

# CHAPTER 6

## FINAL SECTION 4(f) EVALUATION



D.C. TO RICHMOND SOUTHEAST HIGH SPEED RAIL

# 6 FINAL SECTION 4(f) EVALUATION

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## 6.1 INTRODUCTION

This Final Section 4(f) Evaluation follows the procedures for implementing Section 4(f) as outlined in 23 CFR 774 (March 12, 2008), which apply to the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). Although the Federal Railroad Administration (FRA) is not directly subject to this rule, FRA has determined that these procedures are appropriate for use for the proposed rail infrastructure improvements collectively known as the Washington, D.C. to Richmond Southeast High Speed Rail (DC2RVA) Project.<sup>1</sup>

The Draft Section 4(f) Evaluation was included as Chapter 5 of the Draft EIS<sup>2</sup> and analyzed the potential impacts of the 23 Build Alternatives that were evaluated in that document. This Final Section 4(f) Evaluation considers the Preferred Alternative for the DC2RVA Project, which includes design modifications, additional data collected on cultural resources, and updates to parkland resources subsequent to the publication of the Draft EIS and its Draft Section 4(f) Evaluation. Refer to Chapter 4 of this Final EIS for details on the Preferred Alternative; additional data and updates to parkland resources since the Draft EIS are detailed within this chapter.

This Final Section 4(f) Evaluation presents the following:

- Summary of types of Section 4(f) properties, uses, and methodology (see Section 6.2)
- Description of the Project and its Preferred Alternative (see Section 6.3)
- Description of Section 4(f) properties that are within the Project limits (see Section 6.4)
- Determination of Section 4(f) property uses (see Section 6.5)
- Description of avoidance alternatives (see Section 6.6)
- Description of measures to minimize harm (see Section 6.7)
- Section 4(f) coordination and correspondence (see Section 6.8)

Maps of Section 4(f) resources are provided in this chapter for the properties that were determined to have a Section 4(f) use; refer to Section 6.5.

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<sup>1</sup> On November 28, 2018, a final rule went into effect that revised 23 CFR Parts 771 and 774 to include FRA under those regulations. However, that rule only applies to projects initiated after November 28, 2018; therefore, for the DC2RVA Project, FRA will continue to follow 23 CFR Part 774 as guidance.

<sup>2</sup> The Draft EIS included the Draft Section 4(f) Evaluation for the DC2RVA Project and was published on September 8, 2017. It is available on the Project website: <http://dc2rvarail.com/draft/>

## 6.2 SECTION 4(f) TERMINOLOGY AND METHODOLOGY

### 6.2.1 Types of Section 4(f) Properties

Section 4(f) of the U.S. Department of Transportation (U.S. DOT) Act of 1966<sup>3</sup> provides for consideration of park and recreation lands, wildlife or waterfowl refuges, and historic sites during development of transportation projects. Specifically, Section 4(f) applies to the following types of properties:

- Publicly-owned parks, recreation areas, and wildlife or waterfowl refuges, including those that are part of a publicly-published plan but that may not yet be built
- Historic sites<sup>4</sup>, i.e., public or private buildings, districts, objects, structures, or sites listed in or eligible for listing in the National Register of Historic Places (NRHP)

Privately-owned parks or recreation areas that are not open to the general public are not considered Section 4(f) resources for this Project.

### 6.2.2 Types of Section 4(f) Uses

Section 4(f) applies to protected resources when a “use” occurs as a result of the proposed action. There are three different types of potential Section 4(f) uses and one additional determination that may be made for each Section 4(f) property, as described below. Any “use” is an impact for the purposes of the DC2RVA Project, as described in Section 6.2.4.

**Permanent Incorporation.** A permanent incorporation occurs if a Section 4(f) property or portion of a Section 4(f) property is permanently acquired (as fee simple or permanent easement right-of-way) such that the use of the acquired Section 4(f) property is incorporated in the transportation facility, thereby changing its use from a Section 4(f) property to “transportation use.”

**Temporary Occupancy.** A temporary occupancy occurs when the Section 4(f) property or a portion of the Section 4(f) property is impacted or used only during a portion of the construction of the project such that the Section 4(f) property is not permanently incorporated into the transportation facility. A temporary occupancy is considered a Section 4(f) use if it is considered adverse in terms of the statute's preservation purpose. A temporary occupancy is not considered a Section 4(f) use if the following conditions are met:

- The land use is of short duration (defined as less than the time needed for construction)
- There is no change in ownership of the land
- The scope of the work must be minor
- There are no temporary or permanent adverse changes to the activities, features, or attributes of the property
- The land must be fully restored to a condition at least as good as prior to a project (i.e., regrading or revegetating the area)
- There must be documented agreement from the official(s) with jurisdiction over the property with the above conditions

<sup>3</sup> 23 United States Code (U.S.C.) 138

<sup>4</sup> Note that this term parallels the term “historic property” used during the Section 106 evaluations, which is a separate process from Section 4(f). Refer to Section 6.2.3 for details.

**Constructive Use.** A constructive use occurs when there is an indirect impact to the Section 4(f) property of such magnitude as to effectively act as a permanent incorporation. In the case of a constructive use, while the proposed action does not physically incorporate the resource, it is determined to be close enough to severely impact important features, activities, or attributes associated with the Section 4(f) property to substantially impair it. Constructive use is generally rare; examples of impacts that may be considered constructive use include noise, vibration, air quality, and visual impacts. Note that FRA has determined that there are no constructive uses associated with the Final Section 4(f) Evaluation for the DC2RVA Project.

**De Minimis Determination.** FRA may make a *de minimis* determination (or finding) if a use of a Section 4(f) property is generally minor enough in nature as to not elevate to one of the three primary uses as described above. A *de minimis* impact is one that, after taking into account avoidance, minimization, mitigation, and enhancement measures, results in no adverse effect to the activities, features, or attributes qualifying a resource for protection under Section 4(f).

A determination of *de minimis* impact for public parks, recreation areas, and wildlife or waterfowl refuges may be made when all three of the following criteria are met:

- The transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into a project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f);
- The public has been afforded an opportunity to review and comment on the effects of a project on the protected activities, features, and attributes of the Section 4(f) resource; and
- The official(s) with jurisdiction over the property is informed of U.S. DOT's intent to make the *de minimis* impact finding based on their written concurrence that a project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f).

A determination of *de minimis* impact for a historic site may be made when all three of the following criteria are met:

- The process required by Section 106 of the National Historic Preservation Act (NHPA) results in the determination of "no adverse effect" or "no historic properties affected" with the concurrence of the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO), and Advisory Council on Historic Preservation (ACHP), if the ACHP is participating in the Section 106 consultation;
- The SHPO and/or THPO, and ACHP, if the ACHP is participating in the Section 106 consultation, is informed of U.S. DOT's intent to make a *de minimis* impact determination based on their written concurrence in the Section 106 determination; and
- U.S. DOT has considered the views of any consulting parties participating in the Section 106 consultation.

### 6.2.3 Relationship Between Section 4(f) and Section 106

Section 106 of the NHPA and Section 4(f) are separate laws that both mandate consideration of historic properties in planning a federal undertaking. Section 4(f), which applies only to the U. S. Department of Transportation, stipulates that in order for a historic site to be granted protection, it must be considered significant, and the Section 106 process is the method by which a historic

site's significance is determined. The Section 106 process, which is conducted separately from and prior to Section 4(f) evaluations, informs the Section 4(f) determinations, by indicating which historic sites are relevant for Section 4(f) consideration. Further, while the Section 106 process is integral to the Section 4(f) process when historic sites are involved, the Section 4(f) process is not integral to the Section 106 process (i.e., the Section 4(f) uses do not inform the separate Section 106 process).

An important terminology difference between the two is that Section 106 considers "effects" to historic properties, whereas Section 4(f) considers whether there is a "use" of Section 4(f) properties. Any historic property that is considered during the Section 106 process is considered during Section 4(f). The Section 106 effect determinations<sup>5</sup> listed in this chapter are presented for informational purposes only with regard to Section 4(f) and were determined separately from the Section 4(f) process. This Final Section 4(f) Evaluation, therefore, indicates the Section 106 historic property effect and then separately determines the appropriate use under Section 4(f).

#### 6.2.4 How Section 4(f) Properties and Uses were Determined for this Project

**Parks, Recreation Areas, and Wildlife/Waterfowl Refuges.** For public parks, recreation areas, and wildlife or waterfowl refuges, the resource boundaries were compared with the Project's permanent and temporary limits of disturbance (LOD),<sup>6</sup> which are defined as the boundary within which all construction, materials storage, grading, landscaping, and related activities will occur.

- A Section 4(f) use of "permanent incorporation" was identified where resource boundaries overlapped the permanent LOD, which are areas where infrastructure associated with the Preferred Alternative will physically replace existing conditions. A *de minimis* determination was made for Section 4(f) use when the *de minimis* criteria discussed in Section 6.2.2 were met.
- A Section 4(f) "temporary occupancy" was identified where resource boundaries overlapped the temporary LOD, which are areas required for construction of the Preferred Alternative, such as for staging and storage of equipment. As stated in Section 6.2.2, temporary occupancies may or may not result in a Section 4(f) use depending on whether the occupancy is adverse in terms of the statute's preservation purpose. For each resource, the conditions discussed in Section 6.2.2 were considered to determine if the temporary occupancy results in a Section 4(f) use.
- A Section 4(f) "constructive use" determination would be made through considering the level of magnitude of indirect impacts on the Section 4(f) resources; however, no constructive uses were identified for the DC2RVA Project.

<sup>5</sup> Refer to Section 5.13 of this Final EIS for details on the Section 106 process and effect determinations.

<sup>6</sup> The environmental consequences for the DC2RVA Project, which are presented in Chapter 5 of this Final EIS and document the potential effects on the human, physical, and natural environments that may result from the construction and operation of the Preferred Alternative, are also based on the permanent and temporary LOD. Detailed mapbooks of the Preferred Alternative that show the locations of the permanent and temporary LOD throughout the 123-mile Project corridor are provided in Appendix L of this Final EIS. In general, permanent LOD are 0 to 40 feet outside of existing railroad right-of-way with a maximum offset of 650 feet for station improvements. Temporary LOD are generally 10 to 15 feet outside of permanent LOD with a maximum offset of 50 feet.

**Historic Properties.** The historic property limits presented herein and used to determine effects of the DC2RVA Project are those on record at the Virginia Department of Historic Resources (DHR, the Virginia SHPO) for the identified historic resources as of November 20, 2018. As described in Section 6.2.3 above, any historic property that is considered during the separate Section 106 process is also considered under Section 4(f); the Virginia Department of Rail and Public Transportation (DRPT) identified 120 historic properties within the Project Area of Potential Effect (APE).<sup>7</sup>

During the Section 4(f) evaluation of historic properties, DRPT examined all 120 resources to evaluate use.

- For above-ground resources (buildings, districts, objects, and structures):
  - There is a Section 4(f) use (permanent incorporation) on a historic property when the undertaking would physically encroach on the NRHP-eligible boundaries of a historic property and/or the Project would permanently alter the integrity and function of the resource, resulting in an adverse effect determination under Section 106.
  - There is a Section 4(f) *de minimis* use if the NRHP-eligible boundaries are within the Project encroachment area, but the undertaking will not alter the integrity and function of a resource, resulting in either a no adverse effect or no effect determination under Section 106.
  - There is no Section 4(f) use if there is no encroachment and there are no impacts to a historic property.
- For archaeological sites, determination of use depends on whether the resource meets one or more NRHP eligibility criterion:<sup>8</sup>
  - There is no use regardless of encroachment if the site is chiefly important for the data that can be obtained from archaeological excavation and preservation in place is not warranted (e.g., if a site is only eligible for the NRHP under Criterion D).
  - If an archaeological site is eligible under Criterion D as well as any other criterion/criteria consideration and preservation in place is required to maintain eligibility, then the definitions of Section 4(f) use and no use as stated for above-ground resources apply.

### 6.2.5 Section 4(f) Avoidance and Minimization Measures

Projects funded by the U.S. DOT must comply with Section 4(f), which includes mandatory requirements for avoidance alternatives, minimization measures, and possible mitigation of any use of Section 4(f) resources. Specifically, under Section 4(f) of the U.S. DOT Act of 1966 (49 U.S.C. 303(c)), as amended by Section 6009 of the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: a Legacy for Users (SAFETEA-LU), FRA may approve a transportation project

<sup>7</sup> The APE is defined before the identification of any historic properties and includes areas where the Project would impact character-defining features of a resource, directly or indirectly. Whereas the Project Limits of Disturbance are the physical boundary of Project-related construction and construction-related activities, the APE considers all locations where the Project may result in ground disturbances, visible or audible disturbances, or changes in public access, traffic patterns, or land use. As such, the APE comprises the LOD for archaeological resources due to the potential for subsurface impacts but is larger for aboveground resources to account for indirect effects.

<sup>8</sup> NRHP eligibility criterion are discussed in Section 5.13 of this Final EIS and its Appendix D6, and are available at: [https://www.nps.gov/nr/publications/bulletins/nrb15/nrb15\\_2.htm](https://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_2.htm)



requiring the use of a publicly owned park, recreation area, wildlife and waterfowl refuge, or a historic site only if:

- (1) there is no prudent and feasible alternative to using that land; and
- (2) the project includes all possible planning to minimize harm to the Section 4(f) resource resulting from the use, unless the criteria for *de minimis* Section 4(f) involvement can be met (refer to Section 6.2.2 above for descriptions of use and *de minimis* determination).

Accordingly, as part of this Final Section 4(f) evaluation, FRA considered all feasible and prudent alternatives to avoid the Section 4(f) resources (refer to Section 6.6) and ensured the proposed Project included all possible planning to minimize harm (refer to Section 6.7).

### 6.3 DESCRIPTION OF THE PROPOSED ACTION

FRA and DRPT propose increased passenger rail service and rail infrastructure improvements between Washington, D.C. and Richmond, VA, as further described below.

#### 6.3.1 Project Background and Approach

The DC2RVA Project is the second level of a two-tiered environmental process. In October 2002, FRA and the Federal Highway Administration (FHWA), in coordination with DRPT and the North Carolina Department of Transportation, completed a first-level Tier I EIS and Record of Decision (ROD) for the Southeast High Speed Rail (SEHSR) corridor between Washington, D.C. and Charlotte, NC (hereinafter referred to as the 2002 Tier I EIS).<sup>9</sup>

The 2002 Tier I EIS defined the physical limits for passenger rail improvements in the 500-mile corridor between the endpoint cities, from which subsequent Tier II studies (e.g., this DC2RVA Project) would define the actual alignment and specific infrastructure improvements and service plan for an independent section within the larger corridor. This DC2RVA Project Tier II EIS is focused on the northernmost portion of the larger SEHSR corridor from the 2002 Tier I EIS that operates on existing CSX Transportation (CSXT) right-of-way and in which existing freight, conventional passenger rail, and commuter trains operate. Specifically, this is the 123-mile portion of the route between Washington D.C. (with analysis starting on the south bank of the Potomac River) and Richmond, VA (with analysis continuing to Centralia, VA). In the 2002 Tier I EIS, FRA and FHWA made programmatic-level environmental decisions that are the basis of this Project.

The 2002 Tier I EIS identified an incremental approach to develop the rail corridor with upgraded intercity passenger rail service between Washington, D.C. and Charlotte, NC, including using locomotives using existing fossil fuel technology, upgrading existing rail corridors instead of developing new corridors, and building the corridor in incremental sections as funds became available. The incremental approach selected in Tier I sought to minimize cost and potential impacts to the environment by utilizing existing railroad tracks and rail rights-of-way as much as possible. The 2002 Tier I EIS concluded that additional track would be required along sections of the CSXT rail corridor between Alexandria and Richmond to accommodate the freight and passenger growth needs of all rail users and institute higher speed passenger service; however, the Tier I EIS did not specify the extent of additional track required or the possible higher speed that could be accommodated specifically between Alexandria and Richmond.

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<sup>9</sup> <https://www.fra.dot.gov/Page/P0427>

The 2002 Tier I EIS also considered the No Build scenario. FRA and FHWA determined that the No Build did not meet the Purpose and Need of the SEHSR corridor because it would not improve air quality or reduce net energy per passenger mile traveled in the corridor, nor would it offer additional transportation choices, address congestion, or improve overall transportation system safety and effectiveness. Notwithstanding, the No Build was included in the DC2RVA Project Tier II analysis to provide a baseline for quantitative analyses.

### 6.3.2 Purpose and Need for the Project

The 2002 Tier I EIS established the overall purpose for the 500-mile SEHSR corridor between Washington, D.C. and Charlotte, NC: to provide a competitive transportation choice to travelers within the Washington, D.C. to Richmond, Raleigh, and Charlotte travel corridor. This DC2RVA Tier II EIS carries forward the purpose of the 2002 Tier I EIS within the specific Washington, D.C. to Richmond segment of the larger corridor, and further builds upon it by recognizing and incorporating several key corridor-specific items that are unique to the Project corridor including: establishment of a 90 mph maximum achievable speed for intercity passenger trains; accommodation of Virginia Railway Express (VRE) commuter trains; and accommodation of CSXT's freight service, plus the recognition that the corridor is owned and operated by CSXT.

