to environmental justice communities from construction-related impacts.

### Secondary and Cumulative Effects

No impacts to environmental justice populations have been identified in relation to secondary effects. No secondary effects were identified in the study area.

Impacts associated with cumulative effects would be mitigated in accordance with applicable Federal, state and local regulations and would not impact environmental justice populations.

### Resources with No Potential Long-Term Effects

The following resources were identified in the study areas, but no impact from the Build Alternative was identified. These resources were assessed using the findings of the specific analyses as part of this EA. The methodologies used in those resource analyses and their complete findings are reported in the individual technical memoranda found in the appendices of this EA. No potential long-term effect was identified for the following resources, including any potential impacts to environmental justice populations:

- Transportation
- Neighborhoods and Community Resources
- Parklands
- Air Quality
- Noise and Vibration
- Visual and Aesthetics
- Safety and Security
- Soils and Geologic Conditions
- Water Quality
- Utilities

### 3.7.2 Landover Yard

There are no human environmental effects, including health, economic, and social effects, on the identified minority and low-income populations within the Landover Yard site study area. Under the Build Alternative, no impacts to neighborhoods, community facilities, air quality, noise, vibration or traffic are anticipated. Most effects of the project would occur during the construction phase, which is described in **Section 3.13** (Construction Impacts). Where there are impacts, WMATA has committed to apply BMPs and mitigation measures equally throughout the project. Taking all of these factors into account, the Build Alternative at the Landover Yard site would not have “disproportionately high and adverse effects” on minority and low-income populations. The following subsections discuss potential environmental justice impacts from each resource area:

#### Land Use and Zoning

The proposed Landover Yard abuts other transportation uses, including the Landover Metrorail Station, Amtrak’s Northeast Corridor and U.S. Route 50 to the west and north, and industrial land uses to the east and south. The Landover site is currently zoned for light industrial uses and the *Subregion 4 Master Plan* and the *Landover Metro Area and 202 Corridor Sector Plan* recommend the proposed rail yard site as part of a future mixed-use development at the Landover Metrorail Station. WMATA will complete the “Mandatory Referral Review” process in coordination with Prince George’s County that allows for commenting by the County’s Planning Board. Through this process, WMATA will address the project’s consistency with local plans.

Because WMATA will work with Prince George’s County through the “Mandatory Referral Review” and because the Landover Yard site is surrounded by other transportation and light industrial uses, no impact to environmental justice populations has been identified in relation to existing land use zoning or in relation to consistency with local plans.

### Land Acquisitions

No property is being acquired for Landover Yard. Consequently, no impact is identified in the study area.

### Cultural Resources

No cultural resource was identified in the study area. No impact to environmental justice populations has been identified in relation to cultural resources.

### Water Resources and Floodplains

WMATA would affect one small wetland, totally approximately 0.1 acres at the proposed Landover Yard and would mitigate the effects in a manner that is consistent with the requirements set by the Maryland Department of the Environment (MDE) and the US Army Corps of Engineers (USACE). In addition, WMATA will provide a 25-foot stream buffer along the adjacent Beaverdam Creek. As stated in **Section 3.10**, no impacts to floodplains are expected for the proposed Landover Yard. Stormwater from the proposed facility will be treated through the use of BMPs in accordance with state and local requirements. Because the impacts to wetlands and streams will be mitigated, no impact to environmental justice populations is anticipated related to water resources.

### Wildlife and Vegetation

Construction of the proposed Landover Yard would affect approximately 8.1 acres of relatively undisturbed delineated forest stands. While the clearing of the forest would be an adverse effect, the clearing would be minor within the context of the larger region and would be mitigated through the State Forest Conservation Fee-In-Lieu Fund. The forest stand is separated from residential communities by existing transportation infrastructure and noise walls. Because the forest stands would be mitigated through the State Forest Conservation Fee-In-Lieu Fund and the removal would be minor within the context of the larger region, the removal of 8.1 acres would not have an effect on environmental justice populations.

### Hazardous and Contaminated Materials

No hazardous or contaminated material has been identified within the study area. Consequently, no impact to environmental justice populations has been identified.

### Construction Impacts

Noise levels from construction vehicles and equipment may create a temporary nuisance at some receptors and construction activities would follow the noise criteria specified in Prince George's County Code (*Subtitle 19, Pollution, Division 2, Noise Control, Section 19-120*) and in Section 16.7 of the *WMATA Manual Design Criteria*. Some of the closest residential communities would be shielded by existing noise walls along the rail corridor from the construction activities proposed at the proposed Landover Yard.

Air pollution sources include direct emissions from construction equipment and trucks, increased emissions from motor vehicles on streets due to disruption of traffic flow, and fugitive dust emissions. These impacts would be temporary and affect only the immediate vicinity of the construction sites and their access routes. In addition, construction access to the proposed Landover Yard would be through a light industrial park and not require disturbance of any residential communities.

Construction at the Landover Yard and the New Carrollton Yard would be staged to minimize impact to parking at the Landover Metrorail Station.



WMATA would comply with applicable local, state, or federal laws for these and other construction-related impacts and would use BMPs to minimize or mitigate these impacts. Therefore, there would be no disproportionately high and adverse impacts to environmental justice communities from construction-related impacts.

### Secondary and Cumulative Effects

No impacts to environmental justice populations have been identified in relation to secondary effects. No secondary effects were identified in the study area.

Impacts associated with cumulative effects would be mitigated in accordance with applicable Federal, state and local regulations and would not impact environmental justice populations.

### Resources with No Potential Long-Term Effects

The following resources were identified in the study areas, but no impact from the Build Alternative was identified. These resources were assessed using the findings of the specific analyses as part of this EA. The methodologies used in those resource analyses and their complete findings are reported in the individual technical memoranda found in the appendices of this EA. No potential long-term effects were identified for the following resources, including any potential impacts to environmental justice populations:

- Transportation
- Neighborhoods and Community Resources
- Parklands
- Air Quality
- Noise and Vibration
- Visual and Aesthetics
- Safety and Security
- Soils and Geologic Conditions
- Water Quality
- Utilities

### 3.7.3 Public Involvement

The environmental justice analysis determined that both study areas have significant Hispanic populations (18.9 percent in the New Carrollton Yard study area and 25.4 percent in the Landover Yard site study area). Data from the US Census Bureau's American Community Survey 5-Year Estimates (2008-2012) indicate the presence of a Spanish-speaking adult population that exceeds the U.S. Department of Justice's "safe harbor" threshold, which requires the translation of vital documents pursuant to Executive Order 13166 ("Improving Access to Services for Persons with Limited English Proficiency"). Therefore, any future public involvement activities and outreach materials developed for the project will appropriately target minority, low-income and Spanish-speaking populations to ensure full and fair participation of all potentially affected communities in the transportation decision-making process.

