

CHAPTER 6

FINAL SECTION 4(f) EVALUATION



D.C. TO RICHMOND SOUTHEAST HIGH SPEED RAIL

6 FINAL SECTION 4(f) EVALUATION

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.¹

The Draft Section 4(f) Evaluation was included as Chapter 5 of the Draft EIS² 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.

¹ 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.

² 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 1966³ 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 sites⁴, 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

³ 23 United States Code (U.S.C.) 138

⁴ 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 determinations⁵ 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),⁶ 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.

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

⁶ 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).⁷

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:⁸
 - 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

⁷ 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.

⁸ 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

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).⁹

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.

⁹ <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.

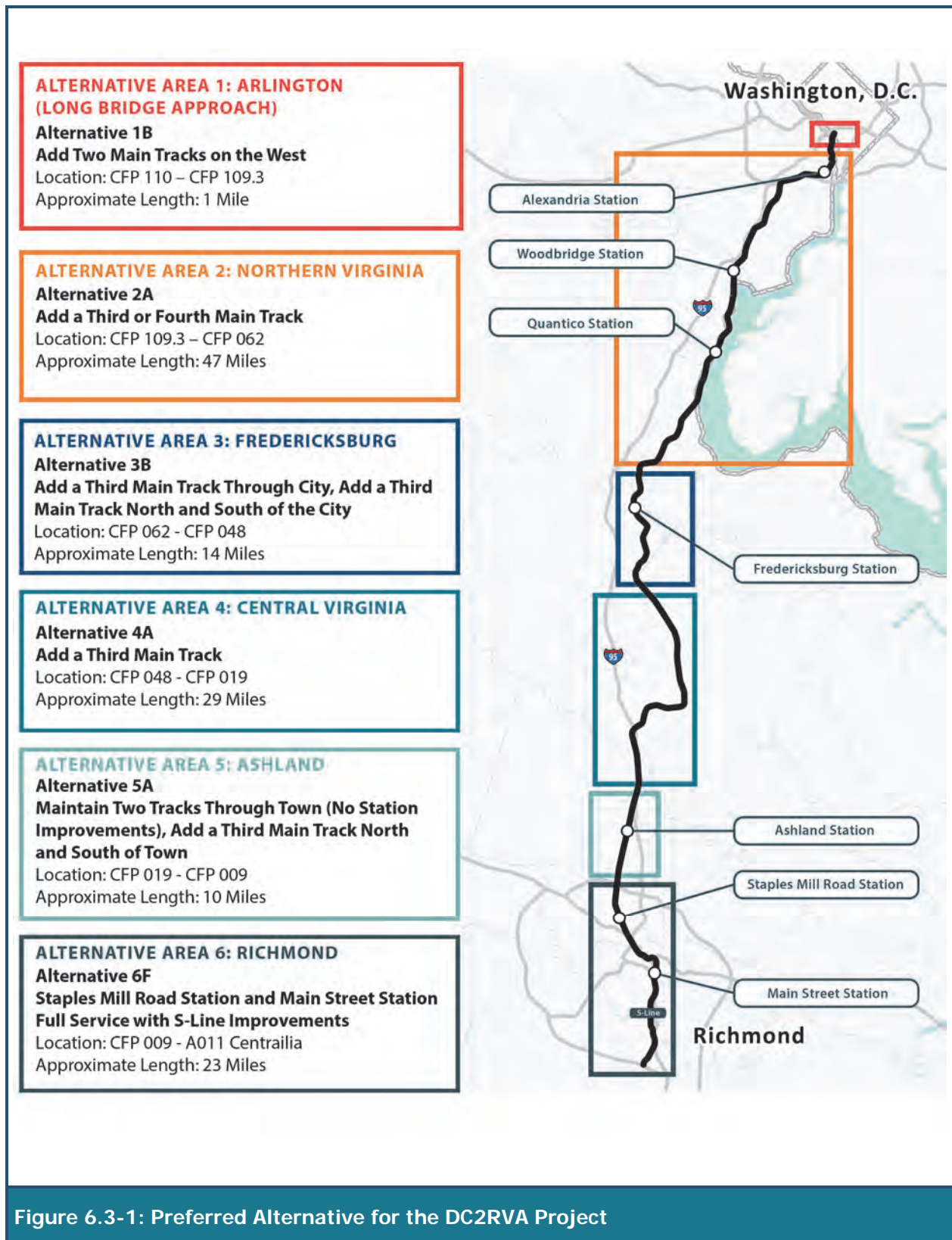


Table 6.3-1: Summary of Build Alternatives Evaluated in Draft EIS

Draft EIS Alternative		Description
Area 1: Arlington: 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	SELECTED AS THE PREFERRED ALTERNATIVE. 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.
Area 2: Northern Virginia: 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	SELECTED AS THE PREFERRED ALTERNATIVE. 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.
Area 3: Fredericksburg: 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	SELECTED AS THE PREFERRED ALTERNATIVE. 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.
Area 4: Central Virginia: 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	SELECTED AS THE PREFERRED ALTERNATIVE. This alternative adds a third main track, mostly within existing right-of-way. Refer to Final EIS Section 4.3.4.
Area 5: Ashland: 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	SELECTED AS THE PREFERRED ALTERNATIVE. 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.
Area 6: Richmond: 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.		
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	SELECTED AS THE PREFERRED ALTERNATIVE. 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 process¹⁰ for the Project, DRPT determined that there are 120 historic properties (buildings, districts, objects, structures, and sites)¹¹ 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.

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

¹¹ 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)
Taylorsville Road Historic District (042-5307)	Davee Gardens Historic District (127-6213)
Hoopers, 11108 McConnell Lane (042-0556)	Philip Morris Operations Complex (127-5818)
Berkleystown 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)
Battlefields	
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 ²
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 ¹ (Prospect Hill Area)	P: 0.00 T: 0.19	Temporary Occupancy but No Section 4(f) Use ²
Alternative 4A: Add a Third Main Track		
Fredericksburg and Spotsylvania National Military Park ¹ (Stonewall Jackson Shrine Area)	P: 0.00 T: 1.10	Temporary Occupancy but No Section 4(f) Use ²
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>
Total for the Preferred Alternative:	P: 0.21 T: 6.18 / 63 feet of trail	I de minimis Use

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*¹² 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).

¹² 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.