The DC2RVA Project's stated Purpose is to increase the capacity of the railroad between Washington, D.C. and Richmond to deliver higher speed passenger rail service, while also supporting the planned expansion of VRE commuter rail service and accommodating the forecasted growth of freight rail service by developing an efficient and reliable multimodal rail corridor. The 2002 Tier I EIS for the SEHSR corridor between Washington, D.C. and Charlotte established the needs for the overall SEHSR program, including this Project. The following needs for the SEHSR program were identified in the 2002 Tier I EIS, and remain current for the SEHSR corridor, including the 123-mile DC2RVA Project corridor:

- Population Growth
- Freight Growth
- Congestion in the I-95 Corridor
- Air Travel Congestion
- Rail Capacity in the Corridor
- Reliable and Convenient Movement of People and Goods
- Air Quality
- Safety
- Energy Efficiency

The DC2RVA corridor is a critical link between Amtrak's heavily traveled Northeast Corridor (NEC) and the developing SEHSR corridor extending south of Richmond.

### 6.3.3 Project Alternatives

Developing Project alternatives was an iterative process. DRPT relied on previous studies, including the 2002 Tier I EIS, and public scoping comments as the starting point for developing potential rail alignments.

In general, the DC2RVA Project proposes to increase capacity by adding one additional main track. The determination of the location of the new track on the east or west of existing trackage varied by location within the corridor based on physical constraints and minimization of impacts. For each alternative, DRPT also evaluated the potential to realign the tracks to improve speeds. The proposed infrastructure sought to avoid or minimize potential adverse effects on environmental resources and existing infrastructure, and to minimize the need for additional new infrastructure, while



preserving the ability of that alignment to meet the Project's Purpose and Need. The final screening evaluation—to determine the Build Alternatives to be carried forward in the Draft EIS—focused on each alternative's ability to reduce trip times based on increased track design speed and to increase the reliability of rail operations based upon added capacity, with the least potential environmental impact and consideration of cost to construct.

In the Draft EIS, DRPT evaluated rail alignment Build Alternatives in six areas along the DC2RVA corridor from north to south: each of the six alternative areas contained one or more Build Alternatives that include rail alignment and associated roadway and station work. From a wide range of options that were considered during the alternatives development process, 23 Build Alternatives, which vary within each alternative area, were evaluated in the Draft EIS and included build-alternative-specific improvements to features such as stations and at-grade roadway crossings.

DRPT selected the Preferred Alternative, as evaluated in the Final EIS, as a combination of one Build Alternative from each of the six alternative areas to form a contiguous "best-fit" alternative for the 123-mile Project corridor, as shown in Figure 6.3-1 below. A discussion of the selection process, as well as detailed descriptions of the Preferred Alternative and modifications between the Draft and Final EIS based on agency and public comment, is provided in Chapter 4 of this Final EIS.

A summary of the 23 Build Alternatives which DRPT evaluated in the Draft EIS, as well as an indication of which was selected as the Preferred Alternative in each of the six areas, are presented in Table 6.3-1 below.

The Preferred Alternative meets the Project Purpose and Need and includes the following proposed improvements:

- Construct additional main line tracks and track crossovers.
- Straighten curves in existing tracks to allow for higher speeds up to a maximum authorized passenger train speed for the corridor of 90 mph.
- Improve intercity passenger rail stations and station areas, including new or replacement station, platform, and parking improvements.
- Improve sidings and signals.
- Implement roadway crossing safety improvements to include median treatment, grade separations, and/or closure of existing at-grade crossings of the rail corridor.
- Add 9 new daily intercity passenger round trips (18 total trains per day):
  - Four new daily round trips would provide regional service from Hampton Roads through Richmond to Amtrak's NEC.
  - One new daily round trip would originate at Richmond's Main Street Station.
  - Four new daily round trips would provide interstate service from North Carolina through Virginia, continuing on to Amtrak's NEC.

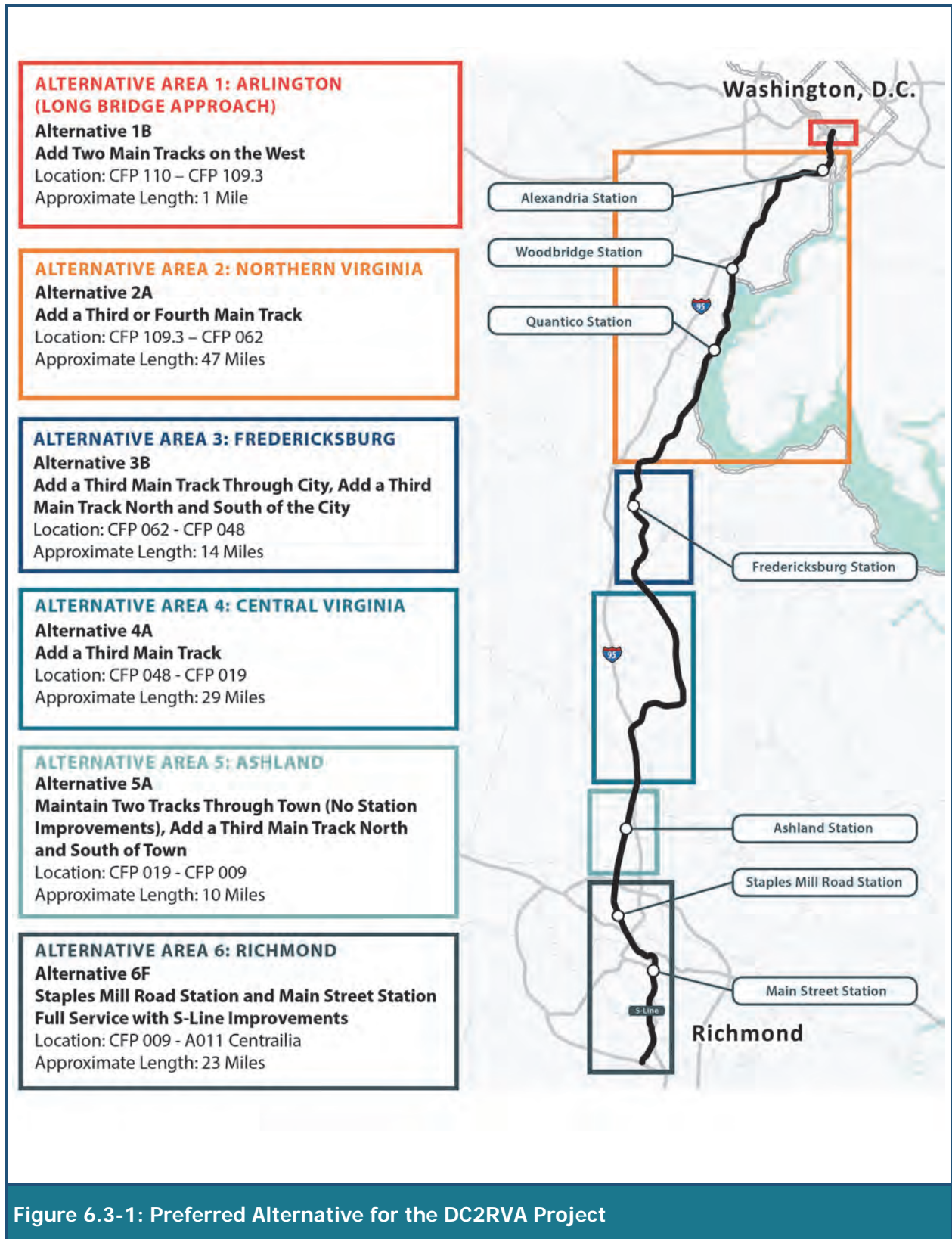


Figure 6.3-1: Preferred Alternative for the DC2RVA Project

**Table 6.3-1: Summary of Build Alternatives Evaluated in Draft EIS**

Draft EIS Alternative		Description
<b>Area 1: Arlington:</b> Three Build Alternatives were evaluated in Area 1, the major difference being which side of the existing track the new track would be added (as indicated in the Build Alternative names). There are no intercity passenger rail stations in this area.		
IA	Add Two Tracks on the East	Within the Arlington Bridge approach, two tracks would be added to the east side of the existing tracks.
IB	Add Two Tracks on the West	<b>SELECTED AS THE PREFERRED ALTERNATIVE.</b> This alternative aligns with both alternatives identified in the Alternatives Development Report for the separate Long Bridge Study. Refer to Final EIS Section 4.3.1.
IC	Add One Track East and One Track West	Within the Arlington Bridge approach, one track would be added to the east side of the existing tracks and one track would be added to the west side of the existing tracks.
<b>Area 2: Northern Virginia:</b> The sole Build Alternative evaluated in Area 2 adds one main track within the existing railroad right-of-way. There are three intercity passenger rail stations in the area: Alexandria, Woodbridge, and Quantico.		
2A	Add One Track / Improve Existing Track	<b>SELECTED AS THE PREFERRED ALTERNATIVE.</b> This alternative adds a third or fourth main track, mostly within existing right-of-way, through the area. Refer to Final EIS Section 4.3.2.
<b>Area 3: Fredericksburg:</b> Three Build Alternatives were evaluated in Area 3, including both two- and three-track options on the existing alignment through the city and a two-track bypass alignment around the city. The Fredericksburg Station is within this area.		
3A	Maintain Two Tracks Through City	Within Fredericksburg, there would be no construction of new track / no additional rail capacity, and train operations would continue through the city similar to existing conditions, with station improvements. North and south of the city, there would be construction of one additional track within the existing railroad right-of-way.
3B	Add One Track Through City East of Existing	<b>SELECTED AS THE PREFERRED ALTERNATIVE.</b> This alternative adds a third main track through the city, and adds a third or fourth main track north and south of the city, mostly within existing right-of-way. Refer to Final EIS Section 4.3.3.
3C	Add Two-Track Bypass East of City	A new two-track bypass east of Fredericksburg would be constructed to serve freight and passenger trains that do not stop in the city, which would require additional right-of-way. The existing rail corridor would be maintained in the city and the station would be improved. North and south of the city, there would be construction of one additional track within the existing railroad right-of-way.
<b>Area 4: Central Virginia:</b> The sole Build Alternative evaluated in Area 4 adds one main track within existing railroad right-of-way. There are no intercity passenger rail stations in this area.		
4A	Add One Track/Improve Existing Track	<b>SELECTED AS THE PREFERRED ALTERNATIVE.</b> This alternative adds a third main track, mostly within existing right-of-way. Refer to Final EIS Section 4.3.4.
<b>Area 5: Ashland:</b> Seven Build Alternatives were evaluated in Area 5, varying from track alignment options through town to a new bypass. The alternatives include two different location options for the Ashland Station: a Downtown Station (which would maintain the existing station location with improvements) and an Ashcake Station location (which would close the existing station location and relocate service to a new station south of Ashcake Road). North and south of the town, all Build Alternatives would include construction of one additional track within the existing railroad right-of-way.		
5A	Maintain Two Tracks Through Town	<b>SELECTED AS THE PREFERRED ALTERNATIVE.</b> This alternative maintains the existing two-track corridor through downtown, with no improvements to the existing station location, and adds a third main track north and south of town, mostly within existing right-of-way. Refer to Final EIS Section 4.3.5.
5A–Ashcake	Maintain Two Tracks Through Town (Relocate Station to Ashcake)	This alternative is the same as 5A (the Preferred Alternative), but would relocate the station to Ashcake Road.

► Continued.

**Table 6.3-1: Summary of Build Alternatives Evaluated in Draft EIS**

Draft EIS Alternative		Description
5B	Add One Track Through Town East of Existing	Within town, one track would be added adjacent to the east side of the existing tracks, which would require additional right-of-way and closure of an existing at-grade crossing within town. The existing station would be improved.
5B–Ashcake	Add One Track Through Town East of Existing (Relocate Station to Ashcake)	This alternative is the same as 5B (as summarized above), but would relocate the station to Ashcake Road.
5C	Add Two-Track Western Bypass	A new two-track bypass west of Ashland would be constructed to serve freight and passenger trains that do not stop in town, which would require additional right-of-way. The existing rail corridor would be maintained in the city and the station would be improved.
5C–Ashcake	Add Two-Track Western Bypass (Relocate Station to Ashcake)	This alternative is the same as 5C (as summarized above), but would relocate the station to Ashcake Road.
5D–Ashcake	Three Tracks Centered Through Town (Add One Track, Relocate Station to Ashcake)	Within town, one track would be added with centering of all three tracks on the existing alignment. This would require additional right-of-way and preclude use of the existing station in town. The station would be relocated to Ashcake Road.
<p><b>Area 6: Richmond:</b> Eight Build Alternatives were evaluated in Area 6: five single-station options (which would consolidate all service to a single station location) and three two-station options (which would divide service between two stations). Use of the A-Line or S-Line varied by alternative, based primarily on the ability to serve station locations and optimize passenger and freight routes.</p>		
6A	Staples Mill Road Station Only	The existing Staples Mill Road Station would be improved to become the single passenger station to serve Richmond, and existing Main Street Station would be closed to service. One main track would be added along the RF&P Line (north of the city) and the A-Line (through the city).
6B–A-Line	Boulevard Station Only, A-Line	A new Boulevard Station would be constructed to become the single passenger station to serve Richmond, and existing Staples Mill Road and Main Street Stations would be closed to service. One main track would be added along the RF&P Line (north of the city) and the A-Line (through the city).
6B–S-Line	Boulevard Station Only, S-Line	This alternative is similar to 6B–A-Line (as summarized above), but would add one main track on the S-Line (through the city).
6C	Broad Street Station Only	A new Broad Street Station would be constructed to become the single passenger station to serve Richmond, and existing Staples Mill Road and Main Street Stations would be closed to service. One main track would be added along the RF&P Line (north of the city) and the A-Line (through the city).
6D	Main Street Station Only	The existing Main Street Station would be improved to become the single passenger station to serve Richmond, and existing Staples Mill Road Station would be closed to service. One main track would be added along the RF&P Line (north of the city) and the S-Line (through the city).
6E	Split Service, Staples Mill Road/Main Street Stations	Both existing Staples Mill Road and Main Street Stations would be improved and remain operational, with the majority of intercity passenger trains stopping only at Staples Mill Road. One main track would be added along the RF&P Line (north of the city) and the A-Line (through the city).
6F	Full Service, Staples Mill Road/Main Street Stations	<b>SELECTED AS THE PREFERRED ALTERNATIVE.</b> This alternative improves the S-Line through Richmond and allows for all intercity passenger trains that stop in Richmond to serve both stations. Refer to Final EIS Section 4.3.6.
6G	Shared Service, Staples Mill Road/Main Street Stations	Both existing Staples Mill Road and Main Street Stations would be improved and remain operational, with the majority of intercity passenger trains stopping at both stations, but some trains following the A-Line to bypass downtown Richmond and only serve Staples Mill Road Station. One main track would be added along the RF&P Line (north of the city) and the S-Line (through the city).



## 6.4 DESCRIPTION OF THE 4(F) RESOURCES

This section describes the following Section 4(f) resources:

- The Section 4(f) parks, recreation areas, and wildlife or waterfowl refuges resources that are within the LOD of the Preferred Alternative are presented in Section 6.4.1 below; note that resources that are near to, but not within, the Project LOD are not presented herein.
- The Section 4(f) historic sites that are within the Project's APE as determined during the Section 106 process are presented in Section 6.4.2.

Maps of the resources and the potential use of these Section 4(f) resources are presented separately in Section 6.5.

### 6.4.1 Parks and Recreation Areas

There are 12 public parks and recreation areas located within the permanent and/or temporary LOD of the Preferred Alternative; each is described in detail below.

Since the publication of the Draft Section 4(f) Evaluation, the Project LOD was refined as the Preferred Alternative was selected as part of this Final EIS (i.e., the LOD was revised since the publication of the Draft EIS). Accordingly, one park (Maggie Walker Governor's School Fields) is no longer included in this discussion because the revised LOD of the Preferred Alternative avoids the resource. Additionally, three parks and a trail are located within the Preferred Alternative LOD of Area 2 that were not within the LOD at the time of the Draft EIS, as discussed below:

- Potomac Yard Park—Park boundaries were expanded since the Draft Section 4(f) Evaluation and now extend within the temporary LOD of the Preferred Alternative
- Four Mile Run Trail—The revised temporary LOD of the Preferred Alternative now extends into the park boundaries
- Potomac Yard Landbay N—Newly designated parkland is located within the temporary LOD of the Preferred Alternative
- Rail Park—Newly designated parkland is located within the temporary LOD of the Preferred Alternative

**Long Bridge Park** (Area 1: Arlington). Long Bridge Park is a 29-acre local park constructed in 2011 that is owned and operated by Arlington County. The park is located between Long Bridge Drive and the western edge of the rail alignment and includes additional land east of the rail alignment adjacent to Roaches Run Waterfowl Sanctuary (which the Preferred Alternative does not encroach upon). Long Bridge Park includes multi-sport, lighted athletic fields, as well as walkways, greenspace, and playgrounds. The park facilities are located west of the rail alignment.