WMATA will complete the public hearing process, as required by the Compact, WMATA's governing document. Notice of the public hearing will be published in the Washington Post for two successive weeks. To comply with Title VI requirements, the notice will be published in local Spanish language newspapers as well. A document summarizing comments received and providing staff responses will be released for public review and comment.

Since local communities who could be affected by the project likely use the local Metrorail Station, notice of the public hearing will be provided at the New Carrollton and Landover Metrorail stations.

### 3.7.4 Mitigation and Commitments

No disproportionate, high and adverse impact to minority and/or low-income communities is anticipated. Therefore, no mitigation is proposed.

## 3.8 Cultural Resources

This section identifies and analyzes the potential to impact cultural resources resulting from the Build Alternative. Cultural resources include historic and prehistoric archaeological sites, as well as historic districts, structures, and objects listed in or potentially eligible for inclusion in the National Register of Historic Places (NRHP) and/or the State of Maryland Register of Historic Places (MRHP).

Qualified archaeologists and architectural historians conducted research at the Maryland Historical Trust (MHT) and visited sites to identify historic architectural and archaeological resources within the proposed Areas of Potential Effects (APEs) for New Carrollton and Landover Yard. The APEs were determined for both architectural and archaeological resources in consultation with MHT. The Section 106 process was initiated with the MHT on June 20, 2014 and consultation is on-going. See **Appendix E** for a comprehensive analysis of cultural resources in the study areas and MHT correspondence.

### 3.8.1 New Carrollton Yard

No eligible historic architectural resource exists at the site based on research and determinations pending review from MHT. No previously identified archaeological site (prehistoric or historic) exists within the site. The potential for prehistoric archaeological resources is low due to extensive ground disturbance, and does not warrant a field investigation.

### 3.8.2 Landover Yard

No eligible historic architectural resource exists at the site based on research and determinations pending review from MHT. The APE for archaeology has been subject to a previous archaeological survey, performed in 1978 for the original construction of WMATA's Metrorail routes in Prince George's County. The previous survey did not identify archaeological resources in the current APE. A Phase I archaeological survey was conducted in August 2014 and no previously unrecorded archaeological sites were identified in or adjacent to the APE. The technical approach for the Phase I survey was developed in consultation with MHT. MHT correspondence regarding the Phase I Survey is provided in **Appendix E**.

### 3.8.3 Mitigation and Commitments

Since no historic properties eligible for or listed on the NRHP were identified in the APE, FTA will make a determination of not effect and send the letter for concurrence to MHT in accordance with Section 106 regulations (36 CFR 800). No mitigation is necessary unless the consulting parties determine the project would have an adverse effect.

### 3.9 Waters of the US and State of Maryland

Waters of the US (WOUS), including wetlands, are defined federally by 40 CFR 230.3(s) and include waters “such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation or destruction of which could affect interstate or foreign commerce.” WOUS are regulated by the Clean Water Act (CWA) of 1972 and implementing regulations. See **Appendix C** for the Natural and Water Resources Technical Memorandum for a comprehensive analysis of the existing conditions for WOUS and Waters of the State of Maryland and relevant agency correspondence.

Waters of the State of Maryland are defined by Section 5-101 of the State’s Environment Code to include “surface and underground waters within the boundaries of the State subject to its jurisdiction.”

In addition to the CWA, surface water resources are regulated by the following federal, state and local laws and regulation:

- Presidential Executive Order 11990, Protection of Wetlands;
- Nontidal Wetlands Protection Act (26.23.00 – 26.23.05 of the Annotated Code of Maryland); and
- Prince George’s County Chesapeake Bay Critical Area Ordinance (Sec. 5B-122. Non-tidal Wetlands).

A site visit was conducted at New Carrollton Yard in February 2014 to identify the presence of WOUS or wetlands. A wetland delineation was completed for the Landover Yard study area in May 2014 and the report is provided in **Appendix C**.

#### 3.9.1 New Carrollton Yard

No naturally occurring water features, including wetlands or WOUS, were identified during site visits.

Existing water features within New Carrollton Yard consist of stormwater best management practices (BMP) and their conveyance systems shown in **Figure 3-6**. Existing stormwater management facilities include:

- Stormwater detention;
- Pocket pond;
- Bioretention pond; and
- Storm sewer network.

Topography varies across New Carrollton Yard, with higher elevation on the northeastern side of the rail yard decreasing toward the southwestern corner. Stormwater drainage from Interstate 95/495 enters the yard through two culverts draining into the stormwater detention pond on the northern portion of the yard. A third culvert drains from the SHA property to the pocket pond in the northwestern corner of the rail yard. Stormwater runoff is collected and conveyed primarily in closed storm sewer pipes. One 48-inch pipe from the stormwater detention pond runs across the site collecting the majority of site stormwater runoff. A network of pipes captures stormwater within the yard and discharges on the southwestern corner to a storm drain culvert. A vegetative swale that runs parallel to the yard along Garden City Drive captures some of the drainage coming from the roadway and the rail yard, and discharges to the same culvert.

Figure 3-6: New Carrollton Yard Stormwater Management Features



The Maryland Department of the Environment (MDE) confirmed these findings during a site visit on July 8, 2014, along with a regulated 25-foot wetland buffer. Following the meeting with MDE, a Jurisdictional Determination (JD) request was submitted by WMATA to the US Army Corps of Engineers (USACE) – Baltimore District on July 23, 2014. The JD package is provided in **Appendix C**.

Stormwater BMPs were constructed as part of a 2004 redevelopment project and include a bioretention area, a pocket pond, and a detention pond. The bioretention area and pocket pond are considered to be water quality BMPs. The detention pond provides for quantity control and does not serve a water quality capacity. The drainage area to the bioretention area consists of 2.1 acres of on-site gravel and paved surfaces, and was designed to treat 1.0 acre of impervious area. The pocket pond drains areas off-site and to the north of the rail yard. The pocket pond treats 2.7 acres of impervious area, 1.2 acres of which were in excess of the water quality requirement for the site. New stormwater BMPs would be constructed to accommodate the proposed improvements at New Carrollton Yard.