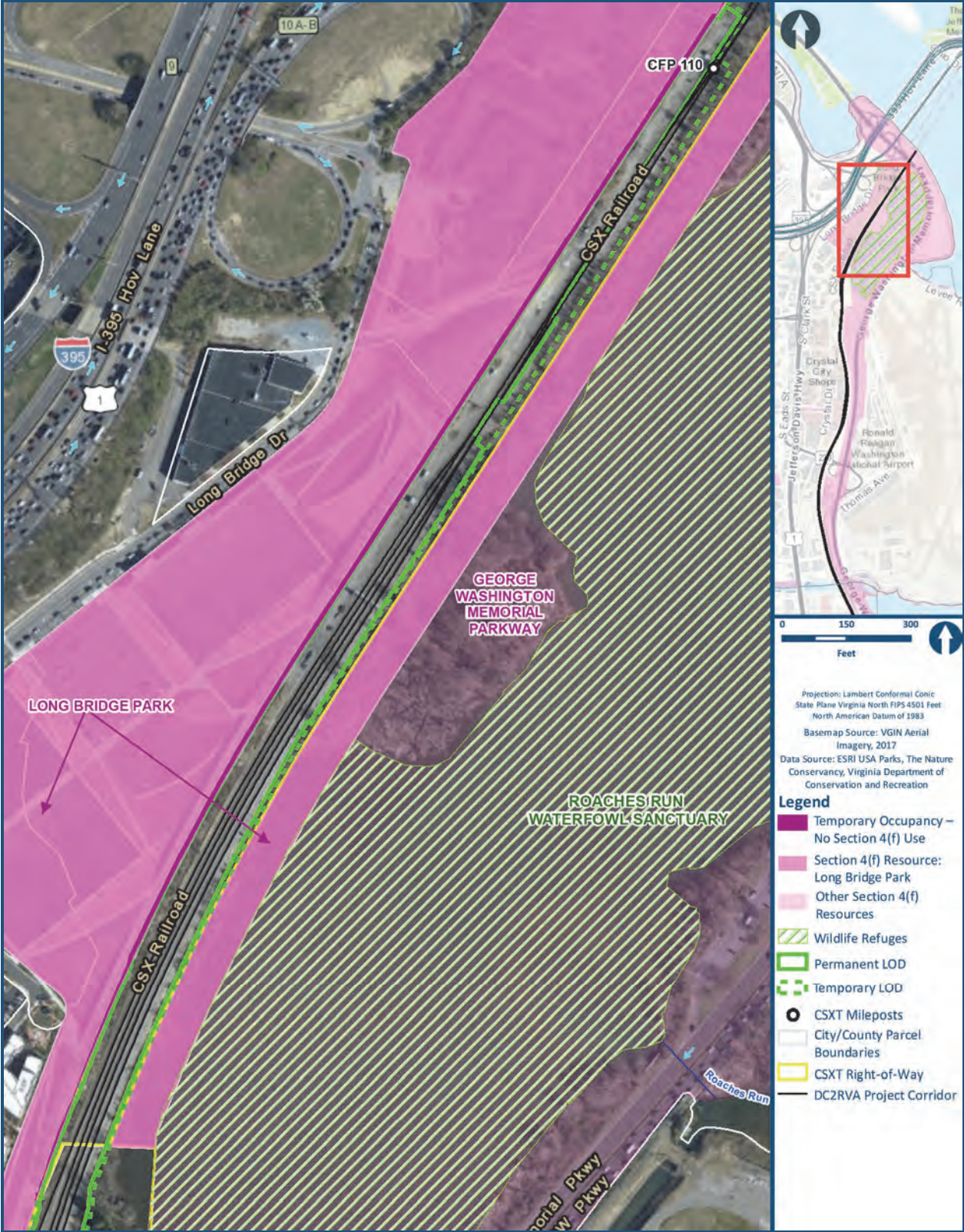


Figure 6.5-1: Determination of Section 4(f) Use of Long Bridge Park

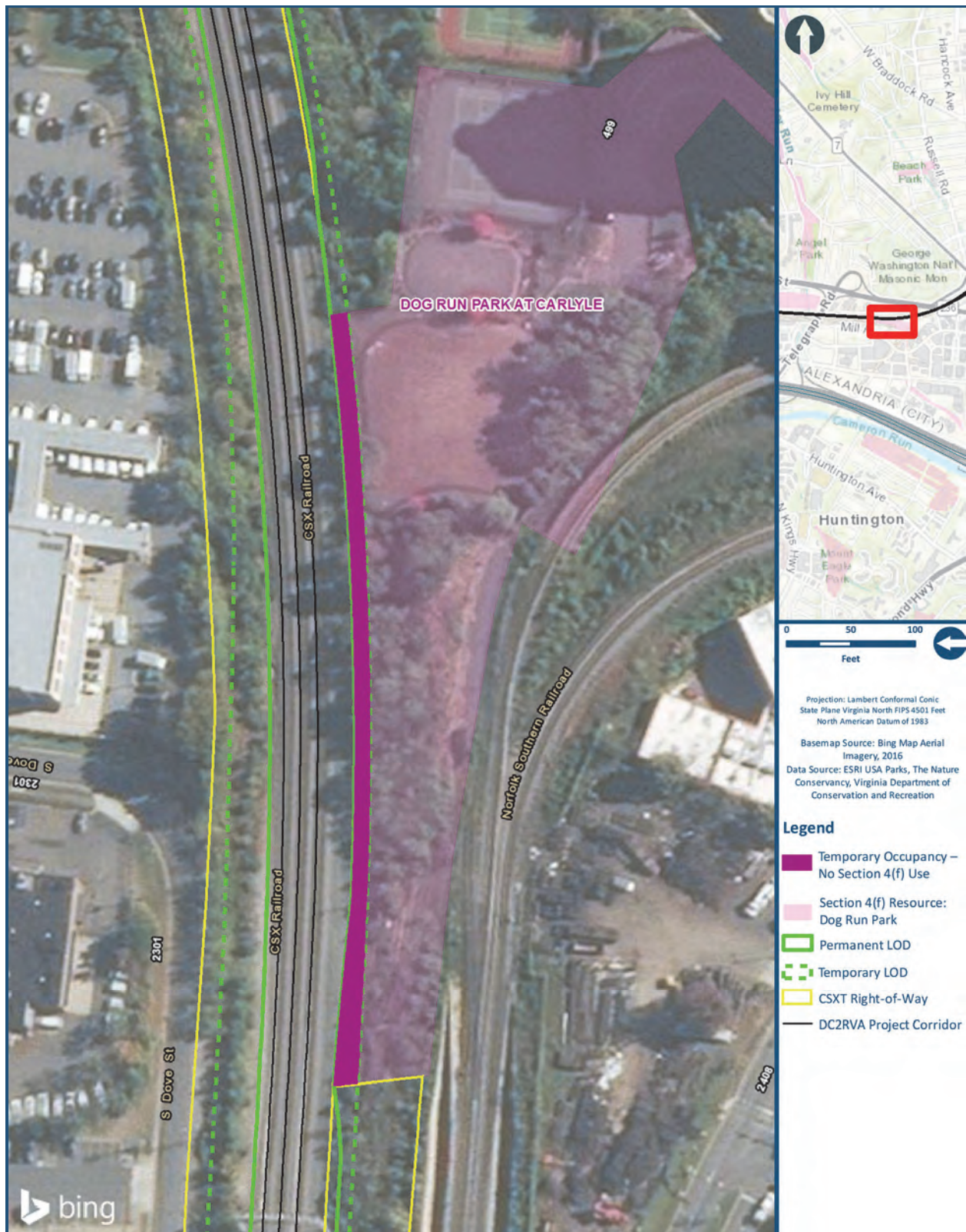


Figure 6.5-2: Determination of Section 4(f) Use of Dog Run Park