**Dog Run Park at Carlyle** (Area 2: Northern Virginia). This 3-acre facility consists of a fenced dog exercise area and tennis courts. The park is owned by the City of Alexandria.

**George Washington Memorial Parkway** (Area 2: Northern Virginia). The Parkway encompasses 1,105 acres and is operated by the National Park Service (NPS). The facility is utilized for transportation and recreational driving, but it also includes several walking/biking trails. The Parkway runs parallel to the DC2RVA corridor throughout much of Arlington. Note that while the George Washington Memorial Parkway is also located in Area 1: Arlington, it is not within the LOD in that area.

**Mount Vernon Trail** (Area 2: Northern Virginia). The Mount Vernon Trail is an 18-mile-long trail that connects Theodore Roosevelt Island Park with George Washington’s Estate at Mount Vernon. It is a very popular trail in the Washington, D.C. area with heavy use by bikers and pedestrians. Most of the trail is paved with some portions on boardwalk. This trail also connects with several other local and regional trails, including the Woodrow Wilson Bridge Trail, the Four Mile Run Trail, and the Custis Trail. The trail crosses the DC2RVA corridor near Long Bridge Park. While portions of the trail are located within property owned by the NPS, for purposes of this Section 4(f) evaluation, the trail was treated as a separate resource.

**Four Mile Run Trail** (Area 2: Northern Virginia). The Four Mile Run Trail, located in Arlington County, traverses the Four Mile Run stream valley. At its eastern end, it connects with the Mount Vernon Trail near Ronald Reagan Washington National Airport. At its westernmost point, it connects with the Bluemont Junction Trail. The trail is 7 miles long and the majority is paved.

**Potomac Yard Park** (Area 2: Northern Virginia). This 21.6-acre park is owned by the City of Alexandria and includes playground equipment, interactive fountain for water play, and walking/biking trails.



*Potomac Yard Park (Area 2, Northern Virginia)*

**Potomac Yard Landbay N** (Area 2: Northern Virginia). This 5.21-acre parcel is owned by the City of Alexandria and designated as parkland on City of Alexandria parkland maps. It is currently an open space area, and is part of the Potomac Yard Development Plan.



**Rail Park** (Area 2: Northern Virginia). This 4.17-acre parcel is owned by the City of Alexandria and designated as parkland on City of Alexandria parkland maps. It is currently a vacant area, and is part of the Potomac Yard Development Plan.

**Veterans Memorial Park** (Area 2: Northern Virginia). This 110-acre park in Prince William County includes a recreation center and several outdoor athletic fields, pavilions, a skate park, horseshoe pits, and walking trails.

**Fredericksburg and Spotsylvania National Military Park** (Area 3: Fredericksburg and Area 4: Central Virginia). This park is operated by NPS. The park is 8,374 acres total in size and encompasses four major Civil War battlefields, and also preserves four historic buildings associated with them. The Prospect Hill area of the park located in Area 3 is 1,100 acres. The Stonewall Jackson Shrine area located in Area 4 near Guinea, VA is 70 acres.

**Laurel Recreation Area** (Area 6: Richmond). This 9.6-acre park is owned and operated by Henrico County and includes a picnic shelter, a skate park, and athletic fields.

**Walker's Creek Retention Basin Park** (Area 6: Richmond). This 6.4-acre park is owned by the City of Richmond Public Works and the City of Richmond, Parks, Recreation and Community Facilities. The park provides access to the walk along the floodwall south of the James River.

#### 6.4.2 Wildlife Refuges/Waterfowl Sanctuary

Only one wildlife refuge, the Mattaponi State Wildlife Management Area, is within the LOD of the Preferred Alternative, and it is located in Area 4: Central Virginia. This wildlife refuge was also identified as a resource in the Draft Section 4(f) Evaluation.

**Mattaponi State Wildlife Management Area.** This state wildlife management area is 2,652 acres and is owned and operated by the Virginia Department of Game and Inland Fisheries (VDGIF).

#### 6.4.3 Historic Properties

During the separate Section 106 process<sup>10</sup> for the Project, DRPT determined that there are 120 historic properties (buildings, districts, objects, structures, and sites)<sup>11</sup> within the Project APE: 2 resources in Area 1; 11 in Area 2; 23 in Area 3; 14 in Area 4; 18 in Area 5; and 51 in Area 6.

These historic properties are listed in Table 6.4-1 in north-to-south order within the Project corridor and include:

- 13 archaeological sites,
- 96 above ground resources,
- 1 resource with an above ground and below ground component, and
- 10 battlefields.

One property, the historic RF&P Railroad, spans the majority of the Project corridor. The resources are described in full in the associated Project cultural resource reports, which are Appendix R of the Draft EIS and Appendix D of the Final EIS. All 120 Section 106 resources were evaluated for Section 4(f) use, the results of which are presented in Section 6.5.3.

<sup>10</sup> Refer to Section 5.13 and Appendix D of this Final EIS for details on the Section 106 process.

<sup>11</sup> For reference, historic resources are listed by DHR identification number throughout the Final EIS documentation.

**Table 6.4-1: Summary of Section 106 Historic Properties**

Site Name (DHR ID)	
Archaeological Sites	
Civil War Campsite (44ST1223)	Main Street Station Parking Lot/Railroad (44HE1098)
Bridge/Marye's Mill (44SP0187)	Lumpkins Jail/Devil's Half Acre Site (44HE1053)
Block 49 (44SP0688)	Railroad, Warehouse (44HE1097)
Block 48 (44SP0687)	Warehouse (44HE1094)
Fredericksburg Gun Manufactory (111-0145)	Falling Creek Ironworks Archaeological Site (020-0063)
Earthwork/Jackson's Earthwork (44SP0468)	Fort Darling Earthworks/Centralia Earthworks (44CF0680)
Grave Yard for Free People of Color and Slaves (44HE1203)	
Multicomponent (both archaeological sites and above-ground resources)	
Fredericksburg & Spotsylvania Co. Battlefields National Military Park & Cemetery, Lee Drive (111-0147)	
Above Ground Resource (Buildings, Districts, Objects, Structures)	
Richmond, Fredericksburg, and Potomac Railroad (500-0001)	MacMurdo House (166-0036)
Mount Vernon Memorial Highway (029-0218)	Hugo House/Lefebvre House (166-0037)
Washington National Airport (000-0045)	House, 1005 S. Center Street (166-0001-0077)
George Washington Junior High School (100-0160)	Charles Gwathmey House (042-0113)
Parker-Gray Historic District/Uptown (100-0133)	Hunton Treasures (043-0694)
Rosemont Historic District (100-0137)	Lewis-McLeod House (043-0690)
Alexandria Union Station (100-0124)	Laurel Industrial School Historic District (043-0292)
George Washington National Masonic Memorial (100-0128)	Main Building/Robert Stiles Building (043-0292-0001)
Phoenix Mill (100-0277)	Scott's Addition Historic District (127-6136)
Old Colchester Road, Potomac Path, King's Highway (029-0953)	Movieland Bowtie Cinema (127-6188)
Colchester Arms, Fairfax Arms (029-0043)	Hermitage Road Warehouse Historic District (127-6730)
RF&P Bridge over Occoquan River (500-0001-0022)	Todd Lofts (127-5978)
Rippon Lodge (076-0023)	Southern Stove Works (127-6145)
Rappahannock River Railroad Bridge and Associated Structures/Platform (111-0132-0025)	Governor's School (127-0414)
Fredericksburg Historic District (111-0132)	Virginia Union University Historic District (127-0354)
Dr. Charles Mortimer House (111-0067/111-0132-0505)	Carver Residential Historic District (127-0822)
Robert Adams Residence (111-0132-0458)	George W. Carver Elementary School (127-0428)
Shiloh Baptist Church New Site (111-0132-0147)	Richmond and Chesapeake Bay Railway Barn (127-6171)
Fredericksburg Train Station (111-0132-0704)	Gilpin Court Apartment Complex (127-6883)
The 1770 House (111-0132-0126)	Barton Heights Cemetery (127-5679)
Purina Tower (111-0132-0020)	Richmond Nursing Home (127-0353)
House, 314-316 Frederick Street (111-0132-0522)	Hebrew Cemetery, 320 Hospital Street (127-6166)

► *Continued.*

**Table 6.4-1: Summary of Section 106 Historic Properties**

Site Name (DHR ID)	
Pulliam's Service Station (111-0009-0795)	Shockoe Valley & Tobacco Row Historic District (127-0344)
Fredericksburg Historic District Extension (111-0009)	Winfree Cottage (127-6129)
Virginia Central Railway Historic District (088-5364)	Main Street Station and Trainshed (127-0172)
La Vue (088-0039)	Seaboard Air Line Railroad Corridor (127-6271)
Fairfield Plantation Office, Jackson Shrine (016-0092)	Masons' Hall (127-0019)
House, 12096 Guinea Drive (016-0208)	Railroad Y.M.C.A. (127-0344-0123)
Excelsior Industry of Caroline County MPD (016-5165)	Shockoe Slip Historic District and Expansions (127-0219)
First Woodford Post Office (016-0223)	Chesapeake & Ohio (C&O) Railroad Segment (127-6793)
Woodford Freight & Passenger Depot, Woodford Road (016-0222)	James River and Kanawha Canal Historic District (127-0171)
Carolina Mansion, 11146 Woodford Road (016-0220)	Bridge #1857, North 14th Street; Mayo Bridge North (127-5809)
Milford Historic District (016-5136)	Southern Railway (127-6792)
Milford State Bank (016-0270)	Manchester Warehouse Historic District (127-0457)
Coghill-Jeter Store (016-0286)	J.P. Taylor Leaf Tobacco, Southern Stove Works (127-6193)
Doswell Historic District (042-5448)	Williams Bridge Company, Emergency Fleet Corporation Factory (127-6245)
Doswell Depot and Tower (042-0093)	Pure Oil Company, Transmontaigne (127-6248)
Taylorville Road Historic District (042-5307)	Davee Gardens Historic District (127-6213)
Hoopers, 11108 McConnell Lane (042-0556)	Philip Morris Operations Complex (127-5818)
Berkleytown Historic District (166-5073)	DuPont Spruance (020-5474)
Ashland Historic District (166-0001)	The Bellwood-Richmond Quartermaster Depot Historic District (020-5336)
Business Office, Randolph-Macon (166-0001-0015)	Bellwood, Sheffields, Auburn Chase, Building 42, Defense Supply Center Richmond (020-0007)
Randolph-Macon College Historic District Expansion (166-5072)	Richmond & Petersburg Electric Railway (020-5351)
Randolph-Macon College Historic District (166-0002)	House, 3619 Thurston Road (020-0013)
Ashland Station Depot, 112 N. Railroad Avenue (166-0001-0008)	Atlantic Coast Line Railroad Corridor, Richmond and Petersburg Railroad (127-6251)
Priddy House (166-5041)	VEPCo Power Transmission Line (020-5378)
Emily Gray House (166-0001-0055)	Circle Oaks (020-0140)
Fleming Fox House (166-0001-0060)	Centralia Post Office (020-0552)
<b>Battlefields</b>	
Battle of Fredericksburg I (111-5295)	Yellow Tavern Battlefield (043-5108)
Battle of Fredericksburg II (111-5296)	Battle of Chaffin's Farm (New Market Heights) (043-0307)
Salem Church Battlefield (Banks Ford Battlefield) (088-5181)	Proctor's Creek Battlefield (020-5320)
Slaughter Pen Farm (088-0254)	Drewry's Bluff Battlefield (Fort Darling) (020-0147)
North Anna Battlefield (042-0123)	Assault on Petersburg (Petersburg Battlefield II) (123-5025)

## 6.5 DETERMINATION OF SECTION 4(F) USES

This section describes the uses of Section 4(f)-protected resources by the Preferred Alternative. Section 4(f) uses are described in Section 6.2.2 above, and Section 4(f) properties are described in Section 6.4 above. Refer to Section 6.8 for details of coordination with property owners throughout the Section 4(f) process.

### 6.5.1 Section 4(f) Use of Parks and Recreation Areas

Table 6.5-1 provides a summary of the permanent incorporation and temporary occupancy of lands at 12 parks and recreational trail resources. The determination of effect within each resource is described in detail after the table. Maps of each of the 12 resources in relation to the Project can be found in Figures 6.5-1 through 6.5-13 at the end of this section.

As shown in the table, the Preferred Alternative will have a 0.21-acre permanent incorporation of Walker's Creek Retention Basin Park that is unavoidable in Area 6 (Richmond). All other uses of park and recreation areas are temporary occupancy. Note that changes to eligible park and recreation area resources since the Draft Section 4(f) Evaluation are discussed in Section 6.4.1 above; additionally, there were minor changes to the type of use (i.e., change from permanent incorporation to temporary occupancy within the same resource) shown in Table 6.5-1.

Based on the criteria discussed in Section 6.2, FRA determined that the Preferred Alternative will have one Section 4(f) *de minimis* use to Walker's Creek Retention Basin Park due to permanent incorporation. FRA has also determined that the remaining 11 park, recreation, and wildlife and waterfowl refuge resources are only within the temporary LOD and result in temporary occupancy but not a Section 4(f) use based on the conditions of the occupancy as discussed in Section 6.2.2. FRA has determined that the Project will not result in any constructive uses.

Detailed descriptions of how FRA determined these uses are provided for each resource after the table. The officials with jurisdiction over these parklands have provided concurrence with FRA's determinations regarding the single *de minimis* use and the temporary occupancies; see Section 6.8.1 for additional information on this coordination and Appendix E of this Final EIS for copies of the concurrence letters.



*Walker's Creek Retention Basin Park (Area 6, Richmond)*

**Table 6.5-1: Permanent Incorporation and Temporary Occupancy of Parks and Recreation Areas of the Preferred Alternative**

Park Name	Area within LOD (Parks in acres; Trails in feet)	Use Determination
Alternative 1B: Add Two Main Tracks on the West		
Long Bridge Park	P: 0.00 T: 0.67	Temporary Occupancy but No Section 4(f) Use
Alternative 2A: Add a Third or Fourth Main Track		
Dog Run Park at Carlyle	P: 0.00 T: 0.18	Temporary Occupancy but No Section 4(f) Use
George Washington Memorial Parkway	P: 0.00 T: 1.20	Temporary Occupancy but No Section 4(f) Use <sup>2</sup>
Mount Vernon Trail	P: 0.00 feet T: 20 feet	Temporary Occupancy but No Section 4(f) Use
Four Mile Run Trail	P: 0.00 feet T: 43 feet	Temporary Occupancy but No Section 4(f) Use
Potomac Yard Park	P: 0.00 T: 0.48	Temporary Occupancy but No Section 4(f) Use
Potomac Yard Landbay N	P: 0.00 T: 1.41	Temporary Occupancy but No Section 4(f) Use
Rail Park	P: 0.00 T: 0.60	Temporary Occupancy but No Section 4(f) Use
Veterans Memorial Park	P: 0.00 T: 0.07	Temporary Occupancy but No Section 4(f) Use
Alternative 3B: Add a Third Main Track Through City		
Fredericksburg and Spotsylvania National Military Park <sup>1</sup> (Prospect Hill Area)	P: 0.00 T: 0.19	Temporary Occupancy but No Section 4(f) Use <sup>2</sup>
Alternative 4A: Add a Third Main Track		
Fredericksburg and Spotsylvania National Military Park <sup>1</sup> (Stonewall Jackson Shrine Area)	P: 0.00 T: 1.10	Temporary Occupancy but No Section 4(f) Use <sup>2</sup>
Alternative 6F: Full Service, Staples Mill Road / Main Street Stations		
Laurel Recreation Area	P: 0.00 T: 0.01	Temporary Occupancy but No Section 4(f) Use
Walker's Creek Retention Basin Park	P: 0.21 T: 0.27	<i>de minimis</i>
<b>Total for the Preferred Alternative:</b>	<b>P: 0.21 T: 6.18 / 63 feet of trail</b>	<b>I de minimis Use</b>

Notes: P: Permanent Incorporation; T: Temporary Occupancy

1. Fredericksburg and Spotsylvania National Military Park is located in both Area 3 and Area 4.

2. George Washington Memorial Parkway and Fredericksburg and Spotsylvania National Military Park are also addressed under historic resources and may have a different use determination as a historic resource. See Table 6.5.3.

There are no impacts from the Preferred Alternative in Area 5, so it is not included in the table.