**3.9.2 Landover Yard**

The wetland delineation identified one small wetland (“Wetland A”), totaling approximately 0.1 acres. Wetland A is located along and associated with Beaverdam Creek. Two drainage channels, totaling 50 linear feet, were also identified based on field visits. The wetland and drainage channels are shown in **Figure 3-7** and summarized in **Table 3-6**. The Maryland Department of the Environment (MDE) confirmed these findings during a site visit on July 8, 2014, along with a regulated 25-foot wetland buffer. Following the meeting with MDE, a Jurisdictional Determination (JD) request was submitted by WMATA to USACE – Baltimore District on July 23, 2014. The JD package is provided in **Appendix C**.

Beaverdam Creek is outside the project site; however, the creek is voluntarily protected by a 25-foot stream buffer as directed by WMATA. The creek buffer intersects with the site at multiple points along the eastern boundary.

Wetlands totaling approximately 0.1 acre would be disturbed.

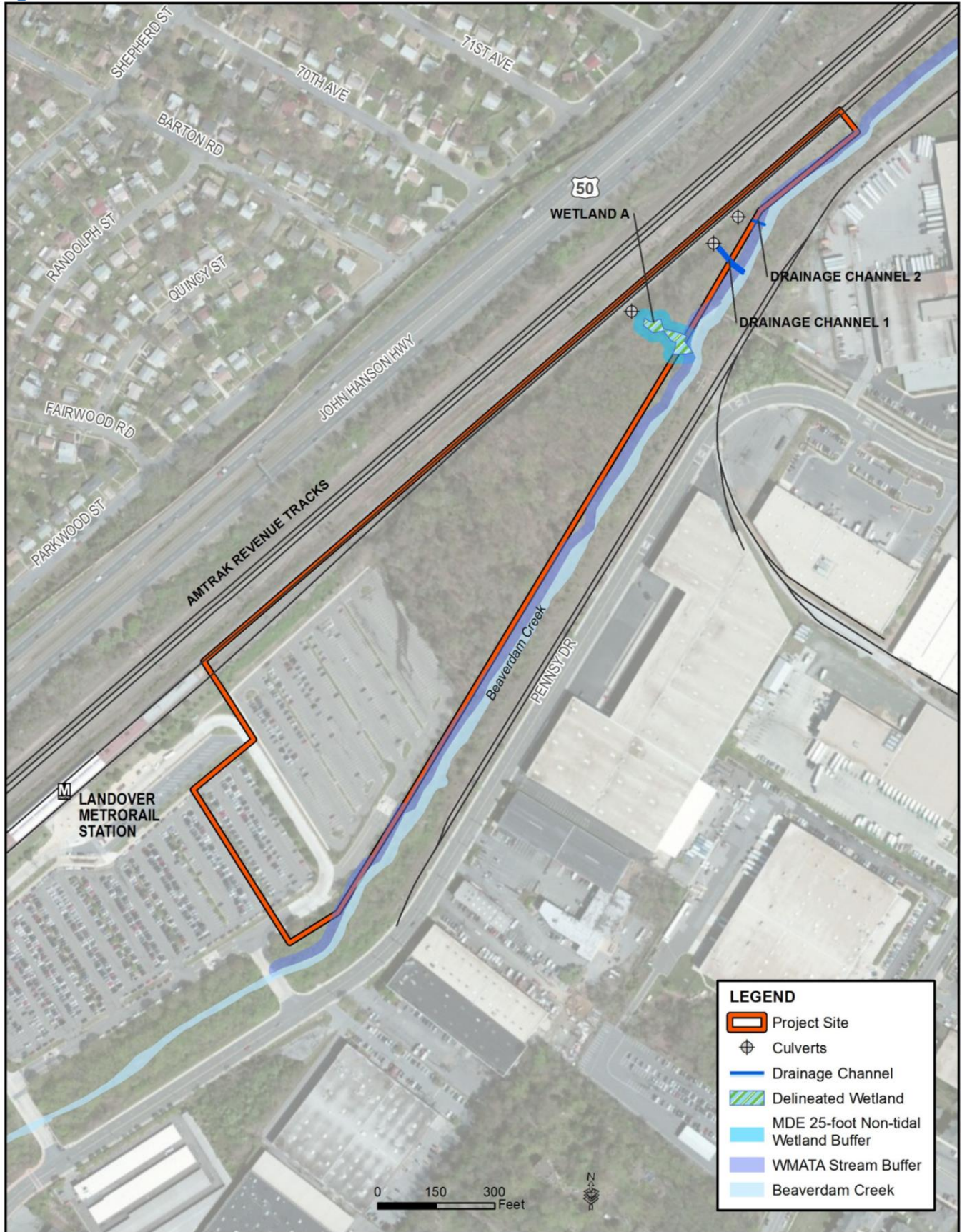
**Table 3-6: Wetland and Water Features at Landover Yard**

Water Feature	Area (Square Feet)	Length (Linear Feet)
Wetland A	2760	Not Applicable
Drainage Channel 1	Not Applicable	47
Drainage Channel 2	Not Applicable	3
Non-Tidal Wetland Buffer	8,148	Not Applicable
WMATA Directed Stream Buffer	9,872	Not Applicable

**3.9.3 Mitigation and Commitments**

WMATA would obtain necessary permits from MDE and USACE before construction. Mitigation would be consistent with requirements set by MDE and USACE. Project impacts would be permitted under the *Maryland State Programmatic General Permit (MD-SPGP) Authorized Activity e(1) Minor Nontidal Fills – Category A*.

Figure 3-7: Landover Yard Wetlands and WOUS



### 3.10 Regulated Floodplains

Special Flood Hazard Areas (SFHAs) are defined by the Federal Emergency Management Agency (FEMA) as areas that have a 1-percent chance of being inundated by a flood event in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood.

Under the National Flood Insurance Program (NFIP), Prince George's County is required to issue permits for development within the 100-year floodplain. In addition to local permits, activities in the 100-year nontidal floodplain require State Waterway Construction Permits, and activities within 25 feet of or in nontidal wetlands require wetland permits from Water Management Administration of the MDE. Executive Order 11988 and Maryland's Construction on Nontidal Waters and Floodplains regulates impacts to the 100-year floodplain.

See **Appendix C** for the Water and Natural Resources Technical Memorandum for a comprehensive analysis of the existing conditions for regulated floodplains and relevant agency correspondence.

#### 3.10.1 New Carrollton Yard

No portion of the New Carrollton Yard study area is within a 100-year floodplain and no impact is anticipated to regulated floodplains as a result of the Build Alternative.

#### 3.10.2 Landover Yard

A portion of the Landover Yard (2.3 acres) is located within an SFHA (see **Figure 3-8**).