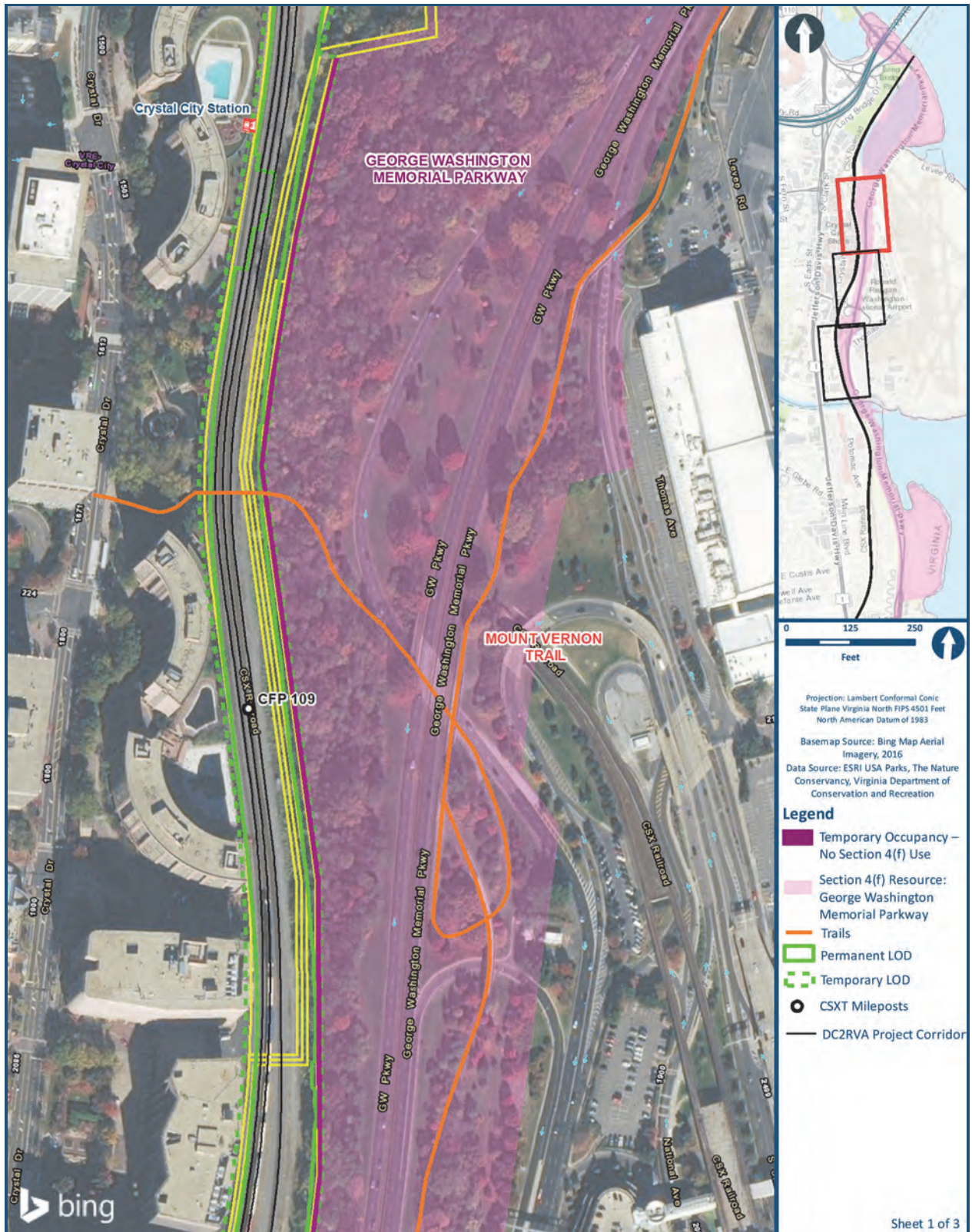


Figure 6.5-3: Determination of Section 4(f) Use of George Washington Memorial Parkway

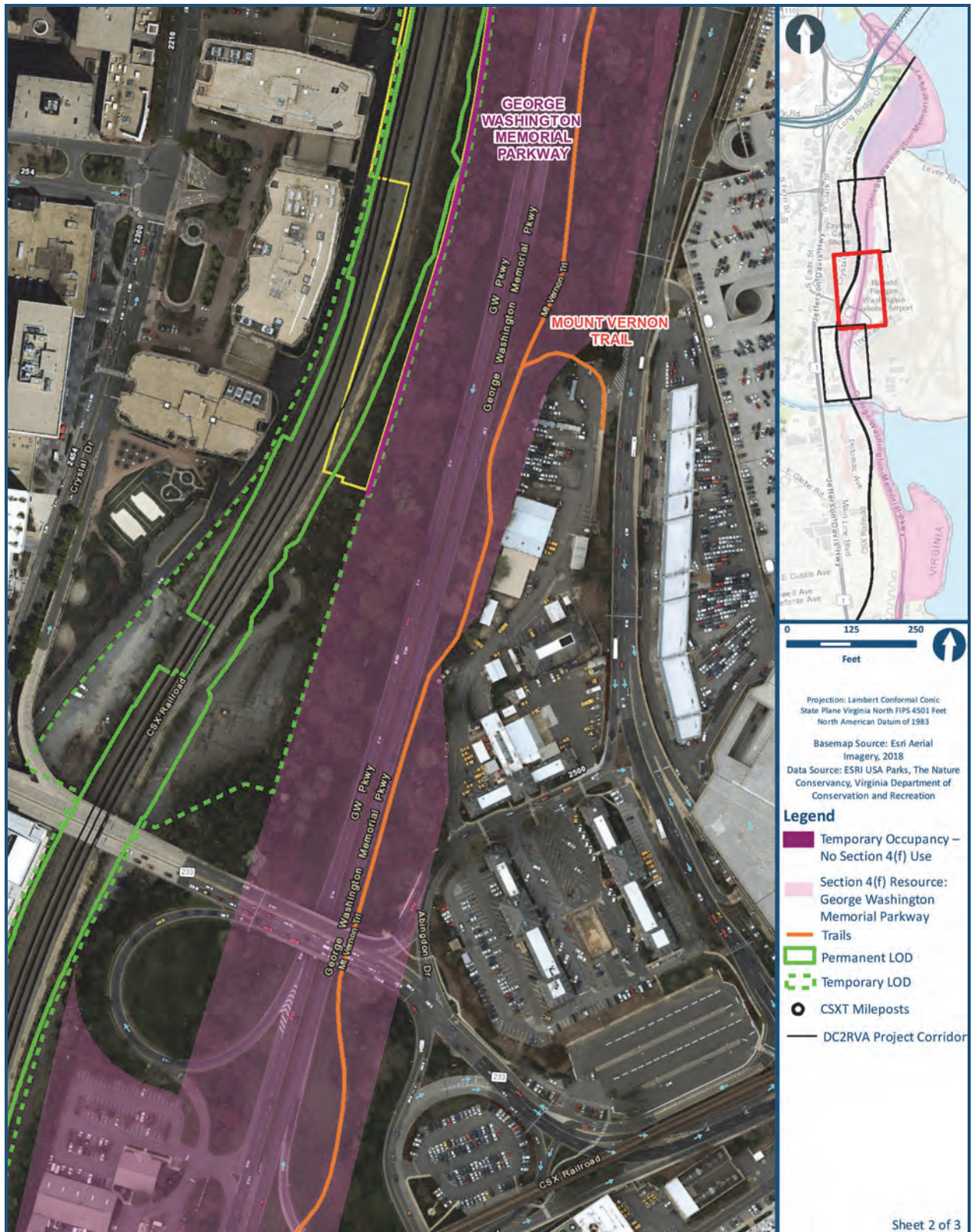


Figure 6.5-3: Determination of Section 4(f) Use of George Washington Memorial Parkway