**Long Bridge Park (Area 1).** The Preferred Alternative will expand the railroad infrastructure on the west side of the railroad, but within the CSXT-owned right-of-way, approaching Long Bridge from the south. However, the Preferred Alternative will result in 0.67 acres of temporary occupancy outside of the right-of-way (less than three percent of the 29-acre facility). As shown in Figure 6.5-1, the temporary occupancy consists of narrow areas needed for construction access, erosion control, and material placement. Subsequent to the Draft EIS, the permanent LOD was minimized and permanent incorporation of this resource was avoided. FRA has determined that the temporary impacts will not result in a Section 4(f) use because upon completion of construction, the land outside of the CSXT right-of-way will be restored to its prior condition, and the activities of the park will not be affected during the timeframe of the temporary occupancy. By letter dated December 18, 2018, Arlington County Department of Parks and Recreation agreed with FRA's determination that this is not a Section 4(f) use (see Appendix E of this Final EIS).

**Dog Run Park at Carlyle (Area 2).** The Preferred Alternative will result in 0.18 acres of temporary occupancy, totaling less than 5 percent of this 3-acre dog park. As shown in Figure 6.5-2, temporary occupancy will be in the areas needed for access, erosion control, and material placement during construction, and are located in a narrow strip of natural vegetation extending approximately 10 feet from the existing right-of-way. The adjacent dog run area and tennis courts will not be impacted. Subsequent to the Draft EIS, the permanent LOD was minimized in this area and permanent incorporation of this resource was avoided; temporary occupancy increased slightly as the previous area of permanent incorporation identified in the Draft EIS is now located within the temporary LOD. FRA has determined that the temporary occupancy will not result in a Section 4(f) use because upon completion of construction, the land outside of the CSXT right-of-way will be restored to its prior condition. The activities of the park will not be affected during construction. By letter dated December 13, 2018, the City of Alexandria agreed with FRA's determination that this is not a Section 4(f) use (see Appendix E of this Final EIS).

**George Washington Memorial Parkway (Area 2).** As shown in Figure 6.5-3, the Preferred Alternative will result in temporary occupancy of an approximately 10-foot-wide strip of vacant forested land on the east side of the existing railroad totaling 1.20 acres, or approximately 0.1 percent of the 1,105-acre facility. Temporary occupancy will be in the area needed for access, erosion control, and material placement during construction. Impacts to mature trees will be avoided and minimized. Design refinements after the Draft EIS resulted in a slight increase in temporary occupancy of this resource. FRA has determined that the temporary occupancy will not result in a Section 4(f) use because upon completion of construction, the land outside of the CSXT right-of-way will be restored to its prior condition, and the activities of the park will not be affected during the timeframe of the temporary occupancy. By letter dated December 12, 2018, the National Park Service George Washington Memorial Parkway Headquarters agreed with FRA's determination that this is not a Section 4(f) use (see Appendix E of this Final EIS). This property is also listed as a historic resource under Section 106 (see Section 6.5.3).

**Mount Vernon Trail (Area 2).** The Preferred Alternative will result in temporary occupancy to 20 feet of this trail facility for access and erosion control during construction, as shown in Figure 6.5-4. Trail connectivity will be maintained during construction. FRA has determined that the temporary occupancy will not result in a Section 4(f) use because upon completion of construction, trail connectivity will be maintained, and the land outside of the CSXT right-of-way will be restored to its prior condition. The activities of the trail will not be affected during the timeframe of the temporary occupancy. By letter dated December 12, 2018, NPS agreed with FRA's determination that this is not a Section 4(f) use (see Appendix E of this Final EIS).



**Four Mile Run Trail (Area 2).** The Preferred Alternative will result in temporary occupancy to 43 feet of this trail facility for access and erosion control during construction, as shown in Figure 6.5-5. Trail connectivity will be maintained during construction. Design refinements subsequent to the Draft EIS resulted in a temporary occupancy of this resource which was previously not within the LOD. FRA has determined that the temporary occupancy will not result in a Section 4(f) use because upon completion of construction, trail connectivity will be maintained, and the land outside of the CSXT right-of-way will be restored to its prior condition. The activities of the trail will not be affected during the timeframe of the temporary occupancy. By letter dated December 13, 2018, the City of Alexandria agreed with FRA's determination that this is not a Section 4(f) use (see Appendix E of this Final EIS).

**Potomac Yard Park (Area 2).** The Preferred Alternative will result in 0.48 acres of temporary occupancy (less than 2 percent of the 21.6-acre park). Temporary occupancy in the area needed for access, erosion control, and material placement during construction is located in a narrow strip adjacent to the existing right-of-way, as shown in Figure 6.5-6. Park boundary expansion subsequent to the Draft EIS resulted in temporary occupancy of this resource that was previously not located within the LOD. FRA has determined that the temporary occupancy will not result in a Section 4(f) use because after construction, the land outside of the CSXT right-of-way will be restored to its prior condition, and park activities will not be affected during the timeframe of the temporary occupancy. By letter dated December 13, 2018, the City of Alexandria agreed with FRA's determination that this is not a Section 4(f) use (see Appendix E of this Final EIS).

**Potomac Yard Landbay N (Area 2).** The Preferred Alternative will result in 1.41 acres of temporary occupancy totaling approximately 27 percent of this 5.21-acre park. Temporary occupancy is needed for access, erosion control, and material placement during construction. There are two separate areas of temporary occupancy within the greater Potomac Yard Landbay N limits, located in narrow, non-continuous strips immediately adjacent to the tracks, as shown in Figure 6.5-7 (0.66 acres of temporary occupancy in the area shown on sheet 1, and 0.75 acres of temporary occupancy in the area shown on sheet 2). The City of Alexandria provided comments identifying this park resource as a new park subsequent to the Draft EIS. FRA has determined that the temporary occupancy will not result in a Section 4(f) use because upon completion of construction, the land outside of the CSXT right-of-way will be restored to its prior condition. Currently, the affected area is open space. DRPT will continue to coordinate with the City of Alexandria to ensure that the activities of the park will not be affected during the timeframe of the temporary occupancy. By letter dated December 13, 2018, the City of Alexandria agreed with FRA's determination that this is not a Section 4(f) use (see Appendix E of this Final EIS).

**Rail Park (Area 2).** The Preferred Alternative will result in 0.60 acres of temporary occupancy (less than 15 percent of the 4.17-acre park). Temporary occupancy is in areas needed for access, erosion control, and material placement during construction, and are located in a narrow strip immediately adjacent to the tracks, as shown in Figure 6.5-8. The City of Alexandria provided comments identifying this park as a new resource subsequent to the Draft EIS. FRA has determined that the temporary occupancy will not result in a Section 4(f) use because upon completion of construction, the land outside of the CSXT right-of-way will be restored to its prior condition. Currently, the affected area is open space. DRPT will continue to coordinate with the City of Alexandria to ensure that the activities of the park will not be affected during the timeframe of the temporary occupancy. By letter dated December 13, 2018, the City of Alexandria agreed with FRA's determination that this is not a Section 4(f) use (see Appendix E of this Final EIS).

**Veterans Memorial Park (Area 2).** The Preferred Alternative will result in temporary occupancy of 0.07 acres of this 110-acre facility, or less than 0.1 percent of the total parkland acreage. The temporary occupancy is located in a narrow strip of land, less than 5 feet in width adjacent to the existing right-of-way, as shown in Figure 6.5-9. Temporary impacts result from area needed for access, erosion control, and material placement during construction. The area consists of natural vegetation. Design refinements subsequent to the Draft EIS resulted in an increased area of temporary occupancy of this resource. FRA has determined that the temporary occupancy will not result in a Section 4(f) use because upon completion of construction, the land outside of the CSXT right-of-way will be restored to its prior condition, and the activities of the park will not be affected during the timeframe of the temporary occupancy. By letter dated November 2, 2018, Prince William County Parks and Recreation Department agreed with FRA's determination that this is not Section 4(f) use as documented on November 2, 2018 (see Appendix E of this Final EIS).

**Fredericksburg and Spotsylvania National Military Park (Area 3, Prospect Hill Area).** The Preferred Alternative in Area 3 will result in temporary occupancy to this facility at the Prospect Hill/Lee Drive site. The temporary occupancy at this location is 0.19 acres, approximately 0.01 percent of this approximately 1,100-acre portion of the National Military Park. The temporarily occupied area is a small rectangular-shaped piece of land that is vacant, as shown in Figure 6.5-10. Temporary occupancy will be in areas needed for access, erosion control, and material placement during construction. Design refinements and parcel boundary adjustments subsequent to the Draft EIS resulted in an increased temporary occupancy of this resource. FRA has determined that the temporary occupancy will not result in a Section 4(f) use because upon completion of construction, the land outside of the CSXT right-of-way will be restored to its prior condition and the activities of the park will not be affected during the timeframe of the temporary occupancy. By letter dated December 7, 2018, the National Park Service Fredericksburg and Spotsylvania National Military Park agreed with FRA's determination that this is not a Section 4(f) use (see Appendix E of this Final EIS). This property is also listed as a historic resource under Section 106, as described in Section 6.5.3 of this chapter.



*Fredericksburg and Spotsylvania National Military Park (Area 3, Fredericksburg)*

**Fredericksburg and Spotsylvania National Military Park (Area 4, Stonewall Jackson Shrine Area).** The Preferred Alternative in Area 4 will have temporary occupancy of 1.10 acres at the Stonewall Jackson Shrine, or less than 2 percent of this approximately 70-acre portion of the National Military Park. The temporary occupancy consists of an approximately 20-foot-wide strip that is made up of forest and agricultural lands, as shown in Figure 6.5-11. Temporary occupancy will be in areas needed for access, erosion control, and material placement during construction. Design refinements subsequent to the Draft EIS resulted in an increased temporary occupancy of this resource. FRA has determined that the temporary occupancy will not result in a Section 4(f) use because upon completion of construction, the land outside of the CSXT right-of-way will be restored to its prior condition, and the activities of the park will not be affected during the timeframe of the temporary occupancy. By letter dated December 7, 2018, the NPS-Fredericksburg and Spotsylvania National Military Park agreed with FRA's determination that this is not a Section 4(f) use (see Appendix E of this Final EIS). This property is also listed as a historic resource under Section 106, as described in Section 6.5.3 of this chapter.

**Laurel Recreation Area (Area 6).** The Preferred Alternative will result in 0.01 acres of temporary occupancy, approximately 0.1 percent of this 9.6-acre facility. The temporary occupancy is located in the upper northeast corner of the parcel, as shown in Figure 6.5-12. Temporary occupancy will be in areas needed for access, erosion control, and material placement during construction. Design refinements subsequent to the Draft EIS resulted in a temporary occupancy of this resource which was previously not within the LOD. FRA has determined that the temporary occupancy will not result in a Section 4(f) use because the land outside of the CSXT right-of-way will be restored to its prior condition and the activities of the park will not be affected during construction. By letter dated October 31, 2018, Henrico County Recreation and Parks agreed with FRA's determination that this is not a Section 4(f) use (see Appendix E of this Final EIS).

**Walker's Creek Retention Basin Park (Area 6).** The Preferred Alternative will require permanent right-of-way from, and result in temporary occupancy to, Walker's Creek Retention Basin Park. Permanent impacts will be 0.21 acres, and temporary impacts will be 0.27 acres, for a total affected percentage of less than 8 percent of the 6.4-acre park. The affected area is a vacant grassed area with a multi-use trail that currently crosses under the existing tracks, as shown in Figure 6.5-13. The width ranges up to 70 feet for temporary and permanent impacts combined. Design refinements subsequent to the Draft EIS resulted in an increase in both temporary occupancy and permanent incorporation of this resource. FRA has determined that the use is *de minimis*<sup>12</sup> as the transportation use of this additional right-of-way does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f). Temporary occupancy will be in areas needed for access, erosion control, and material placement during construction. FRA does not anticipate the temporary occupancy will result in a Section 4(f) use because upon completion of construction, the land outside of the CSXT right-of-way will be restored to its prior condition, trail connectivity will be maintained, and the other activities of the park will not be affected during the timeframe of the temporary occupancy. By letter dated November 16, 2018, the City of Richmond Department of Public Works in consultation with the Department of Parks and Recreation agreed with FRA's determination of Section 4(f) *de minimis* use and that the temporary occupancy is not a use (see Appendix E of this Final EIS).

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<sup>12</sup> This resource was within the scope of the previous SEHSR Richmond to Raleigh (R2R) project; however, no impacts were identified as part of that project. The DC2RVA determinations of effect are based on the Project limits of disturbance and proposed infrastructure per the Basis of Design for the Project; refer to Chapter 4 of this Final EIS for details.