A June 2014 survey of the site determined the southern portion of the study area was above the Base Flood Elevation, with elevations ranging between 55 and 60 feet where the Build Alternative would be constructed (See **Appendix C**). WMATA is seeking a Letter of Map Amendment (LOMA) from FEMA for the southern portion of the study area and no impact is anticipated.

#### 3.10.3 Mitigation and Commitments

A LOMA will be obtained; no mitigation is proposed.

Figure 3-8: Landover Yard Regulated Floodplain





### 3.11 Wildlife and Vegetation

Impacts to plant and animal species in the study areas include the removal of tree stands at both site locations and the removal of a resident Canada Geese population at New Carrollton Yard. See **Appendix C** for the Water and Natural Resources Technical Memorandum for a comprehensive analysis of the existing conditions for wildlife and vegetation and relevant agency correspondence. As noted in **Section 3.1** and in **Appendix C**, no impacts to Federal or state-listed threatened or endangered species are anticipated.

Forests in Maryland are protected under the Maryland Forest Conservation Act (Natural Resources Article Section 5-1601 through 5-1613). Maryland's Forest Conservation Program regulates development activities on sites that are 40,000 square feet (0.91 acres) in size and greater. All projects that meet this requirement must submit a forest stand delineation and Forest Conservation Plan prepared by a qualified professional. All Forest Conservation Plans are approved by the Maryland Department of Natural Resources (DNR).

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid hunting game permit issued pursuant to Federal regulations. Permitted exceptions are allowed for game birds, research purposes, and nuisance species. Migratory Canadian Geese are protected by this Act.

#### 3.11.1 New Carrollton Yard

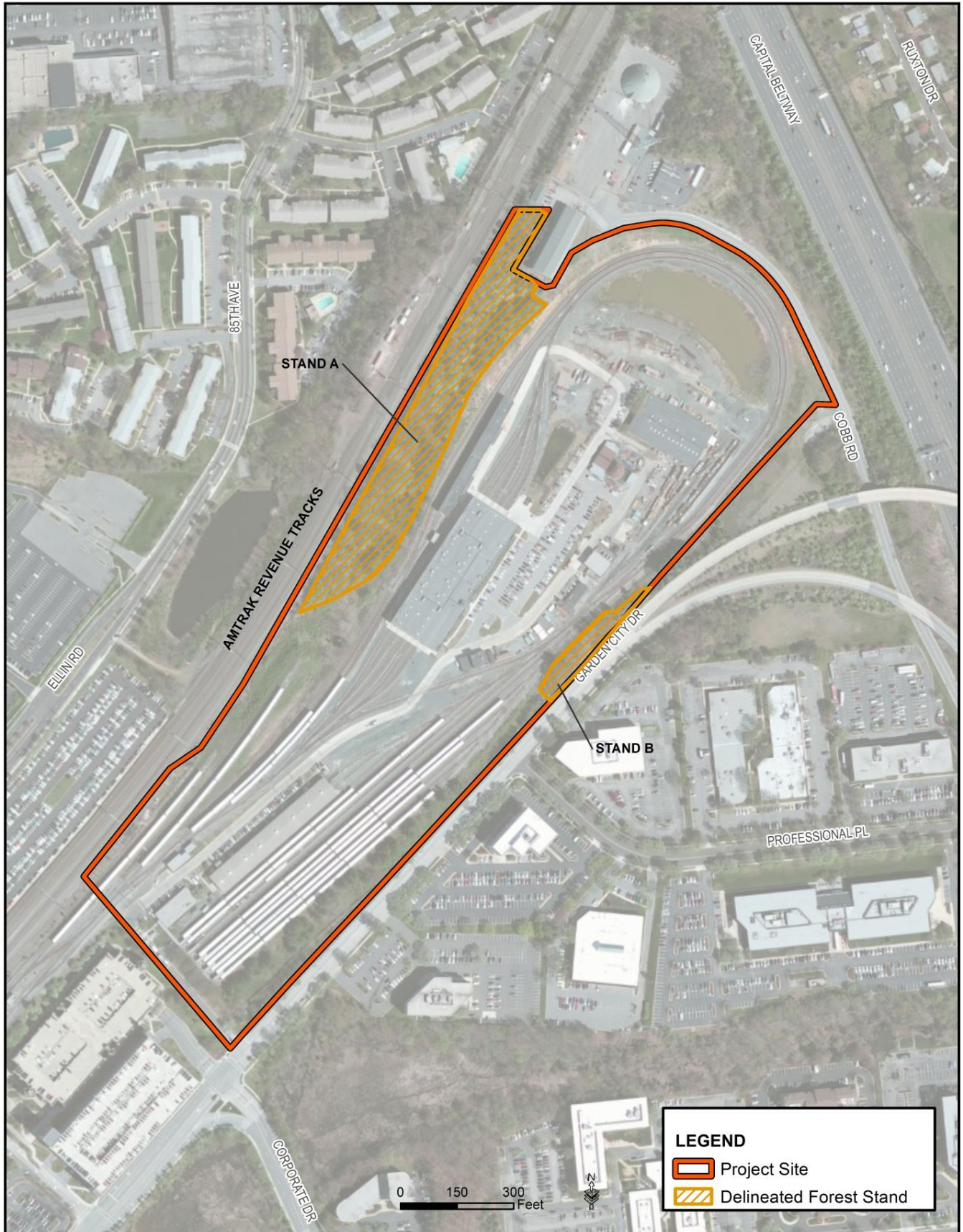
##### Forest Stands

A forest stand delineation was completed within the New Carrollton Yard study area in May 2014 and is provided in **Appendix C**. Two forest stands were identified and delineated in the field qualify as forest under the Maryland Forest Conservation Act. The two forest stands, shown in **Figure 3-9**, total 3.8 acres and are located along the boundary of the rail yard with Garden City Drive ("Stand B") and along the Amtrak train tracks ("Stand A) on the northwestern border of the yard. The Build Alternative would impact 3.8 acres by the clearing and removal of delineated forest stands.

##### Resident Canada Geese

A resident Canada Goose population nest is located in the stormwater ponds area of the rail yard and would conflict with the operations proposed at the rail yard. Geese activities, especially flightless goslings, have the potential to significantly delay construction. The stormwater ponds, where the geese live and nest, would remain. This population would be removed through the issuance of depredation permit approved by USFWS. The resident Canada Goose nest and egg depredation order authorizes landowners who register with the USFWS to destroy resident Canada Goose nests and eggs on property under its jurisdiction when necessary to resolve or prevent injury to people, property, agricultural crops, or other interests. The order does not authorize the killing of any migratory bird species or destruction of any nests or eggs other than resident Canada Geese.