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

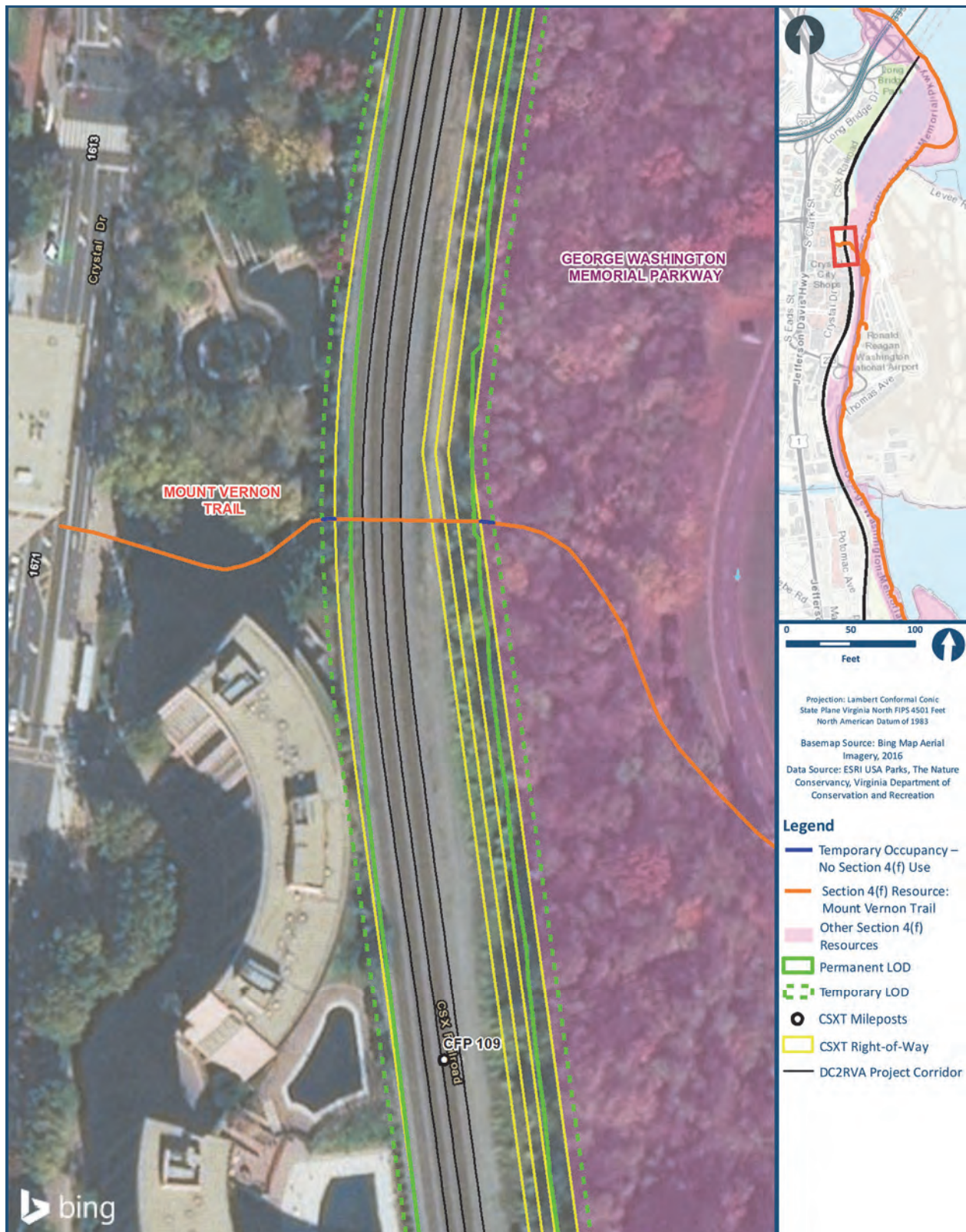


Figure 6.5-4: Determination of Section 4(f) Use of Mount Vernon Trail

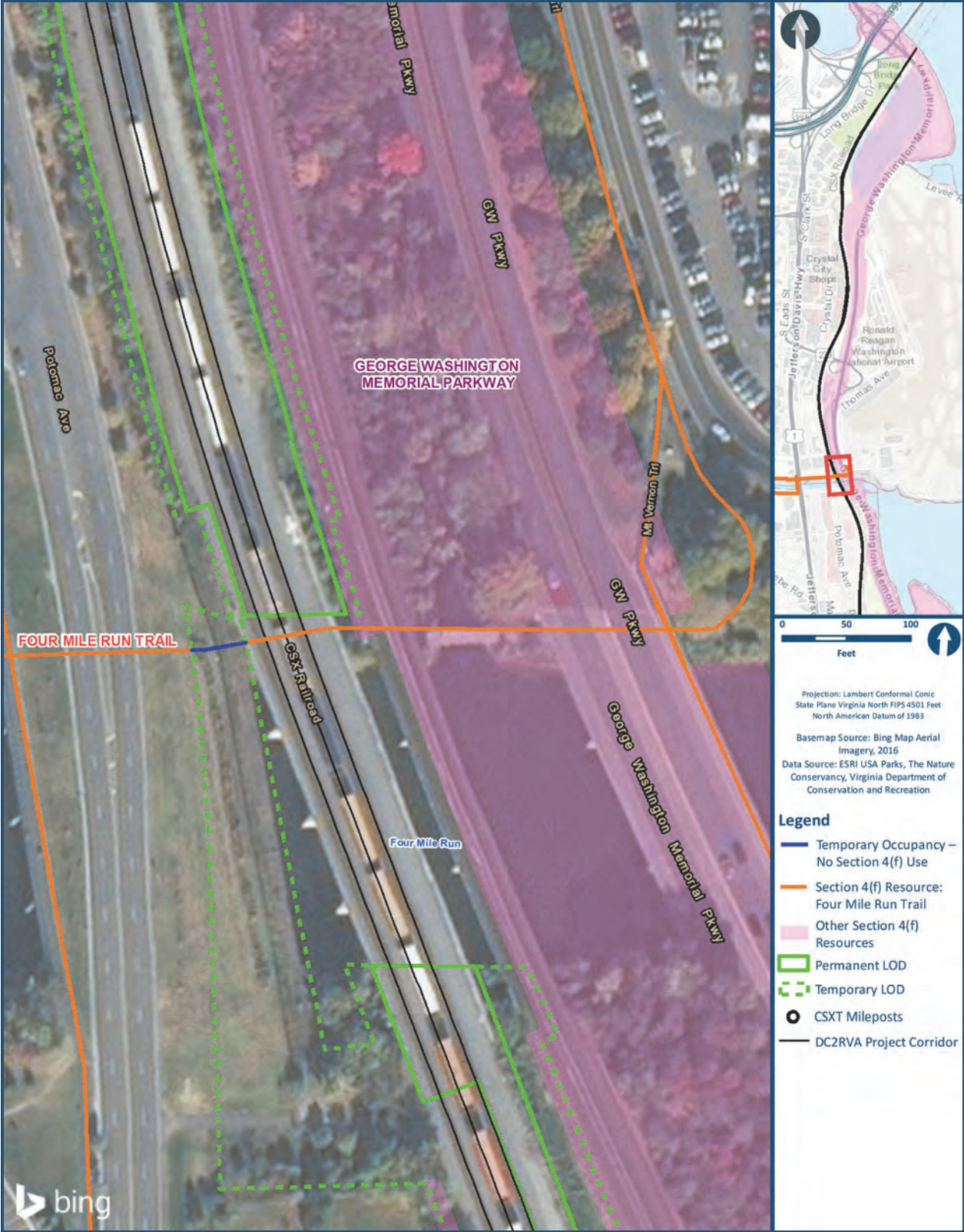