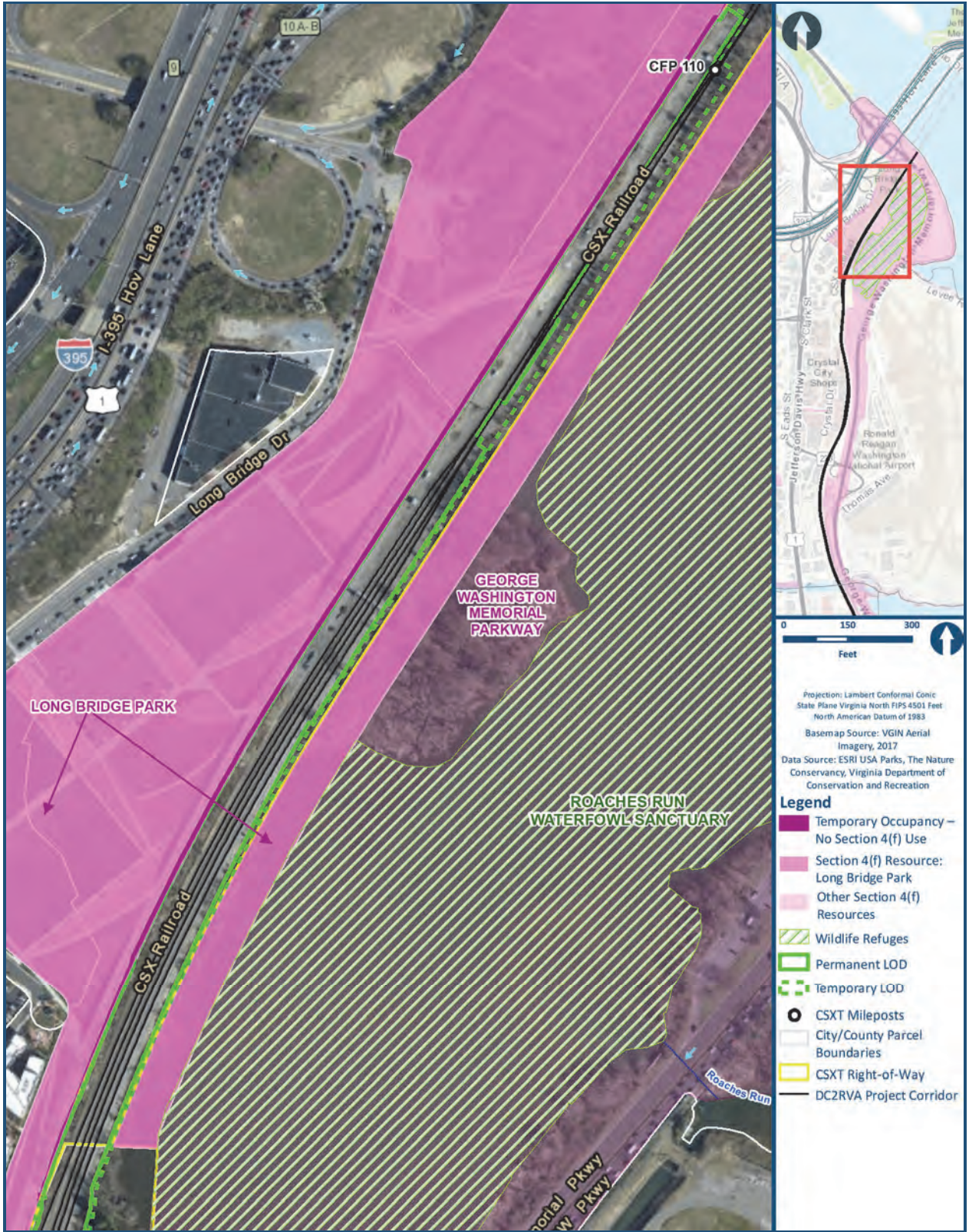


Figure 6.5-1: Determination of Section 4(f) Use of Long Bridge Park



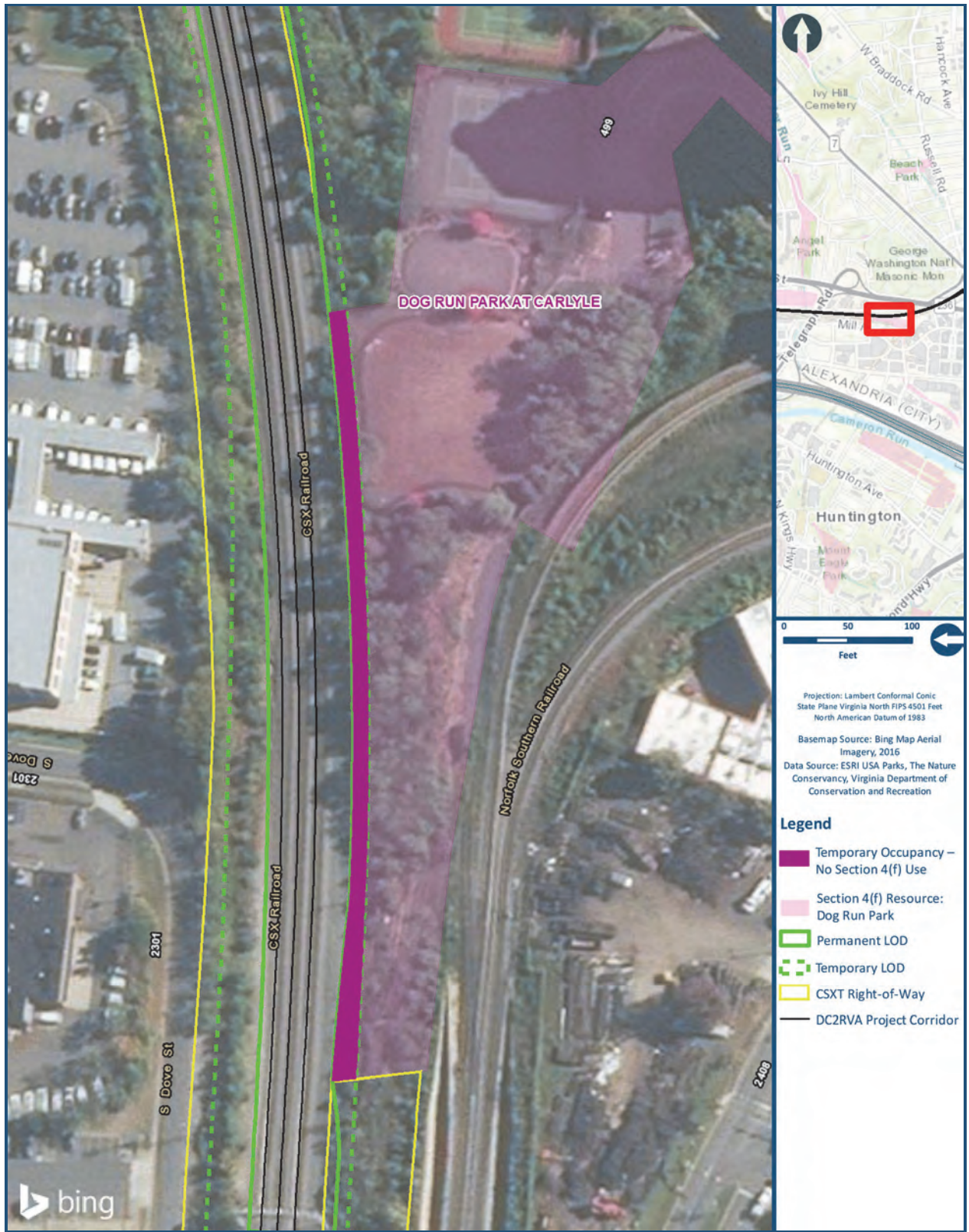


Figure 6.5-2: Determination of Section 4(f) Use of Dog Run Park



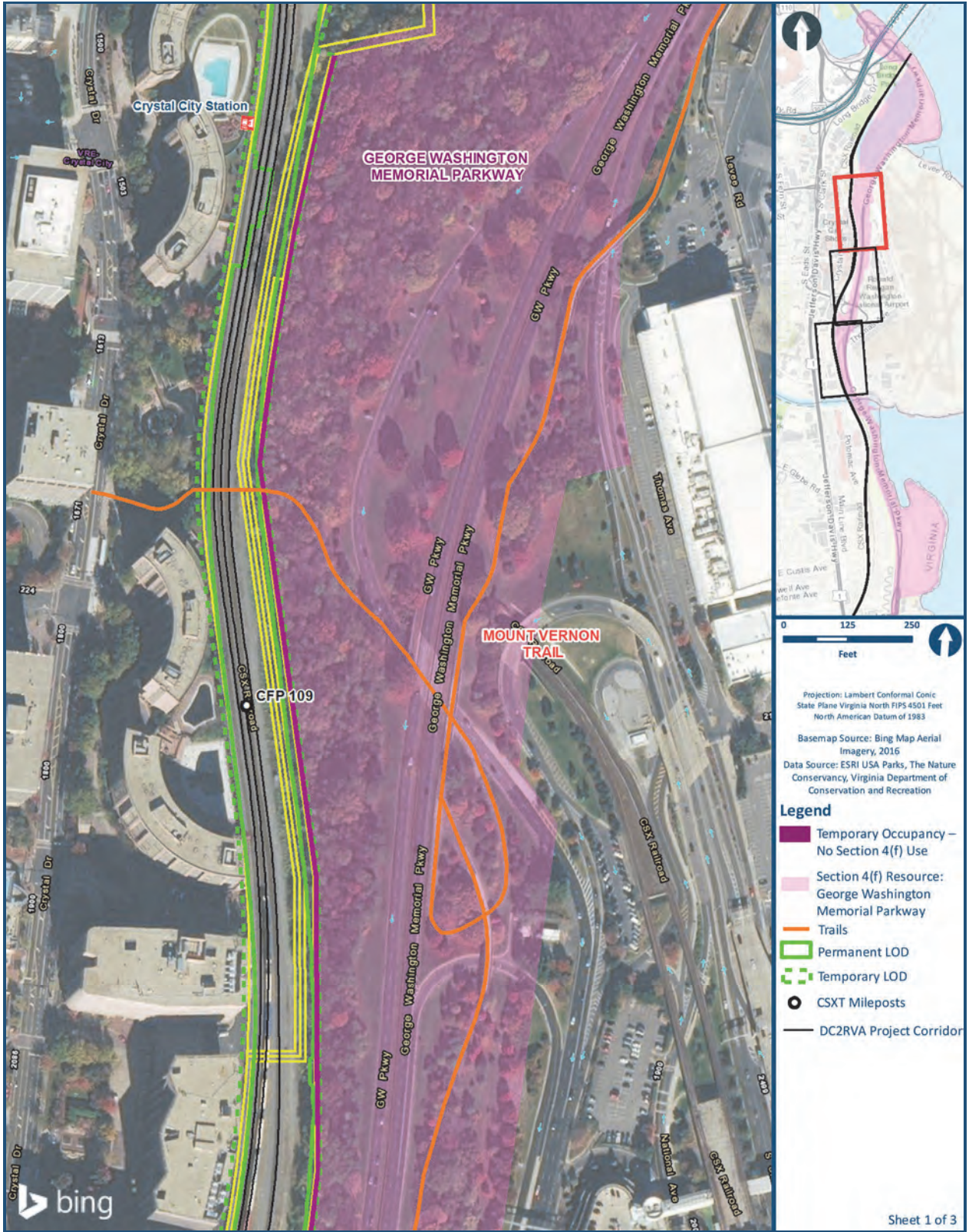


Figure 6.5-3: Determination of Section 4(f) Use of George Washington Memorial Parkway



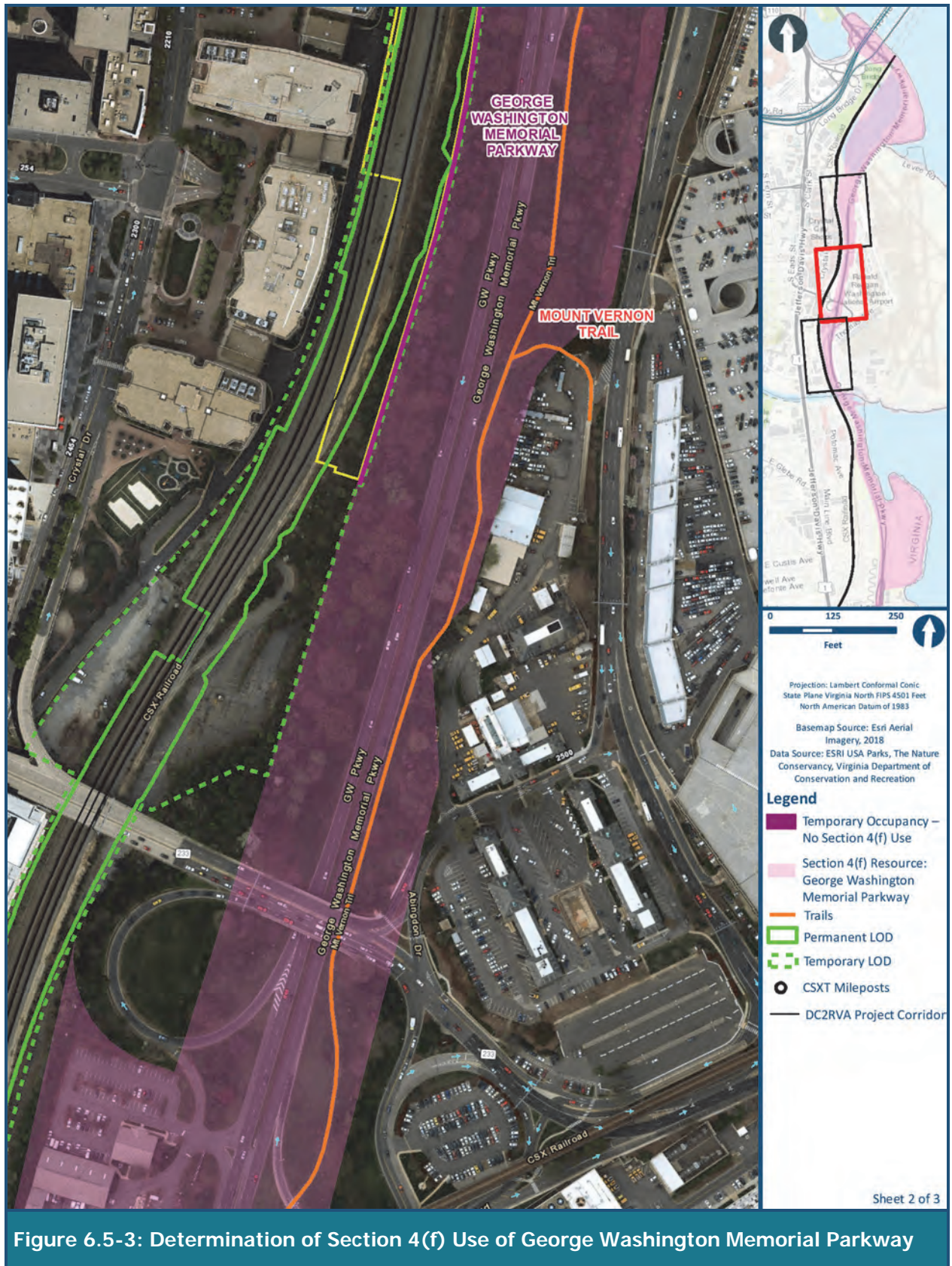


Figure 6.5-3: Determination of Section 4(f) Use of George Washington Memorial Parkway



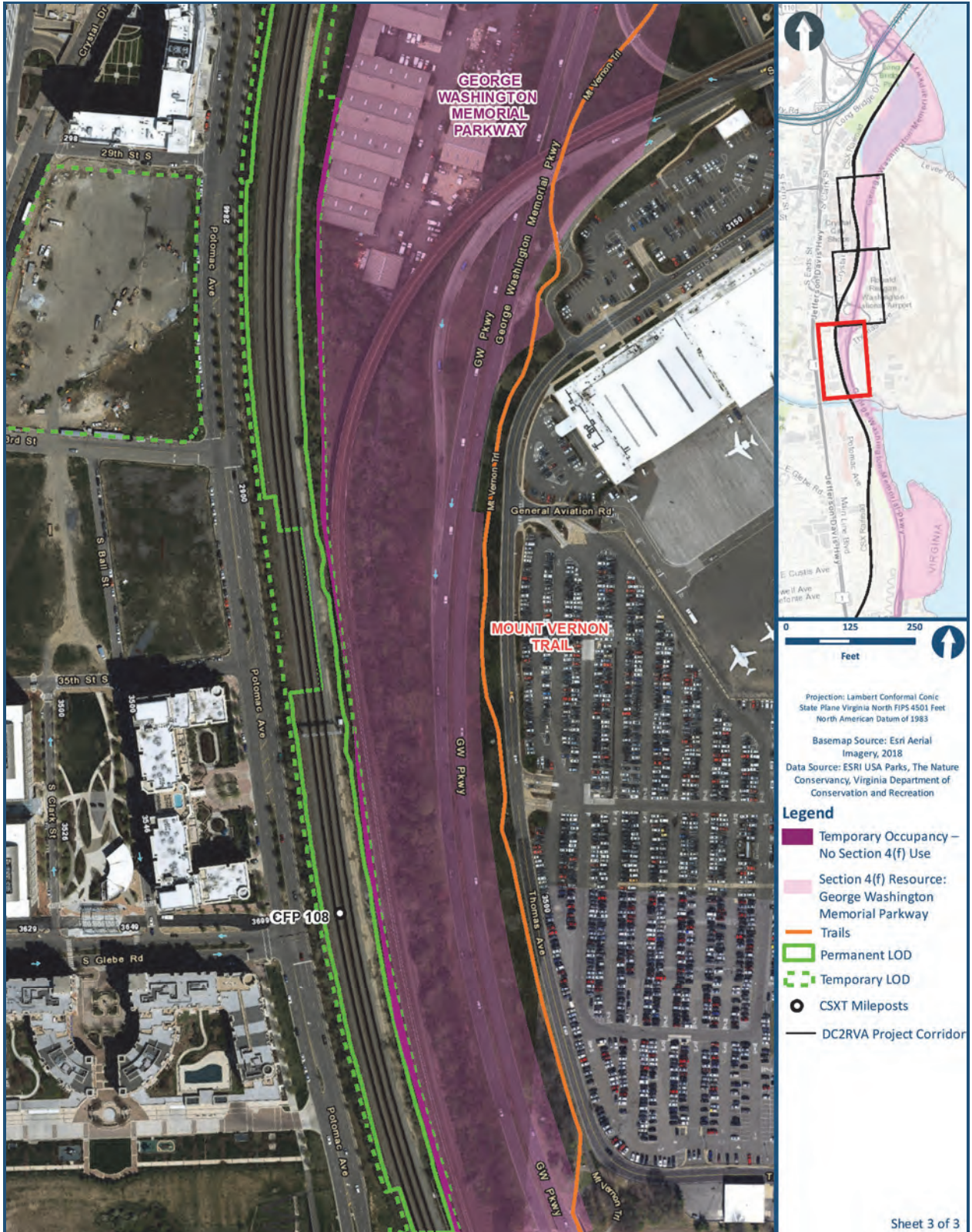


Figure 6.5-3: Determination of Section 4(f) Use of George Washington Memorial Parkway