Figure 3-9: New Carrollton Yard Forest Stands



### 3.11.2 Landover Yard

#### Forest Stands

A forest stand delineation was completed within the Landover Yard study area in May 2014 and is provided in **Appendix C**. The delineation confirmed that the majority of the study area is characterized by a mixed hardwood forest. Two forest stands (“Stand A” and “Stand B”) were identified and delineated in the field and are shown in **Figure 3-10**. Stand A is a 5.7-acre forest comprised of upland mixed hardwood species and Stand B is a 2.4-acre forest comprised of bottomland mixed hardwood species. The Build Alternative would impact 8.1 acres by the clearing and removal of delineated forest stands.

Four specimen trees with diameters greater than 30-inches in diameter were identified. The Build Alternative would clear these trees. Specimen trees have special status under Maryland’s Forest Conservation Act, and preservation is encouraged when possible.

#### 3.11.3 Mitigation and Commitments

The amount of reforestation required by the Maryland Forest Conservation Act is determined using the Forest Conservation Worksheet provided in the state technical manual. Reforestation is determined using multiple factors such as net tract areas, land use category, existing forest cover, sensitive environmental features, and proposed clearing. Reforestation can occur either on- or off-site, and may include the use of a pre-approved forest mitigation bank or paying into the State Forest Conservation Program Fee-In-Lieu Fund.

The 3.8 acres of impacted forest stands at New Carrollton Yard and the 8.1 acres of impacted forest stands at Landover Yard would be mitigated through the State Forest Conservation Program Fee-In-Lieu Fund.

Figure 3-10: Landover Yard Forest Stands



### 3.12 Hazardous and Contaminated Materials

Hazardous and contaminated materials include oil and other hazardous substances that present an imminent and substantial danger to the public health and the environment. An analysis for the presence of hazardous and contaminated materials was completed for both study areas. Federal and state laws and regulations include:

- Comprehensive Environmental Response, Compensation, and Liability Act;
- Resource Conservation and Recovery Act;
- Clean Water Act;
- Occupational Safety and Health Standards (29 CFR 1904, 1910 and 1926);
- Hazardous Materials and Hazardous Substances (Code of Maryland, COMAR 26.13.02 and 26.13.04); and
- Prohibition Against Oil Pollution (Code of Maryland, COMAR 26.10.01.02).

Environmental Site Assessments (ESAs) were completed for both study areas to determine the presence of these materials. See **Appendix D** for the Phase I ESA completed for the New Carrollton Yard study area, and Limited Phase I ESA completed for the Landover Yard study area.

#### New Carrollton Yard

A Phase I Environmental Site Assessment (ESA) completed for New Carrollton Yard focused on adjacent Amtrak and Maryland State Highway Administration (SHA) properties that may be acquired for construction of the Build Alternative. The analysis consisted of a public records search to identify Records of Environmental Concern (REC) within the study area, a review of historical records for the study area to characterize historic land use, interviews with persons knowledgeable about the properties (as available), and a site visit. The Phase I ESA was prepared in accordance with the American Society of Testing and Materials (ASTM) requirements and is provided in **Appendix D**.

#### Landover Yard

A Limited Phase I ESA was prepared for the entire Landover Yard study area, since no property would be acquired for the Build Alternative. The analysis consisted of a public records search to identify RECs within the study area, a review of historical records for the study area to characterize historic land use, and a site visit.

#### 3.12.1 New Carrollton Yard

The Phase I ESA identified several environmental concerns within the study area that may be impacted by the Build Alternative. Temporary construction impacts resulting from contaminated materials are described in further detail in **Section 3.13.1**.

#### Amtrak Property

The review of state and federal environmental databases did not identify past uses that would be indicative of releases of petroleum products or hazardous substances on the subject properties. However, because of its historic association with railroad uses, the property is classified as a REC, due to the potential impacts typically associated with railroads prior to regulatory requirements for contaminant use. Based on a review of the historical topographic maps, the Northeast Corridor railroad line has been in operation since 1906. Environmental concerns along railroads often include contamination from wood treatment chemicals, application of pesticides and herbicides, and releases from hazardous substances and petroleum products transported by rail.

### Asbestos Containing Materials

An Asbestos Assessment Report, completed in 2012, identified Asbestos Containing Materials (ACMs) in six buildings at New Carrollton Yard, which were surveyed for the report. All ACMs or suspected ACMs observed during the survey were in good condition with the exception of Brown End Sealant in the Rail Yard Control Building, which was considered to be in fair condition. ACMs in poor condition, and those that will be disturbed through renovation or demolition, can present a hazard and are generally recommended to be abated prior to construction.

### Petroleum Impacted Fill

Petroleum hydrocarbon impacted fill and railroad ballast was observed in isolated areas near the CTEM Shop.

### Underground Storage Tanks

Three underground storage tanks (USTs) in New Carrollton Yard are listed under the Maryland Oil Control Program. These include a 2,000-gallon gasoline UST installed in 1982 now closed, a 6,000-gallon diesel UST currently in use, and a 2,500-gallon gasohol UST installed in 1998 and currently in use.

### 3.12.2 Landover Yard

The presence of the Northeast Corridor railroad line and an abandoned rail spur both adjacent to the study area are environmental concerns, due to the potential impacts typically associated with railroads prior to regulatory requirements for contaminant use. Environmental concerns along railroads often include contamination from wood treatment chemicals, application of pesticides and herbicides, and releases from hazardous substances and petroleum products transported by rail.

During the site visit, a stockpile of railroad ties was observed outside the northeastern periphery of the study area (See **Figure 3-11**). The presence of this stockpile adjacent to the study area could be an environmental concern, due to the potential leaching of wood treatment compounds and its proximity to where the Build Alternative would be constructed.