Figure 6.5-5: Determination of Section 4(f) Use of Four Mile Run Trail

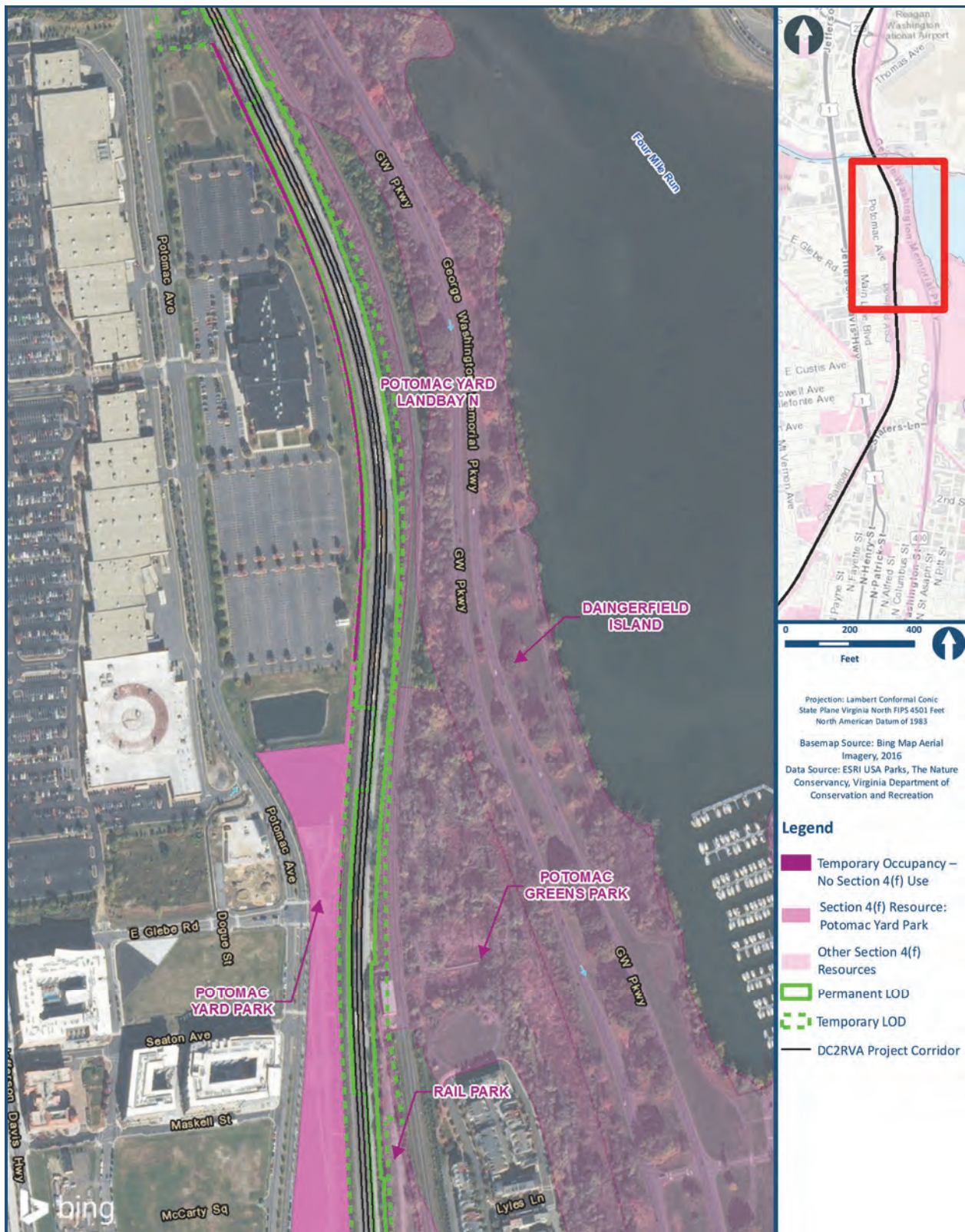


Figure 6.5-6: Determination of Section 4(f) Use of Potomac Yard Park

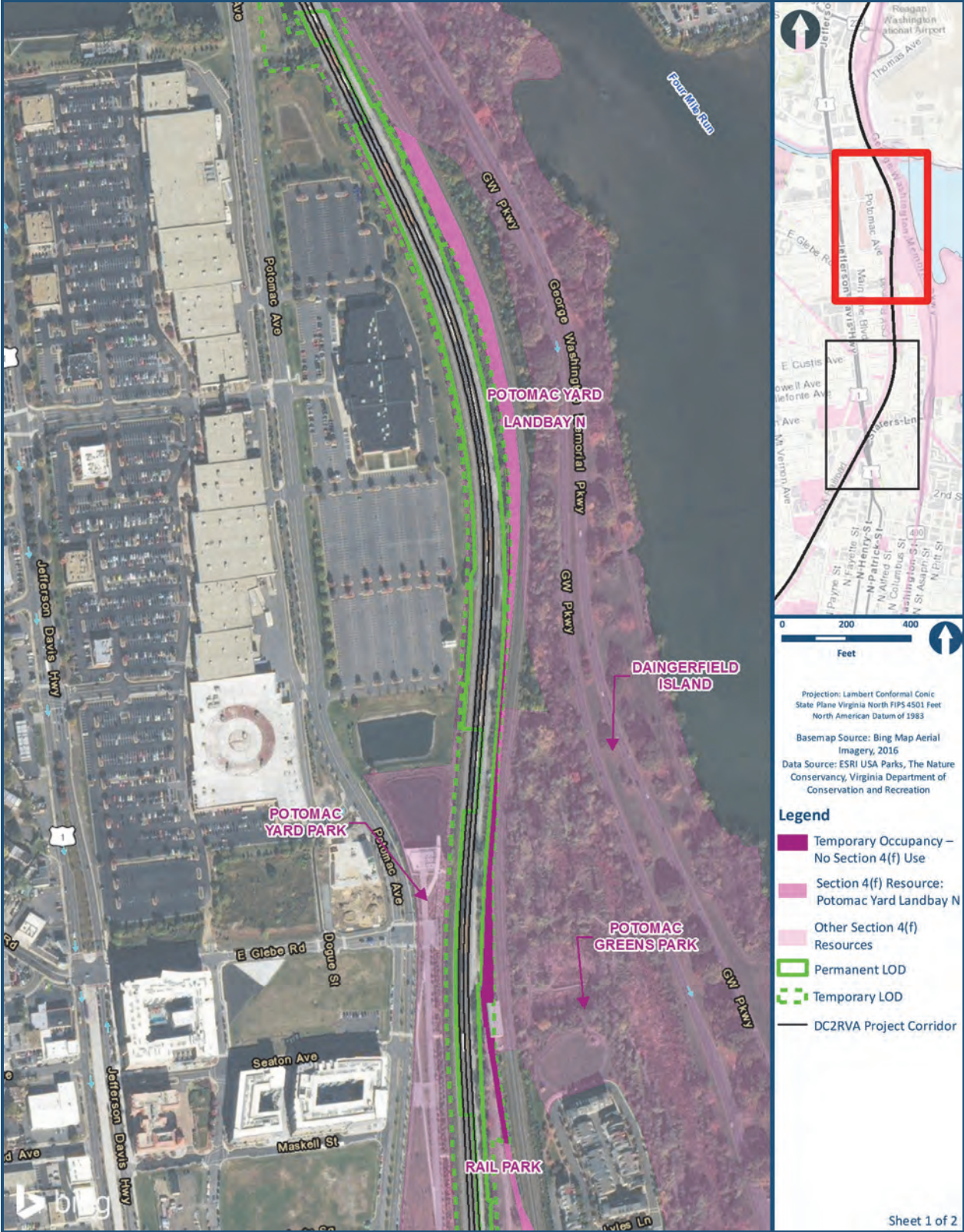
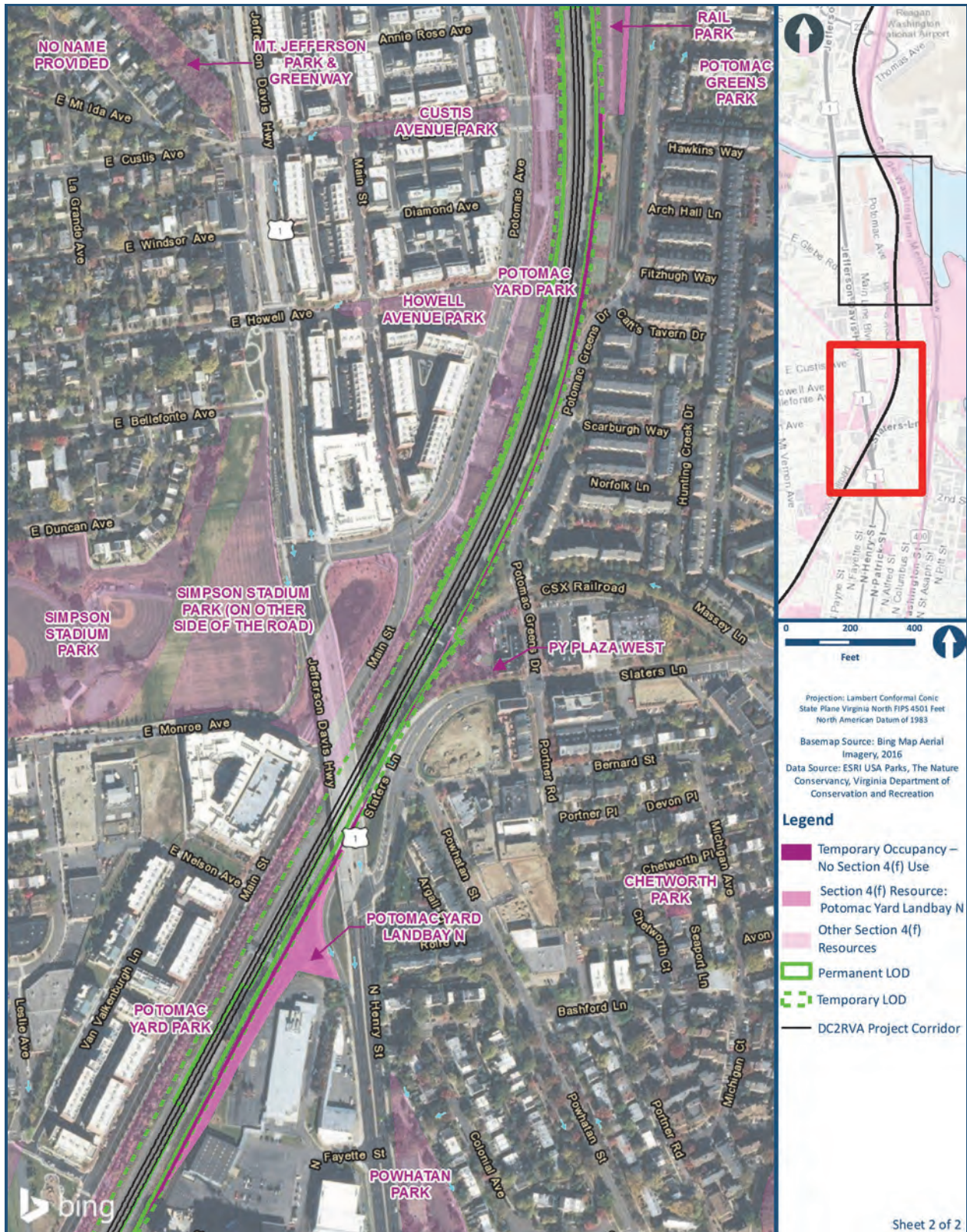