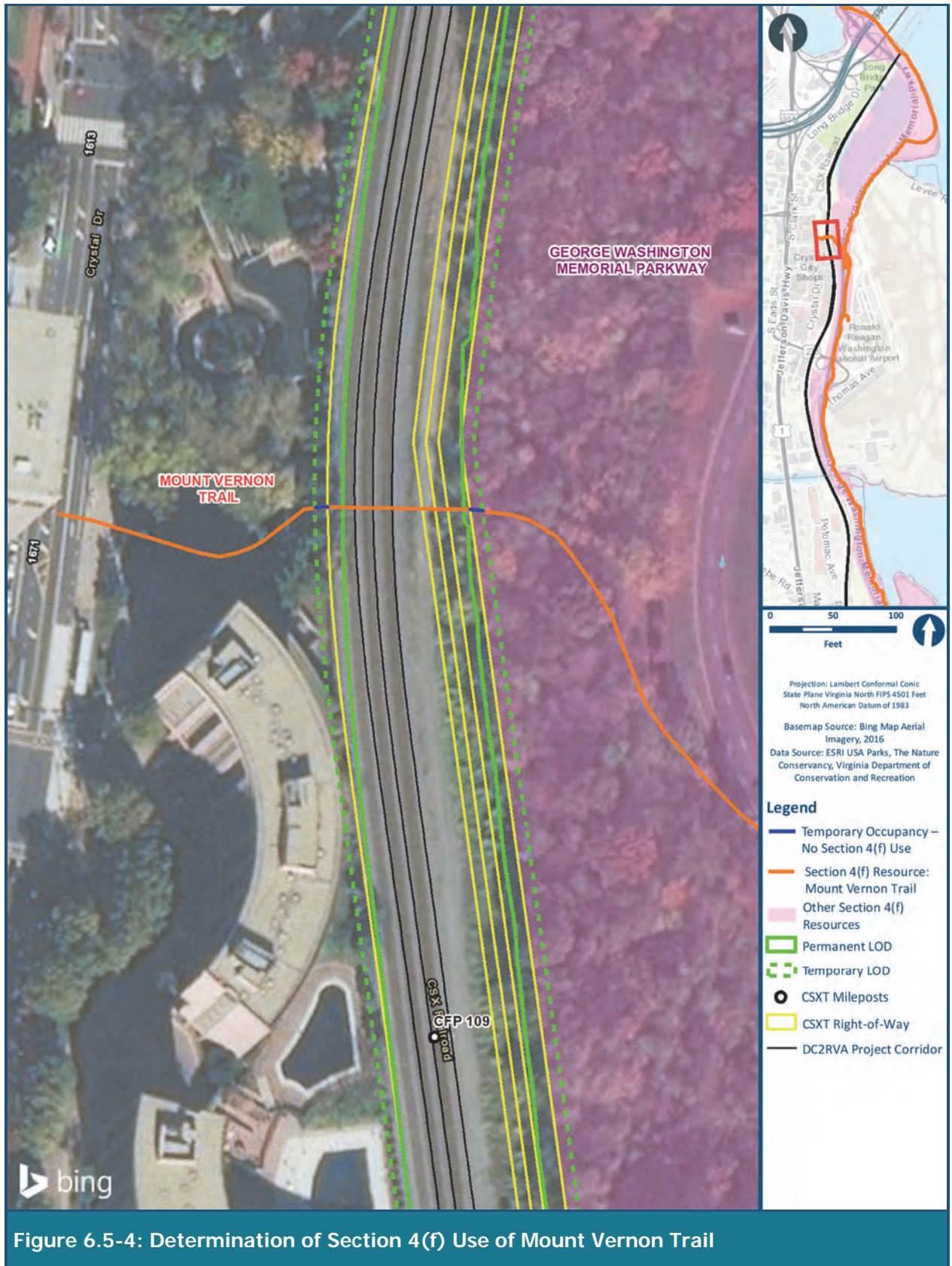


Figure 6.5-4: Determination of Section 4(f) Use of Mount Vernon Trail



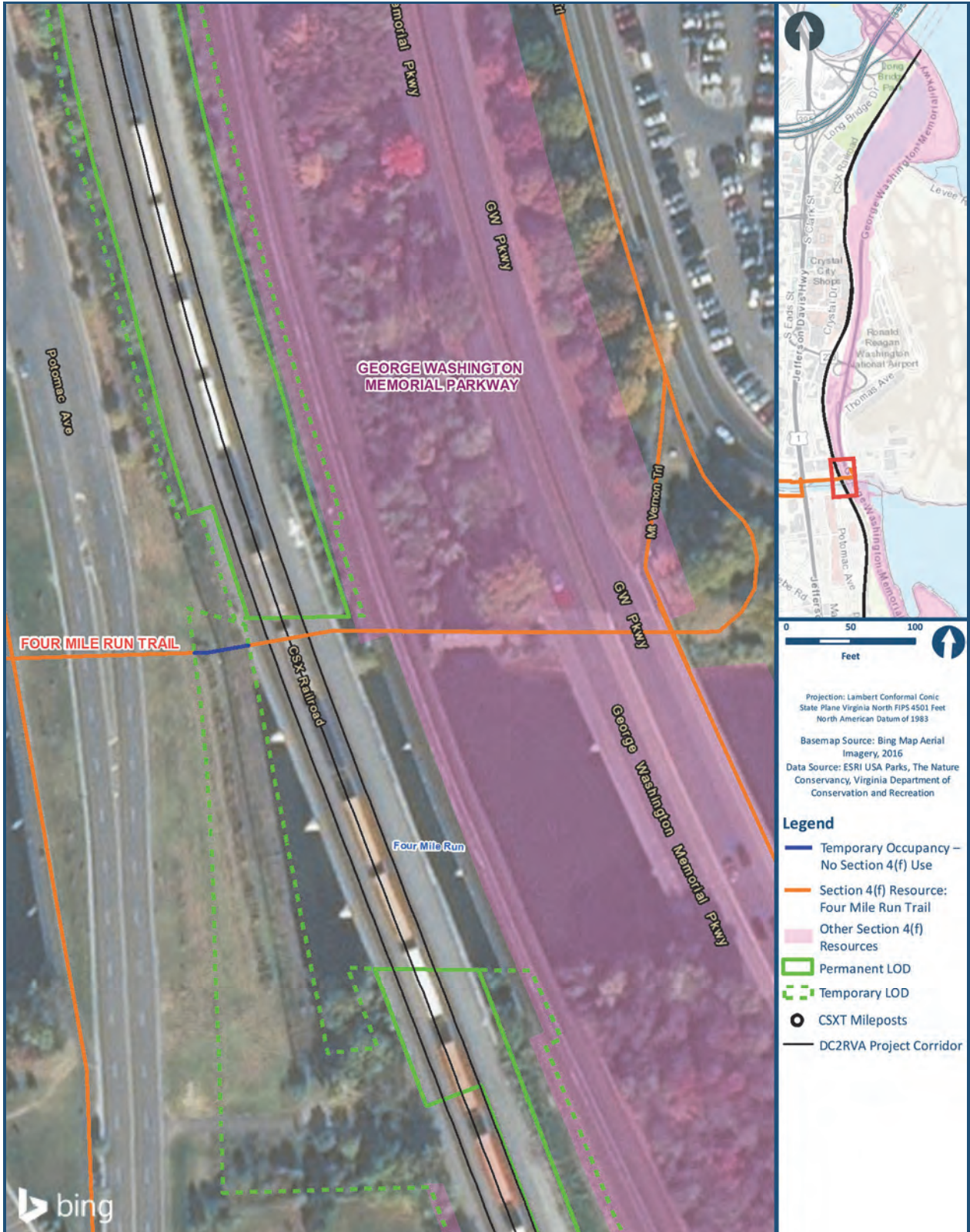


Figure 6.5-5: Determination of Section 4(f) Use of Four Mile Run Trail



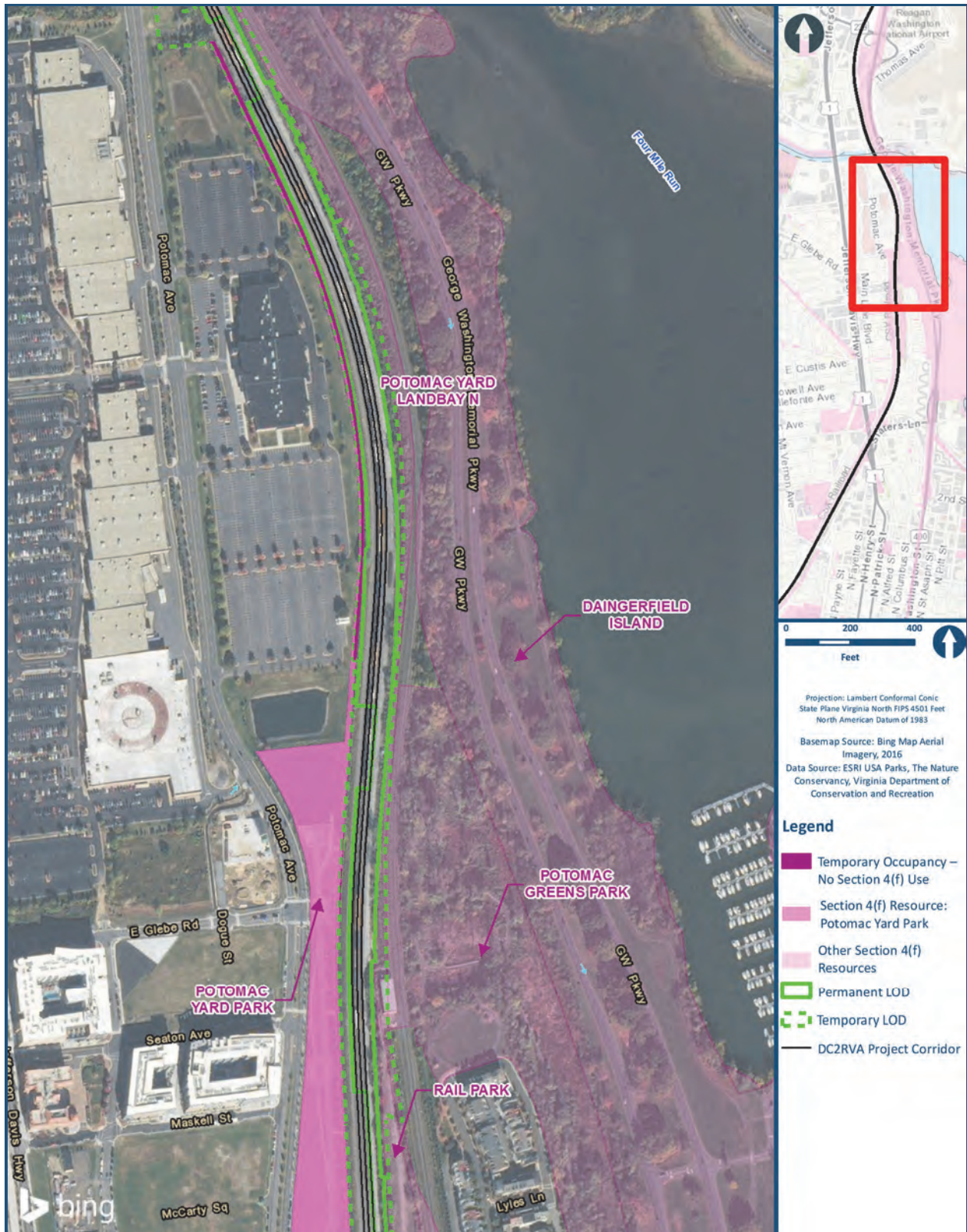


Figure 6.5-6: Determination of Section 4(f) Use of Potomac Yard Park



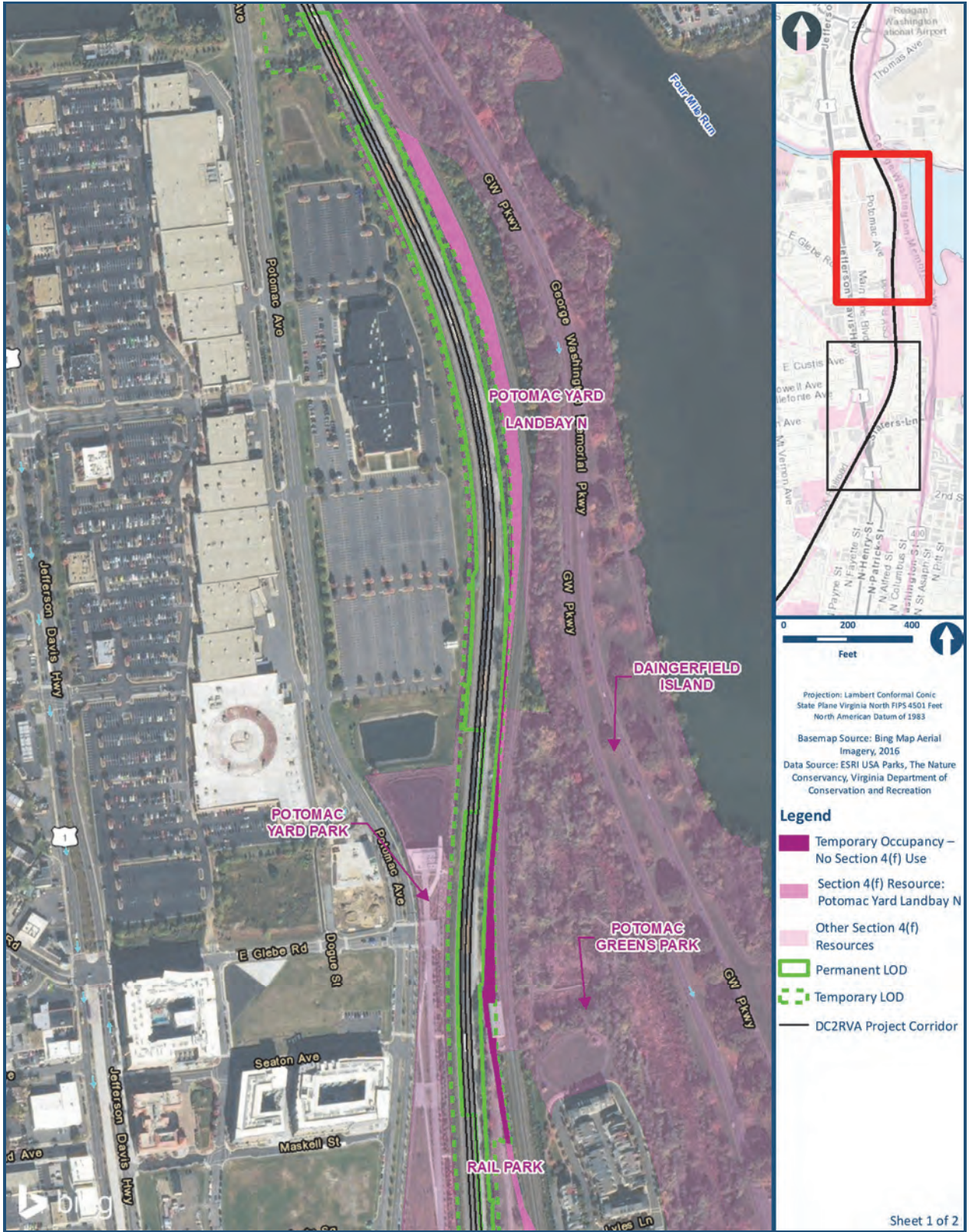


Figure 6.5-7: Determination of Section 4(f) Use of Potomac Yard Landbay N



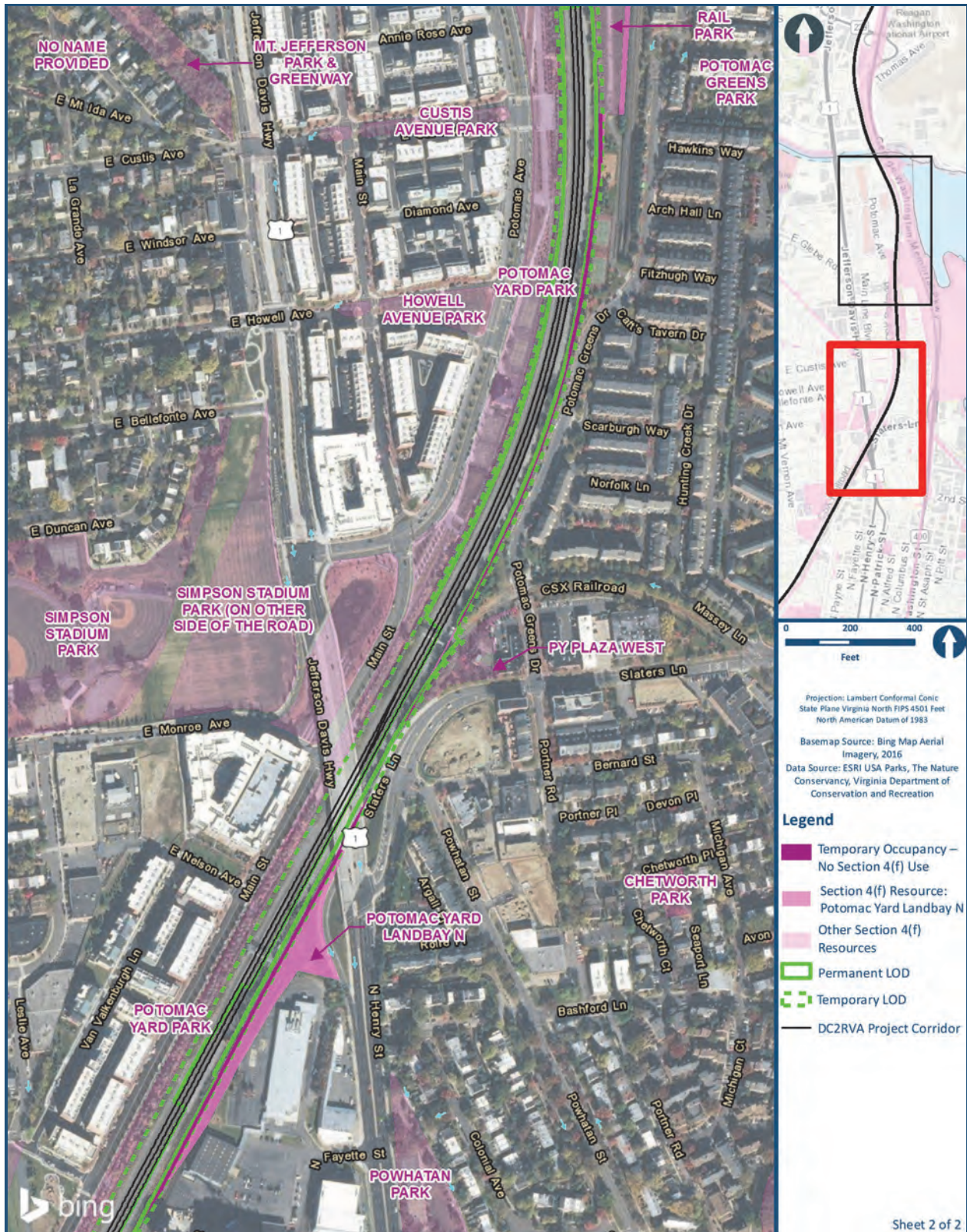