### 3.12.3 Mitigation and Commitments

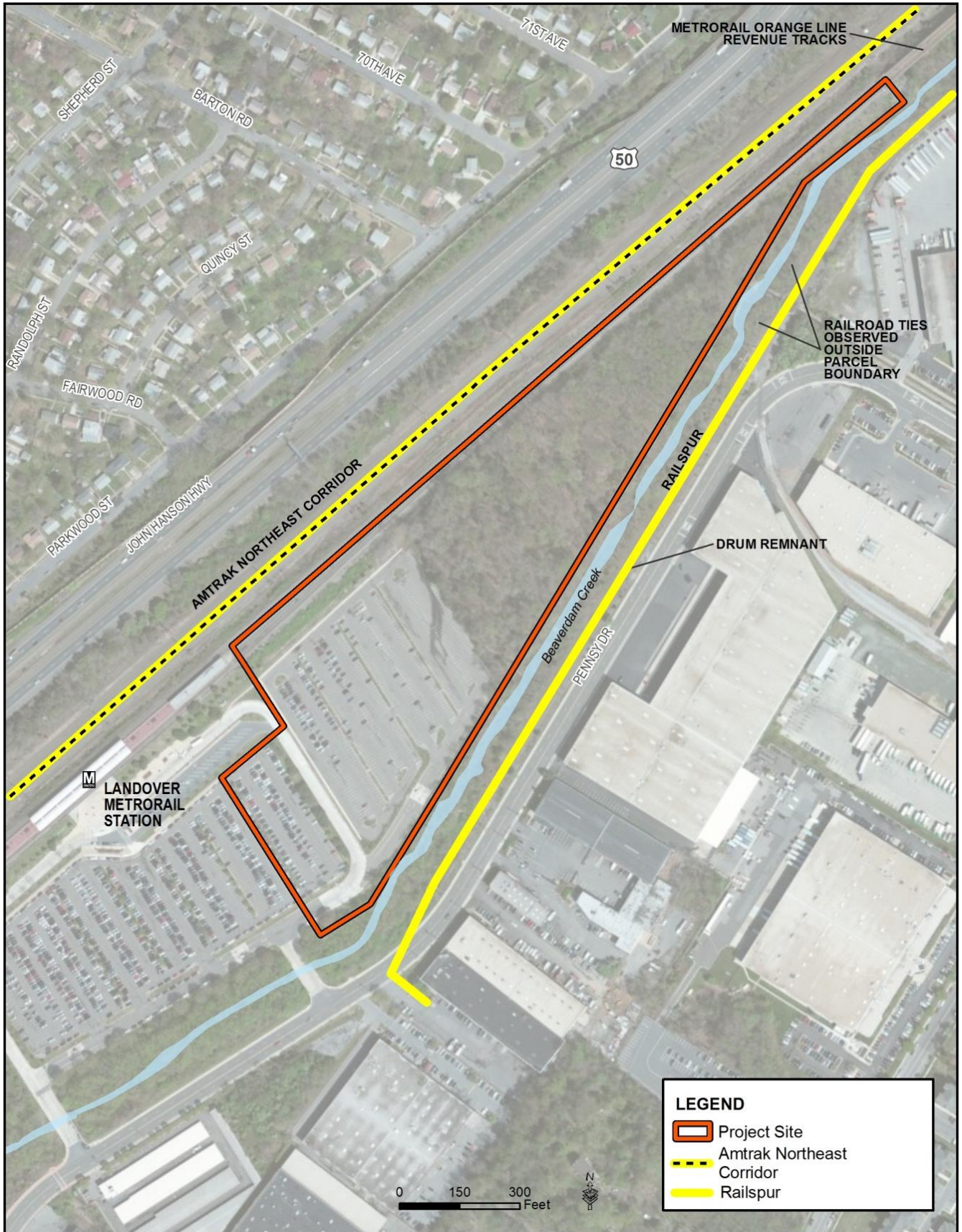
#### Asbestos Containing Materials

Renovation or demolition work that may impact ACMs must be conducted in accordance with applicable Federal and State of Maryland regulations.

#### Petroleum Impacted Materials

Management and disposal of petroleum impacted materials (if encountered) would be conducted in accordance with state and local regulations, and a WMATA-approved waste management plan. Contaminated materials will be sent to a licensed facility.

Figure 3-11: Landover Yard Environmental Concerns



### 3.13 Construction Impacts

This section identifies potential temporary constructions impacts that could result from implementation of the Build Alternative. Surrounding land uses that could experience temporary construction impacts include residential neighborhoods, the existing New Carrollton and Landover Metrorail Stations, and adjacent businesses.

Construction would be phased to minimize disruptions to parking capacity at Landover Metrorail Station and the maintenance operations based out of New Carrollton Yard. All construction activities would be located within the study areas and would be phased over an approximately two year period between 2016 to 2018.

The first phase of construction would include the commuter parking garage at Landover Yard. The construction of CTEM and TRST facilities at Landover Yard would follow, preceded by the demolition of existing CTEM and TRST facilities at New Carrollton Yard. All other proposed facilities at New Carrollton Yard would be constructed during the same phase as the Landover Yard CTEM and TRST facilities except for the proposed northeast storage tracks and ATC facility. Once CTEM and TRST functions moved to Landover Yard, the existing CTEM and TRST facility at New Carrollton Yard would be demolished and the proposed northeast storage tracks and ATC facility would be constructed. During construction, WMATA would not require the shifting of maintenance functions to other yards across the Metrorail system, and all other facilities would continue to operate at New Carrollton Yard.

#### 3.13.1 Contaminated Materials

##### Fluorescent Lights

Fluorescent lights which contain mercury may be present in buildings. Bulbs removed during demolition must be disposed properly.

##### Transformer Mineral Oil

Transformer Mineral Oil is present in transformers that may be removed or relocated during construction. Mineral oil removed during construction must be disposed properly.

##### Railroad Ties

Any abandoned railroad ties located within the permanent limits of disturbance or temporary limits of construction would be removed during construction. Railroad ties and contaminated soil removed during construction must be disposed properly.

#### 3.13.2 Noise

Noise levels from construction vehicles and equipment may create a temporary nuisance at some receptors, 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 16.7 of the *WMATA Manual Design Criteria*.

The Noise and Vibration Technical Memorandum provided as Appendix G did not identify any noise impacts based on the noise and vibration criteria set by WMATA and FTA.



### 3.13.3 Air Quality

Air pollution sources include direct emissions from construction equipment and trucks, increased emissions from motor vehicles on streets due to disruption of traffic flow, and fugitive dust emissions. These impacts would be temporary and affect only the immediate vicinity of the construction sites and their access routes. Emissions from project-related construction equipment and trucks would be much less than the total emissions from other industrial and transportation sources in the region, and, therefore, are expected to be insignificant with respect to NAAQS compliance.

### 3.13.4 Water Quality

Construction of the proposed facilities would result in increased erosion from exposed soils and stormwater runoff. Water quality impacts resulting from construction could include site runoff from grading and other construction activities, erosion, and construction debris that could enter water bodies within the site. These impacts would be mitigated by proper erosion and sediment control techniques. See **Appendix C** for a more complete description of water quality conditions in the study area. Water quality conditions in Beaverdam Creek are identified as poor by the Anacostia River Watershed Partnership.