Figure 6.5-7: Determination of Section 4(f) Use of Potomac Yard Landbay N



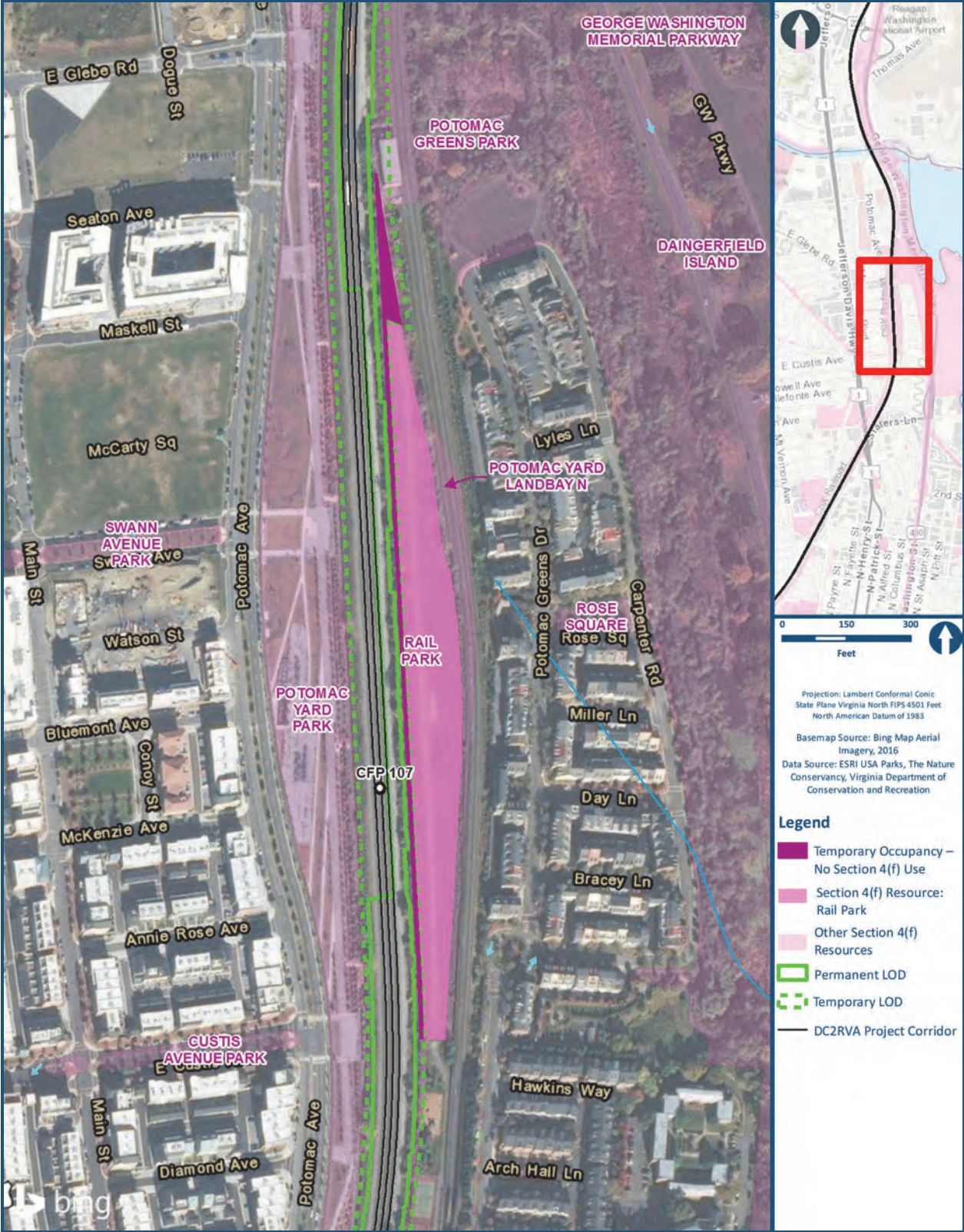


Figure 6.5-8: Determination of Section 4(f) Use of Rail Park

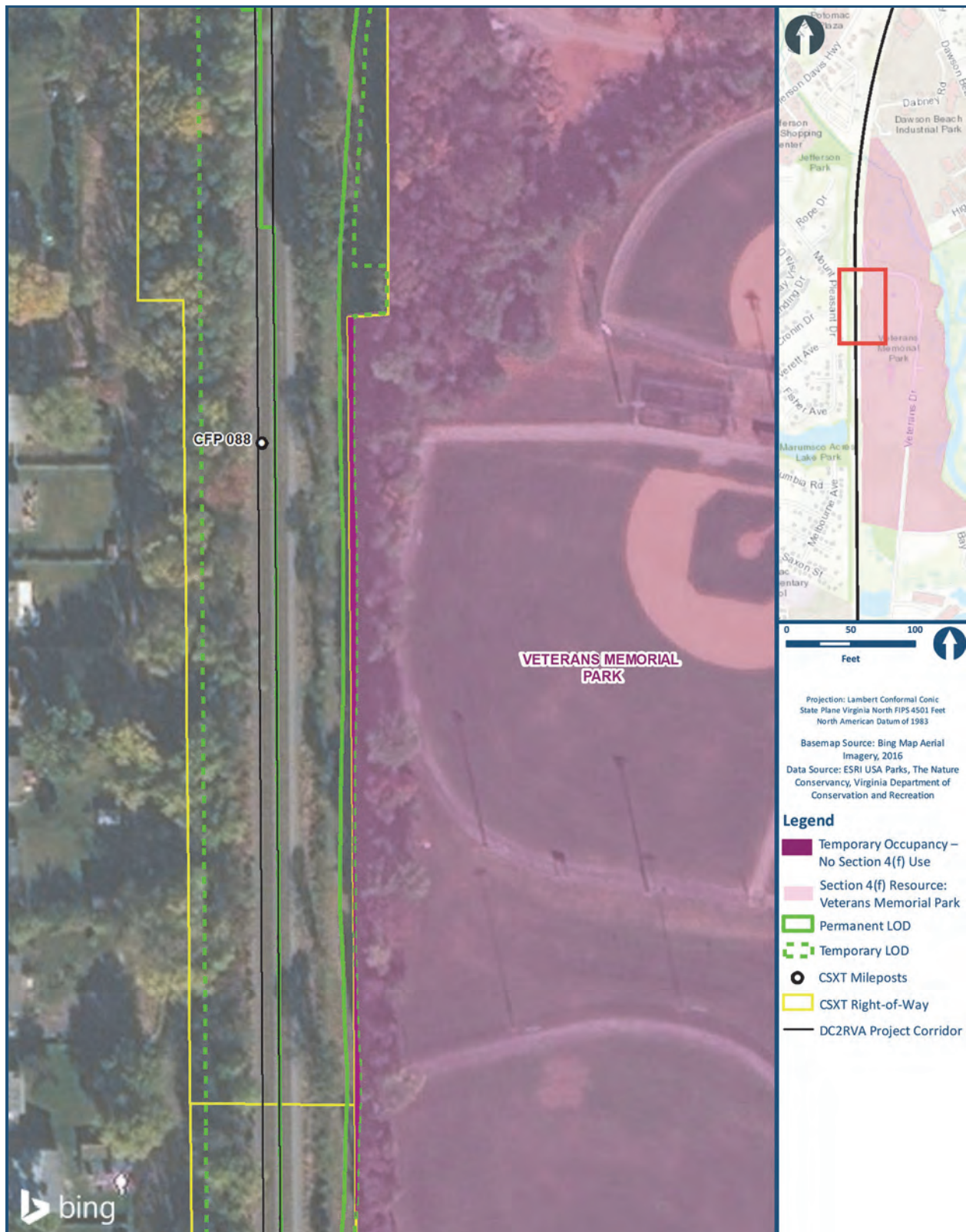