Figure 6.5-7: Determination of Section 4(f) Use of Potomac Yard Landbay N



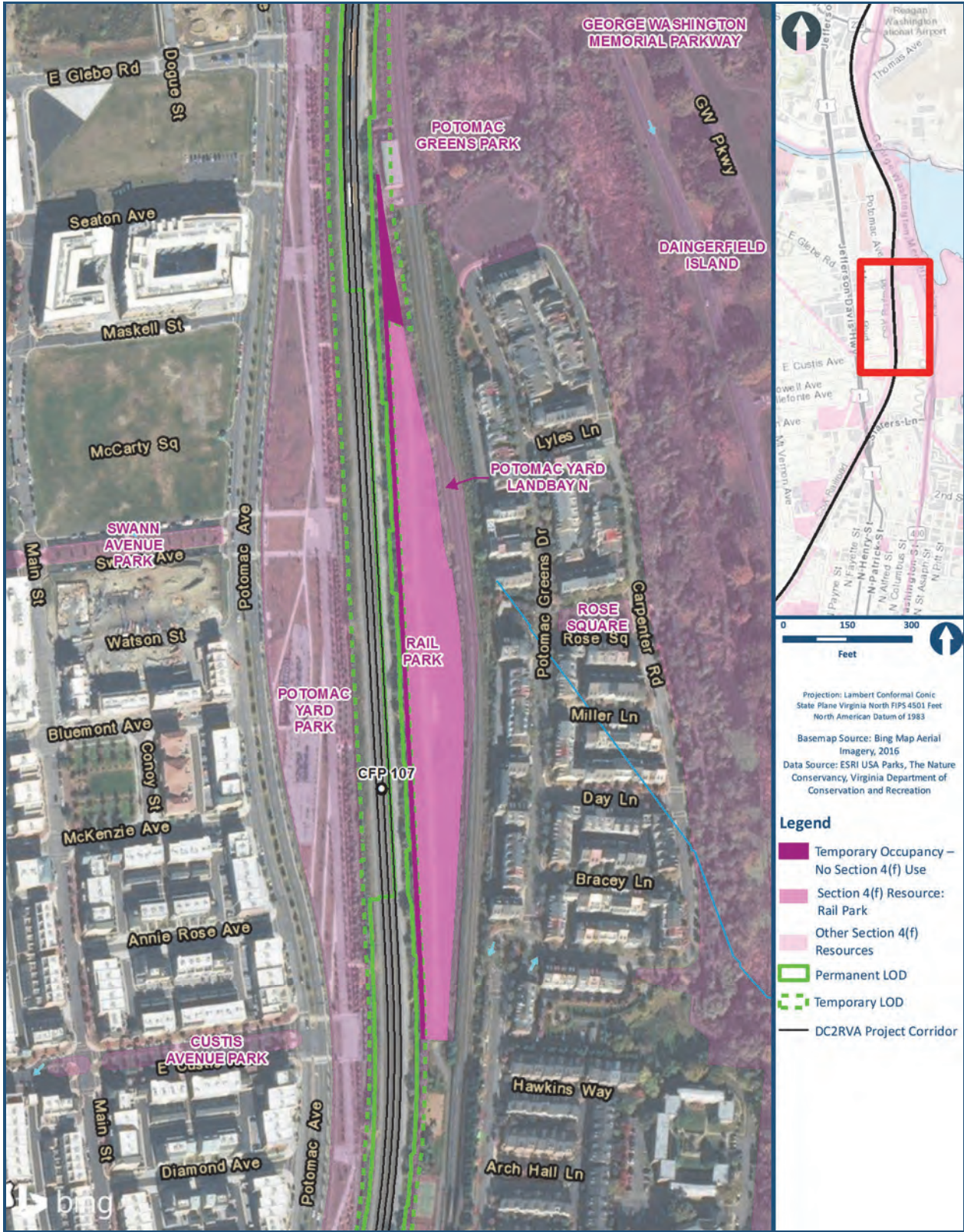


Figure 6.5-8: Determination of Section 4(f) Use of Rail Park



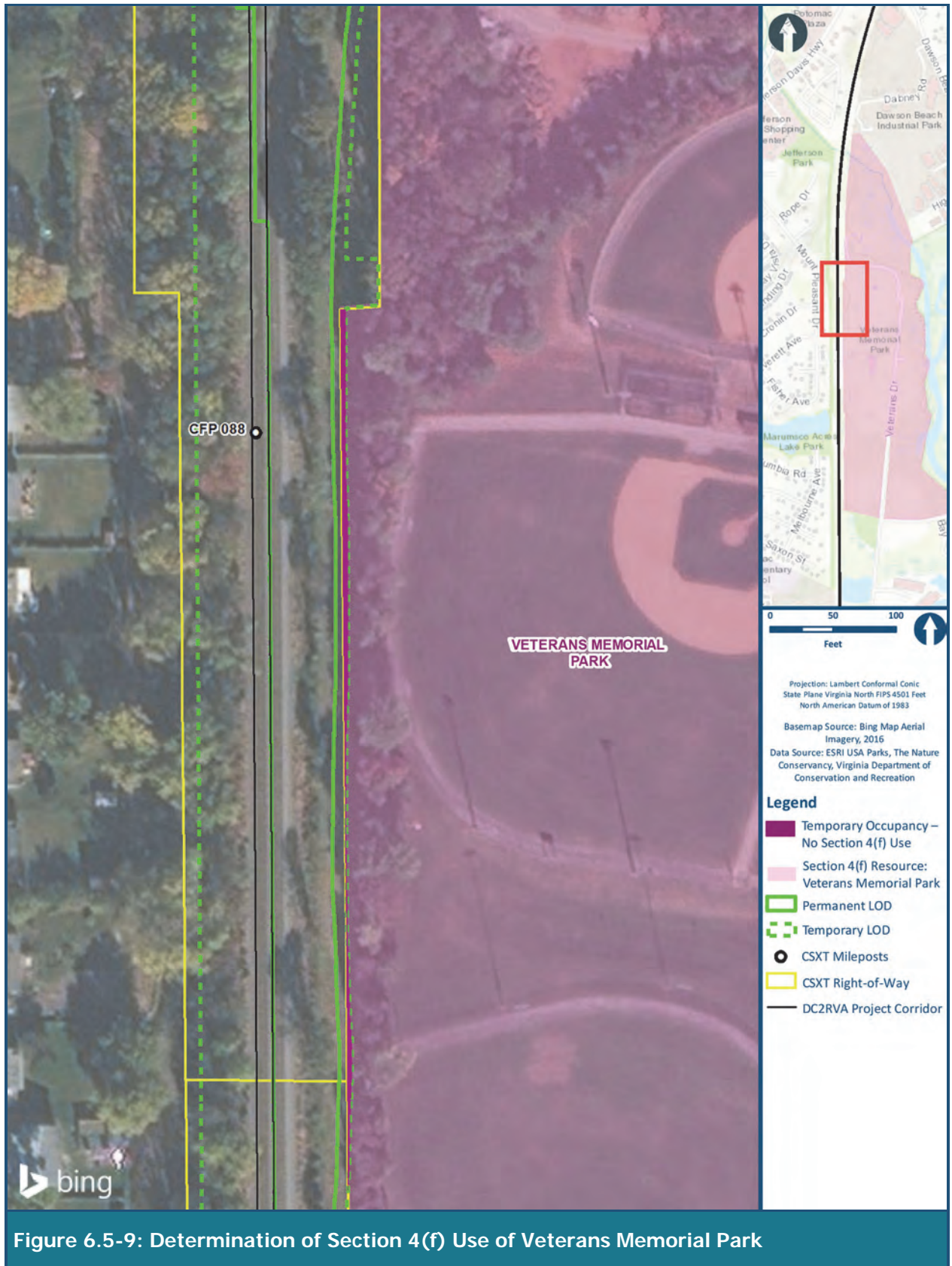


Figure 6.5-9: Determination of Section 4(f) Use of Veterans Memorial Park

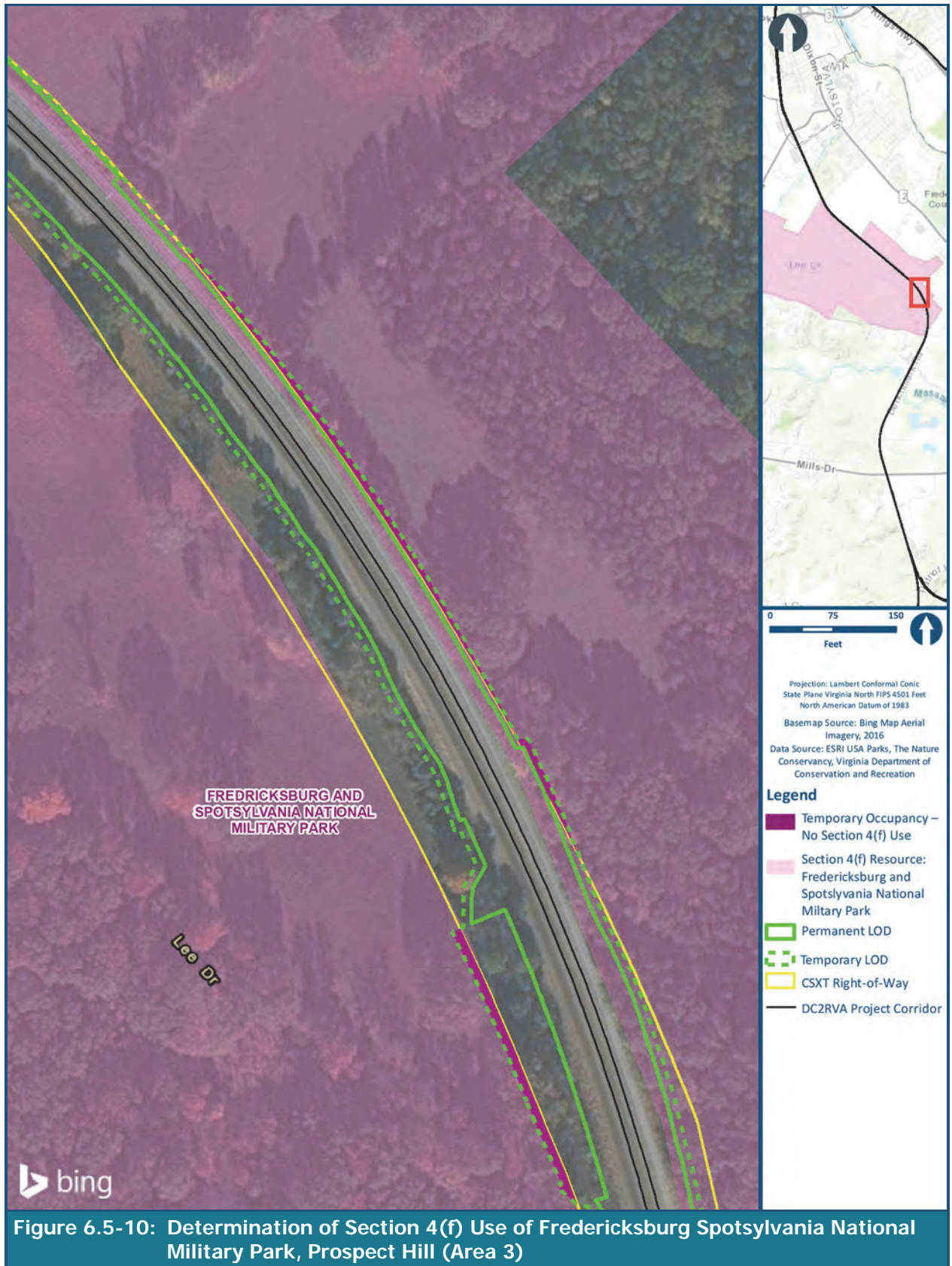






Figure 6.5-11: Determination of Section 4(f) Use of Fredericksburg Spotsylvania National Military Park, Jackson Shrine (Area 4)