### 3.13.5 Utilities

Construction operations will not result in disruption of any energy utility to commercial, industrial, or residential customers at New Carrollton Yard. At Landover Yard, construction activities would require the realignment of a sanitary/water line traversing the site.

### 3.13.6 Mitigation and Commitments

WMATA will work to avoid, minimize, or mitigate temporary construction impacts. The construction contract will specify the Best Management Practices (BMPs), which are discussed below, to be used during construction. Contractors will be required to obtain applicable local, state, or federal approvals for construction as a condition of the contract.

#### Noise

WMATA will require the construction contractor to ensure that noise levels caused by land clearing, hauling, and other construction activities will not exceed WMATA construction noise criteria.

#### Air Quality

Increases in nuisance dust and construction equipment emissions are not expected to impact air quality adversely, either locally or regionally, because WMATA will ensure that control measures are employed. Control measures may include the development of dust control procedures, including:

- Minimizing the length of exposure of disturbed lands;
- Sprinkling water and/or wood chips on exposed earth, and;
- Using tarpaulins on loaded trucks.

WMATA will require the contractor to utilize the best available mitigation measures to prevent excessive emissions of particulates and carbon monoxide from the operation of machinery. Generally, such measures include the prohibition of unnecessary idling and operation of equipment and appropriate pollution control equipment.

### Water Quality

The project is regulated under Maryland's National Pollutant Discharge Elimination System (NPDES) Phase I or Phase II Permit for construction activities. Erosion and sediment control measures would be implemented during the site development and construction process to minimize any sedimentation that could impact water quality both on and off site. A stormwater management plan for erosion and sediment control will be prepared for use during construction activities, as required by the MDE. The project's BMP design will incorporate the technical criteria stipulated in the *Maryland Stormwater Design Manual*.

A stormwater pollution prevention plan will be developed, detailing the methods to manage construction waste such as building materials, garbage, and debris, and to implement controls to minimize the exposure of these materials to stormwater. Temporary management facilities for the control of construction stormwater runoff would be erected and the contractor will obtain all appropriate permits and approvals.

### Utilities

The realigned segments of the sewer line at Landover Yard would be constructed before any segments of the line are removed to minimize service disruptions.

### Disposal of Debris

WMATA contract specifications require the contractor to dispose of construction generated solid waste. The disposal method will be either transport of materials to an approved disposal facility or collection by an approved agent. No waste will be disposed of or incinerated on site.

### Maintenance of Traffic

Construction at any of the sites is not expected to require the closing of any street or create a major interference in the traffic flow of the surrounding roadways.

### Construction Site Safety and Security

The contractor must erect fencing around the construction zone to prevent trespassing.

## 3.14 Secondary and Cumulative Effects

Secondary, or indirect, effects are defined as impacts that are caused by the action, but which occur later in time or are farther away in distance from the site. Indirect effects may include growth-inducing effects and other effects related to induced changes in the patterns of land use, population density, or growth rate, as well as related effects on air and water and other natural systems.

Cumulative impacts are defined as impacts that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

### 3.14.1 Potential Secondary Effects

Expansion of an existing New Carrollton Yard to store additional Metro railcars would not, by itself, result in induced or secondary development. Induced land use demand or traffic is not anticipated if the Build Alternative is constructed.

Construction of Landover Yard would be used by WMATA for system maintenance would not, by itself, result in induced or secondary development. Induced land use demand or traffic is not anticipated if the Build Alternative is constructed.

### 3.14.2 Potential Cumulative Effects

Construction of the Build Alternative would result in the loss of forest stands and an increase of impervious surface.

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 Build Alternative, combined with other planned development within this watershed, would 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.

Construction of New Carrollton Yard would require the clearing of approximately 3.8 acres of forested land at New Carrollton Yard. Construction of Landover Yard would require the clearing of approximately 8.1 acres of forested land. This could contribute cumulatively to an overall reduction in forested area within Prince George's County.

An additional result of clearing and developing land would be the increase of impervious surface that would result in additional stormwater runoff within the watershed. As proposed, stormwater management would be provided on-site to help offset adverse effects. However, this increase in impervious surface due to the Build Alternative, combined with other planned development within this watershed would result in an overall net loss of pervious surface. This net loss and an increase in stormwater runoff could affect overall water quality within this watershed.

Lastly, WMATA is currently in the design phase to replace the existing 6,000-gallon diesel UST and a 2,500-gallon gasohol UST at New Carrollton Yard, with the installation of two new 12,000-gallon UST systems. In addition, a new aboveground storage tank (AST) for Diesel Exhaust Fluid (DEF) is planned for the fueling facility. Activities near existing and planned USTs should be monitored during construction to ensure no damage to the tanks.

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## 4.0 AGENCY CONSULTATION & PUBLIC INVOLVEMENT

This chapter identifies coordination with federal and state agencies as well as the public’s involvement during the project planning and development process.

### 4.1 Agency Correspondence

Federal and state agencies were contacted to identify any potential areas of concern under their jurisdiction. Agencies contacted in the development of this EA are listed in **Table 4-1**. Agency correspondence is included in **Appendices C and E**.

**Table 4-1: Agency Correspondence**

Resource Area Coordination	Agency	Date Contacted	Agency Response	Determination	Correspondence Letter
Cultural Resources	Maryland Historical Trust	June 20, 2014	July 29, 2014	No historic structures identified at both study areas. No archaeological resources identified at New Carrollton Yard.  Awaiting final determination for archaeological resources at Landover Yard pending Phase 1 archaeological survey.	Appendix E
Threatened and Endangered Species	US Fish and Wildlife Service	June 20, 2014	No response	Online certifications (5/15/14 for New Carrollton and 5/7/14 for Landover) determined no endangered or threatened species were identified	Appendix C
Threatened and Endangered Species	Maryland Department of Natural Resources	June 4, 2014	June 13, 2014	No endangered or threatened species identified	Appendix C
Jurisdictional Determination	US Army Corps of Engineers	July 23, 2014	TBD	Awaiting final determination	Appendix C
Forest Stand Delineation Application	Maryland Department of Natural Resources	August 27, 2014	TBD	Awaiting response	Appendix C
Coastal Zone Determination	Maryland Department of the Environment	September 2, 2014	TBD	Awaiting response	Appendix C

### 4.2 Public Involvement

WMATA will hold a public hearing on December 4, 2014 at 7:00 p.m. at Fortis College, 4351 Garden City Drive, Landover, MD 20785.