Figure 6.5-9: Determination of Section 4(f) Use of Veterans Memorial Park

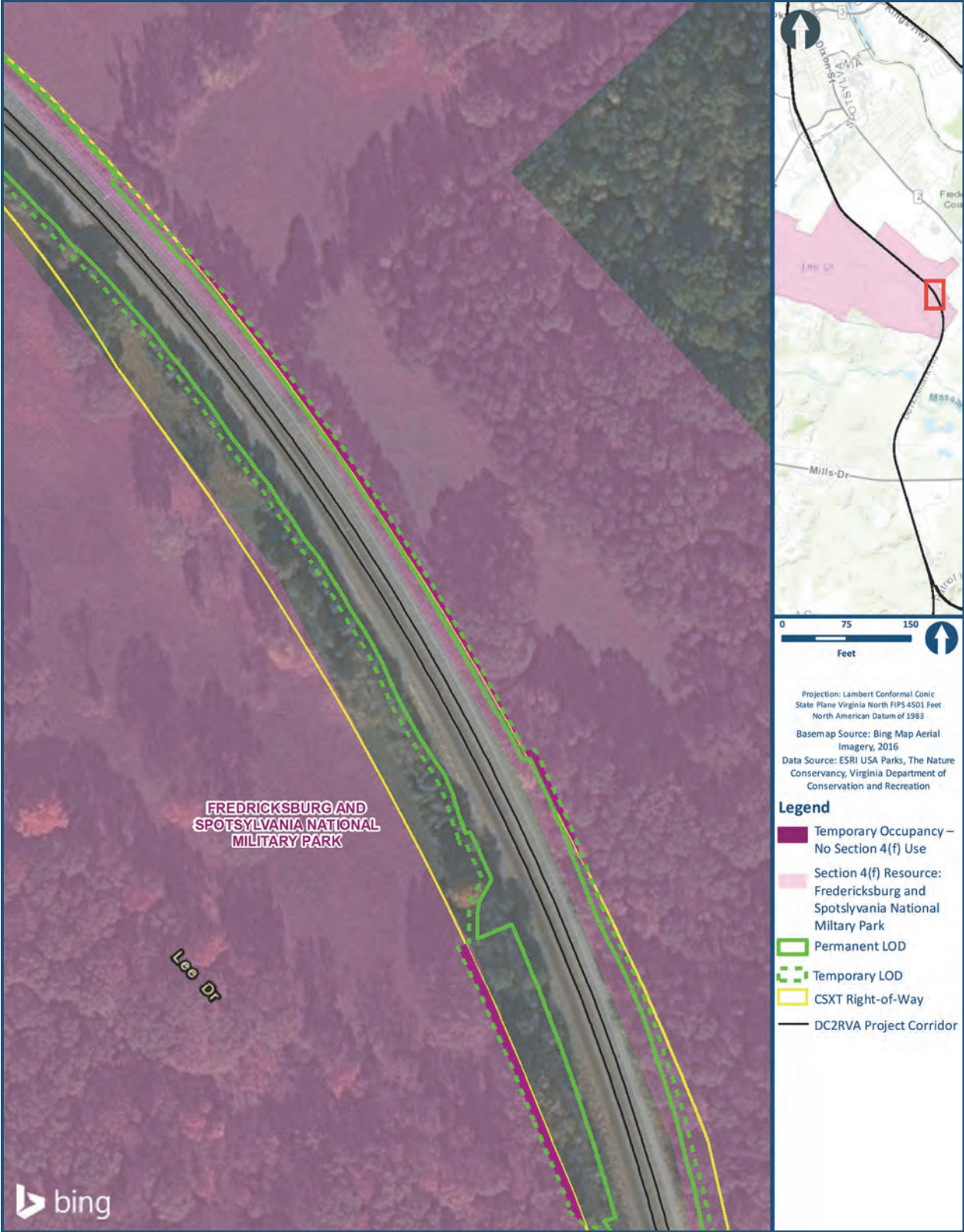


Figure 6.5-10: Determination of Section 4(f) Use of Fredericksburg Spotsylvania National Military Park, Prospect Hill (Area 3)