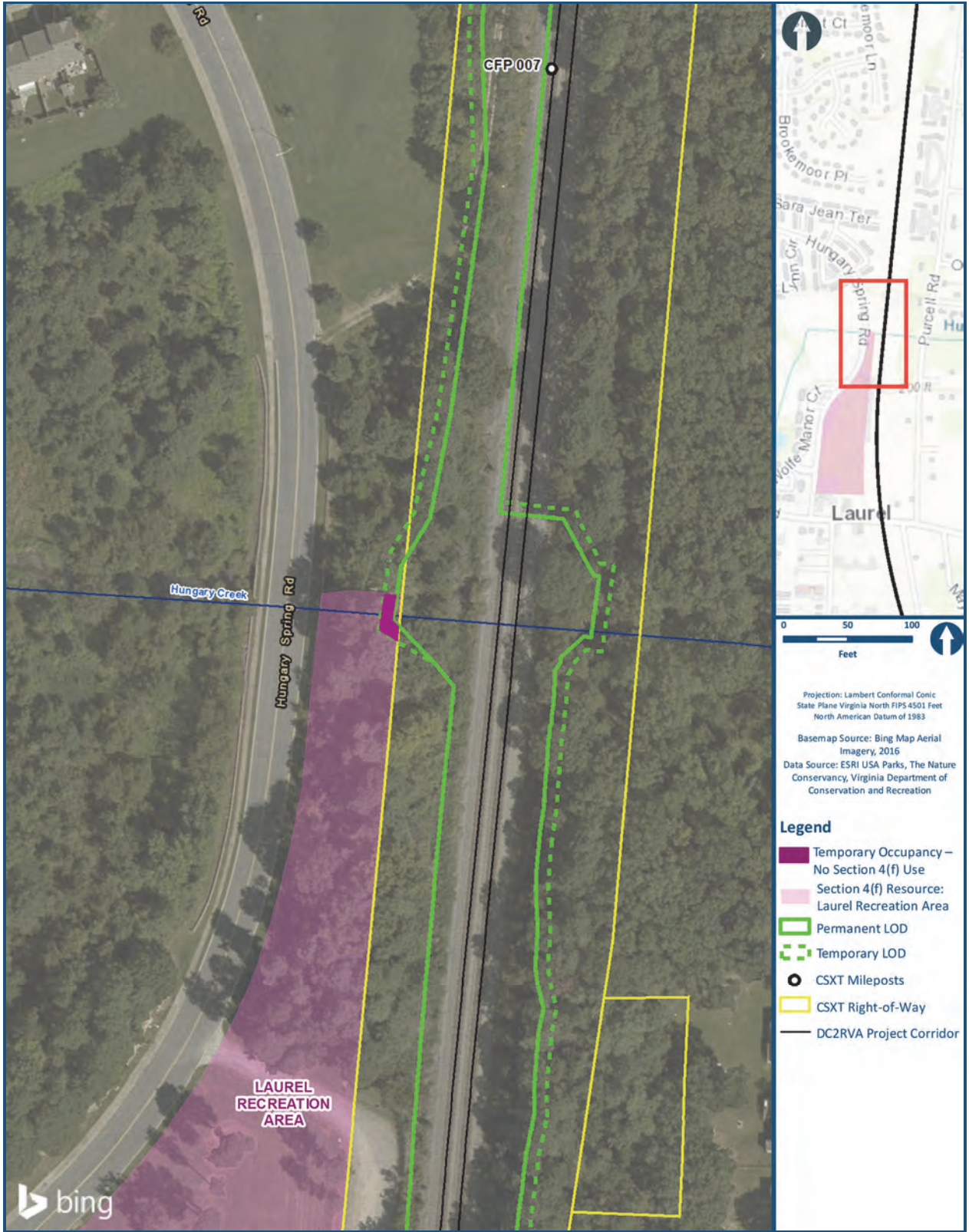


Figure 6.5-12: Determination of Section 4(f) Use of Laurel Recreation Area



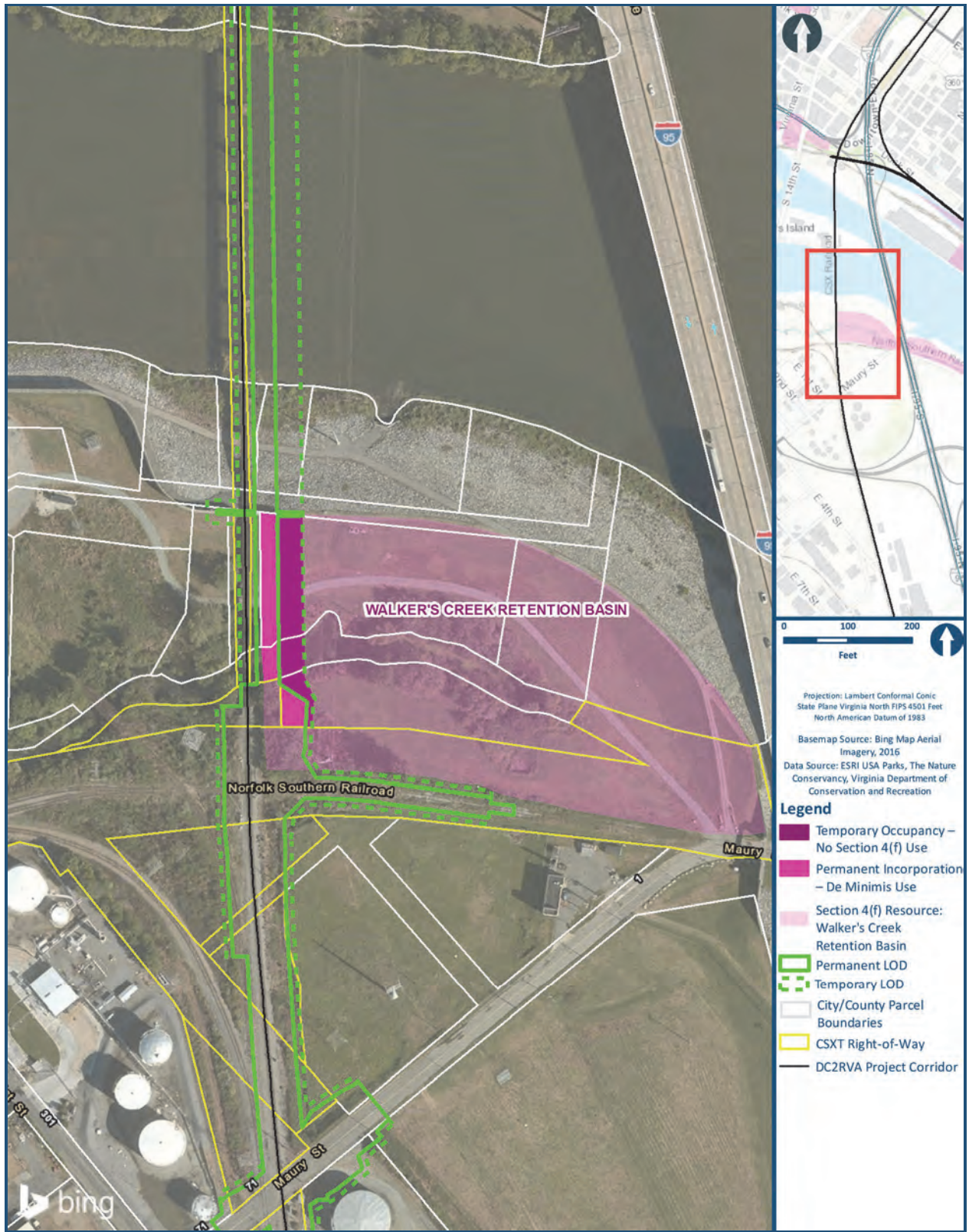


Figure 6.5-13: Determination of Section 4(f) Use of Walkers Creek Retention Basin



**6.5.2 Section 4(f) Use of Wildlife Refuges/Waterfowl Sanctuaries**

There is no permanent incorporation of wildlife refuges or waterfowl sanctuaries, as shown in Table 6.5-2, which remains unchanged since the Draft Section 4(f) Evaluation. The Preferred Alternative will have temporary occupancy of 2.54 acres, or 0.1 percent, of the 2,652-acre Mattaponi Wildlife Management Area in Area 4. The occupied area consists of forest in a narrow strip of land, approximately 15 feet wide on the west side of the existing right-of-way (see Figure 6.5-14). Temporary occupancy will be from areas needed for access, erosion control, and material placement during construction. Impacts to mature trees will be avoided and minimized.

FRA has determined that the temporary occupancy will not result in a Section 4(f) use because the land outside of the CSXT right-of-way will be restored and stabilized through revegetation to as near to its prior condition as possible and the activities of the park will not be affected during construction. By letter dated October 12, 2017, the Virginia Department of Game and Inland Fisheries agreed with FRA’s determination that this is not a Section 4(f) use (see Appendix E of this Final EIS).

**Table 6.5-2: Permanent Incorporation and Temporary Occupancy of Wildlife Refuges/Waterfowl Sanctuaries of the Preferred Alternative**

Park Name	Area within LOD (Parks in acres; Trails in feet)	Use Determination
Alternative 4A: Add a Third Main Track		
Mattaponi Wildlife Management Area	P: 0.00 T: 2.54	Temporary Occupancy but No Section 4(f) Use
<b>Total for the Preferred Alternative:</b>	<b>P: 0.00 T: 2.54</b>	<b>No Section 4(f) Uses</b>



*Mattaponi State Wildlife Management Area (Area 4, Central Virginia)*



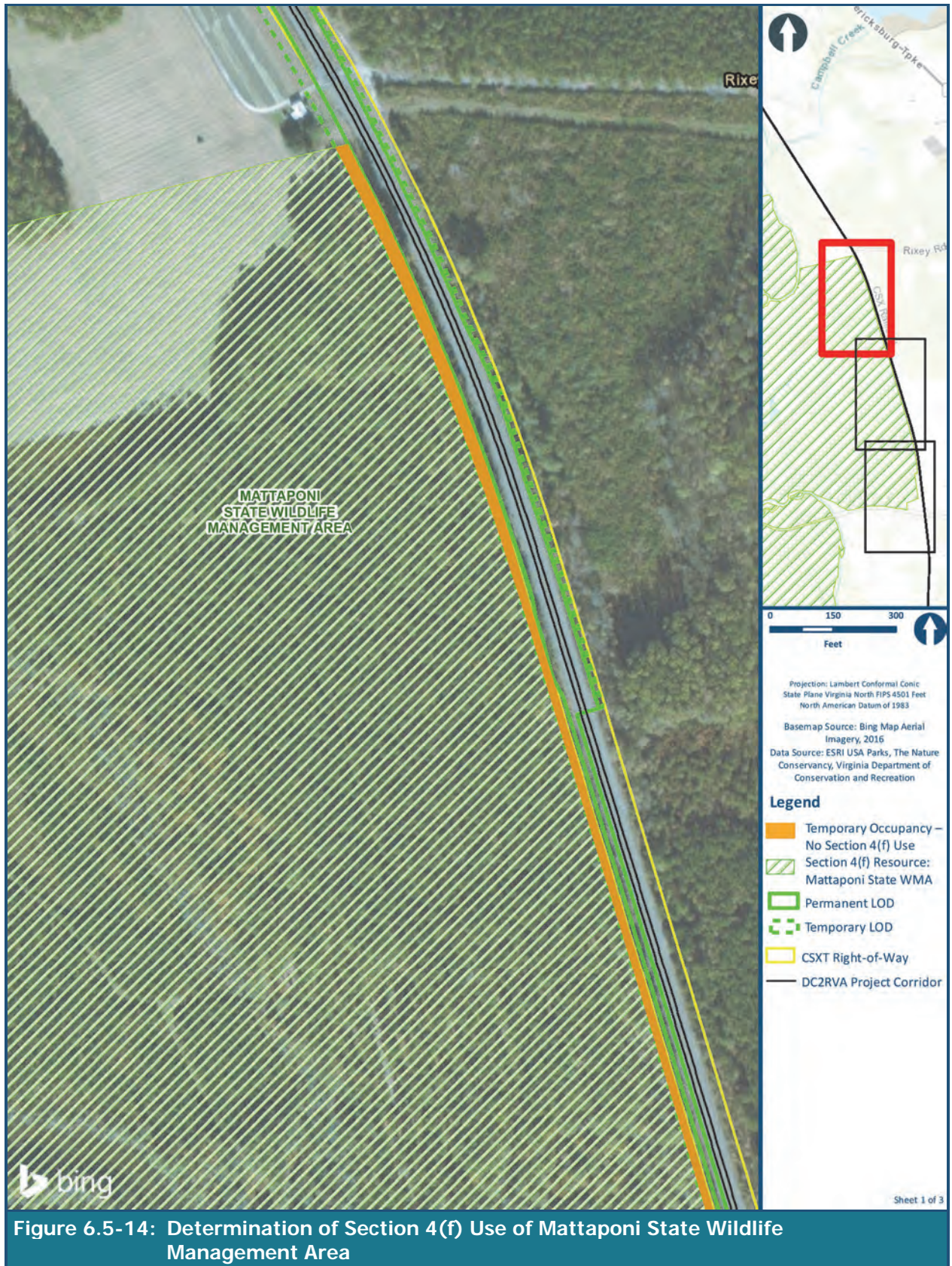


Figure 6.5-14: Determination of Section 4(f) Use of Mattaponi State Wildlife Management Area



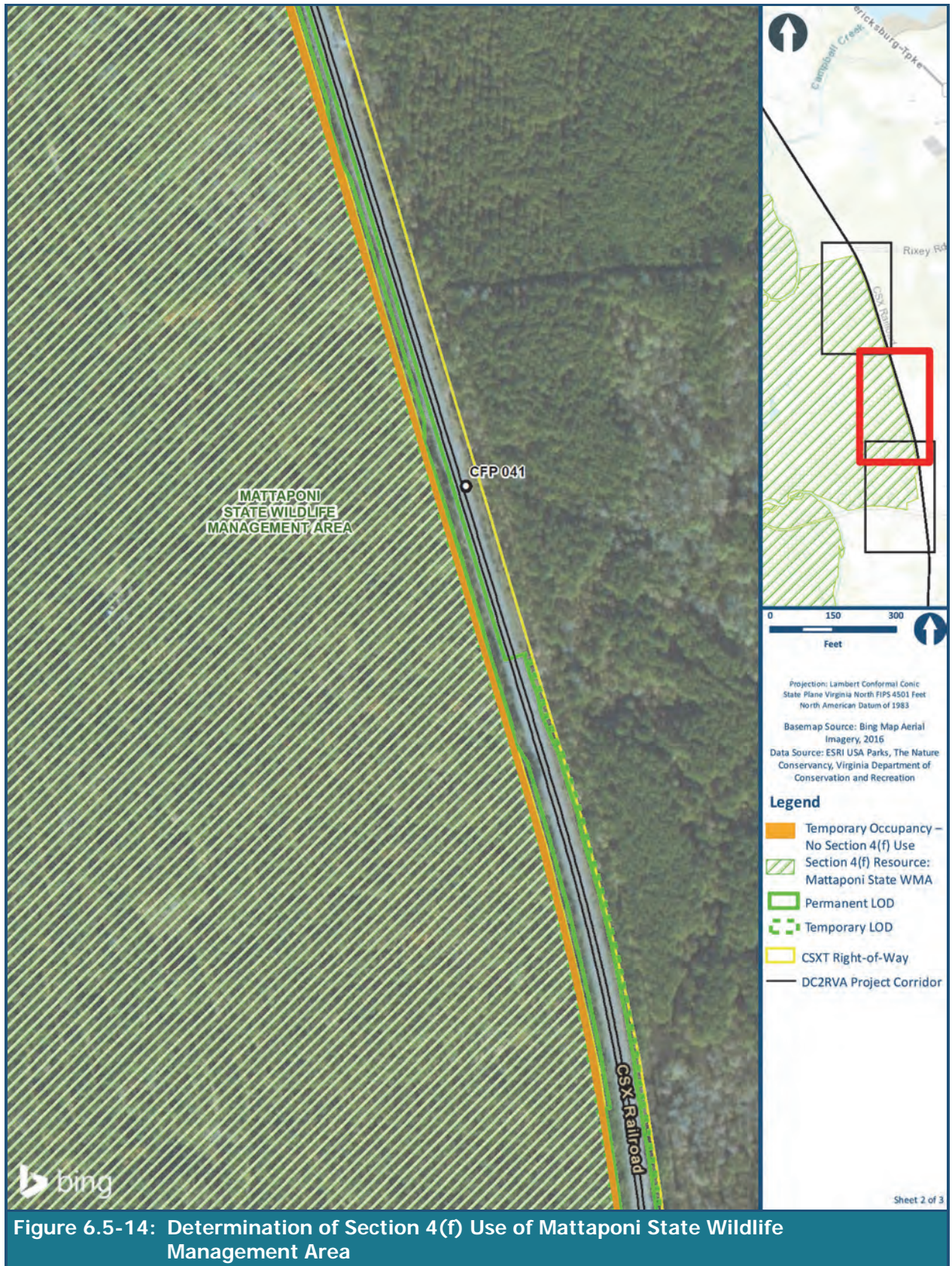


Figure 6.5-14: Determination of Section 4(f) Use of Mattaponi State Wildlife Management Area



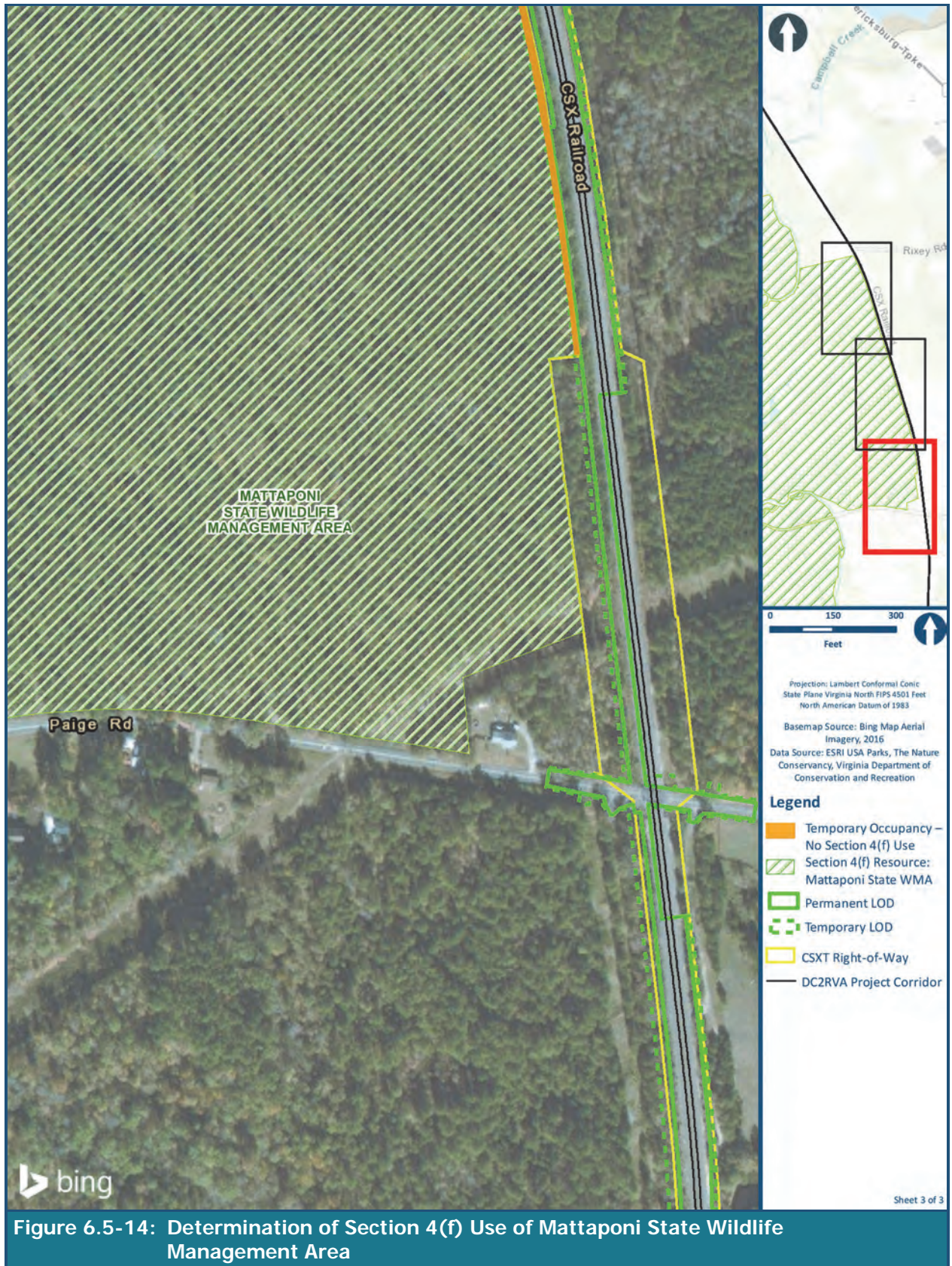


Figure 6.5-14: Determination of Section 4(f) Use of Mattaponi State Wildlife Management Area