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## 5.0 ACRONYMS AND GLOSSARY OF TERMS

### 5.1 Acronyms

<b>Acronym</b>	<b>Definition</b>
ATC	Automatic Train Control
Amtrak	National Passenger Railroad Corporation
AMP	Asbestos Management Plan
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
BFE	Base Flood Elevation
BMPs	Best Management Practices
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CLRP	Constrained Long Range Plan
CMNT	Car Maintenance
CTEM	Car Track and Equipment Maintenance
CWA	Clean Water Act
DEF	Diesel Exhaust Fluid
DNR	Department of Natural Resources
EA	environmental assessment
ESA	Endangered Species Act
ESA	Environmental Site Assessments
FEMA	Federal Emergency Management Agency
FIRMs	Federal Insurance Rate Maps
FONSI	Finding of No Significant Impact
FTA	Federal Transit Administration
GIS	geographic information systems
I-1	Light Industrial zone
I-95	Interstate 95
I-495	Interstate 495
LOS	level of service
MAP-21	Moving Ahead Progress for the 21st Century Act
MDE	Maryland Department of the Environment
MDNR	Maryland Department of Natural Resources
MHT	Maryland Historic Trust
MNCPPC	Maryland National Capitol Park and Planning Commission
MRHP	Maryland Register of Historic Places
MWCOG	Metropolitan Washington Council of Governments
M-X-T	Mixed Use Transportation-Oriented zone
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NWI	National Wetlands Inventory

NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
REC	Records of Environmental Concern
RFMP	<i>Rail Fleet Management Plan</i>
SAFETEA-LU	Safe, Accountable, Flexible and Efficient Transportation Act: A Legacy for Users
SFHAs	Special Flood Hazard Areas
SHA	Maryland State Highway Administration
SHPO	State Historic Preservation Office
S&I	Service and Inspection
TDOZ	Transit Development Overlay Zone
TIP	Transportation Improvement Program
TRST	Office of Track and Structures
USACE	US Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
WMATA	Washington Metropolitan Area Transit Authority
WOUS	Waters of the U.S.



## 5.2 Glossary of Terms

**100-year floodplain** – The areas along or adjacent to a stream or body of water that are capable of storing or conveying floodwaters during a 100-year frequency storm event.

**Area of Potential Effect (APE)** – For purposes of complying with Section 106 of the NHPA, a geographic area or areas where an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties are located in the area of the project.

**Best Management Practices (BMPs)** – Specific standards utilized during construction and design to minimize the impact on surrounding resources.

**census tract** – A small statistical subdivision of a county defined by a local committee of census data users for the purpose of presenting census information every ten years. The census tract boundaries, which are nested within counties, generally follow visible features and often follow governmental unit boundaries or invisible features.

**Council on Environmental Quality (CEQ)** – Established in the Executive Office as part of the National Environmental Policy Act of 1969 (NEPA), the council coordinates federal environmental efforts, policies, and initiatives, and ensures that federal agencies meet NEPA requirements.

**cumulative impact** – The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.

**effects** – Synonymous with impact, includes the result from actions that may have a beneficial or detrimental outcome.

**endangered species** – A species whose prospects for survival are in immediate danger based on a loss of habitat, over-exploitation, predation, competition, or disease. An endangered species requires immediate attention or extinction will likely follow.

**Environmental Assessment (EA)** – A prepared document used find the significant impacts of a transportation project. If significant impacts are found, then an environmental impact statement should commence.

**Environmental Justice (EJ)** – Provides for equal protection from environmental hazards and fair treatment for all people regardless of race, ethnicity, or economic status, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

**Environmental Site Assessments (ESA)** – Identifies potential or existing environmental contamination liabilities and addresses the underlying land and physical improvements of a property.

**Federal Transit Administration (FTA)** – The agency of the USDOT responsible for regulation and funding of public transportation.

**Finding of No Significant Impact (FONSI)** – Issued when the EA process finds a project to have no significant impacts on the quality of the environment.

**Geographic Information Systems (GIS)** – A system of computer software, hardware, and data to manipulate, analyze and present geographically referenced information or data that is identified according to their locations.

**habitat** – The area or environment where an organism or ecological community normally lives or occurs.

**Jurisdictional determination (JD)** – Regulatory review of previously identified wetlands and waters of the United States Army Corp of Engineers (USACE) in compliance with Section 404 of the Clean Water Act.

**land use** – Classification providing information on land cover and the types of human activity occurring on a parcel of land, such as “commercial,” “industrial,” “residential,” or “open space.”

**low-income** – Any household with income at or below the U.S. Bureau of the Census poverty thresholds.

**minority** – A member of the following races: (1) Black or African American, (2) American Indian or Alaska Native, (3) Asian, (4) Native Hawaiian or other Pacific Islander, (5) Hispanic or Latino Origin.

**mitigation** – The actions necessary to reduce or eliminate an impact and thereby restoring the affected environment.

**mixed-use** – Combination of land uses, such as residential uses combined with office, retail, public, entertainment, or even manufacturing uses.

**National Environmental Policy Act of 1969 (NEPA)** – Requires Federal agencies to consider the environmental impacts of major federal projects or decisions, to share information with the public; to identify and assess reasonable alternatives; and to coordinate efforts with other planning and environmental reviews taking place.

**National Register of Historic Places (NRHP)** – A Federal list of buildings, sites, district or other properties that have a historic significance. The National Register of Historic Places is maintained by the Keeper of the National Register.

**off-peak period** – Used to describe times where travel is not at its peak, or highest level, during the day. Off-peak travel usually occurs in the midday and evenings in most cities.

**Recognized Environmental Condition (REC)** – The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

**right-of-way (ROW)** – Land available for operation of transportation facilities (roadways or rail lines). The land is typically government-owned (local, state, or federal). A transportation facility may occupy all or a portion of the right-of-way. ROWs can be grade-separated or at-grade.

**secondary impact** – The effect of an action that takes place some time after a primary event has occurred.

**Special Flood Hazard Areas (SFHAs)** – Land areas that are at high risk for flooding; also are called floodplains. These areas are indicated on Flood Insurance Rate Maps (FIRMs).

**State Historic Preservation Office (SHPO)** – A state administrative agency responsible for carrying out consultation in accordance with the National Historic Preservation Act of 1966, as amended and other state historic preservation regulations.

**threatened species** – A species that may become endangered if surrounding conditions begin or continue to deteriorate.

**topography** – The surface features of a place or region.

**Traffic Analysis Zone (TAZ)** – a geographic area delineated by state and/or local transportation officials for tabulating traffic-related data.

**variance** – A requested deviation from the set of rules applied to land use regulations.

**wetlands** – Tidal areas or swamps with water saturated soil characteristics and associated vegetation that meet certain criteria on which filling and development are federally- and/or state-regulated.

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