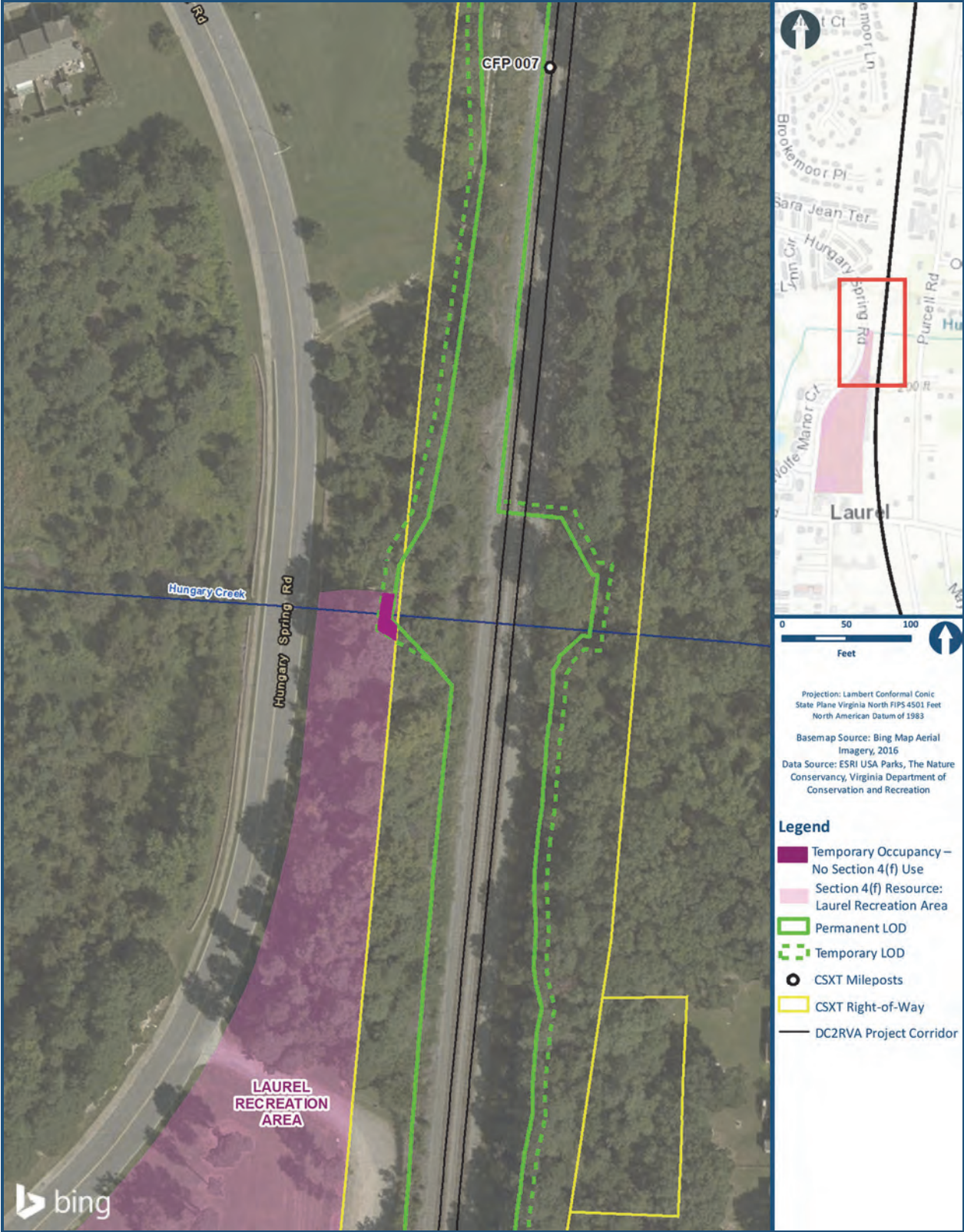


Figure 6.5-12: Determination of Section 4(f) Use of Laurel Recreation Area

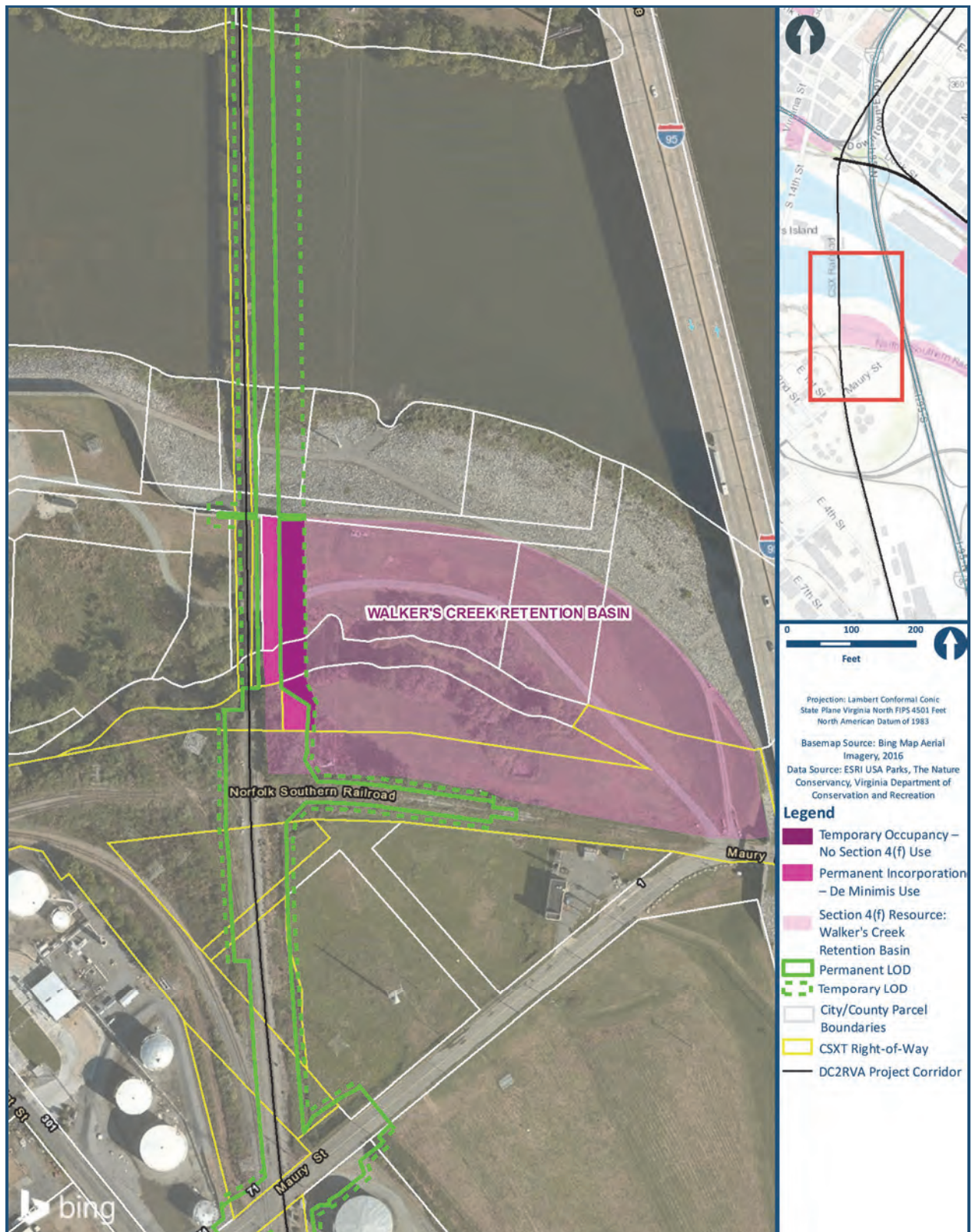


Figure 6.5-13: Determination of Section 4(f) Use of Walkers Creek Retention Basin

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
Total for the Preferred Alternative:	P: 0.00 T: 2.54	No Section 4(f) Uses



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

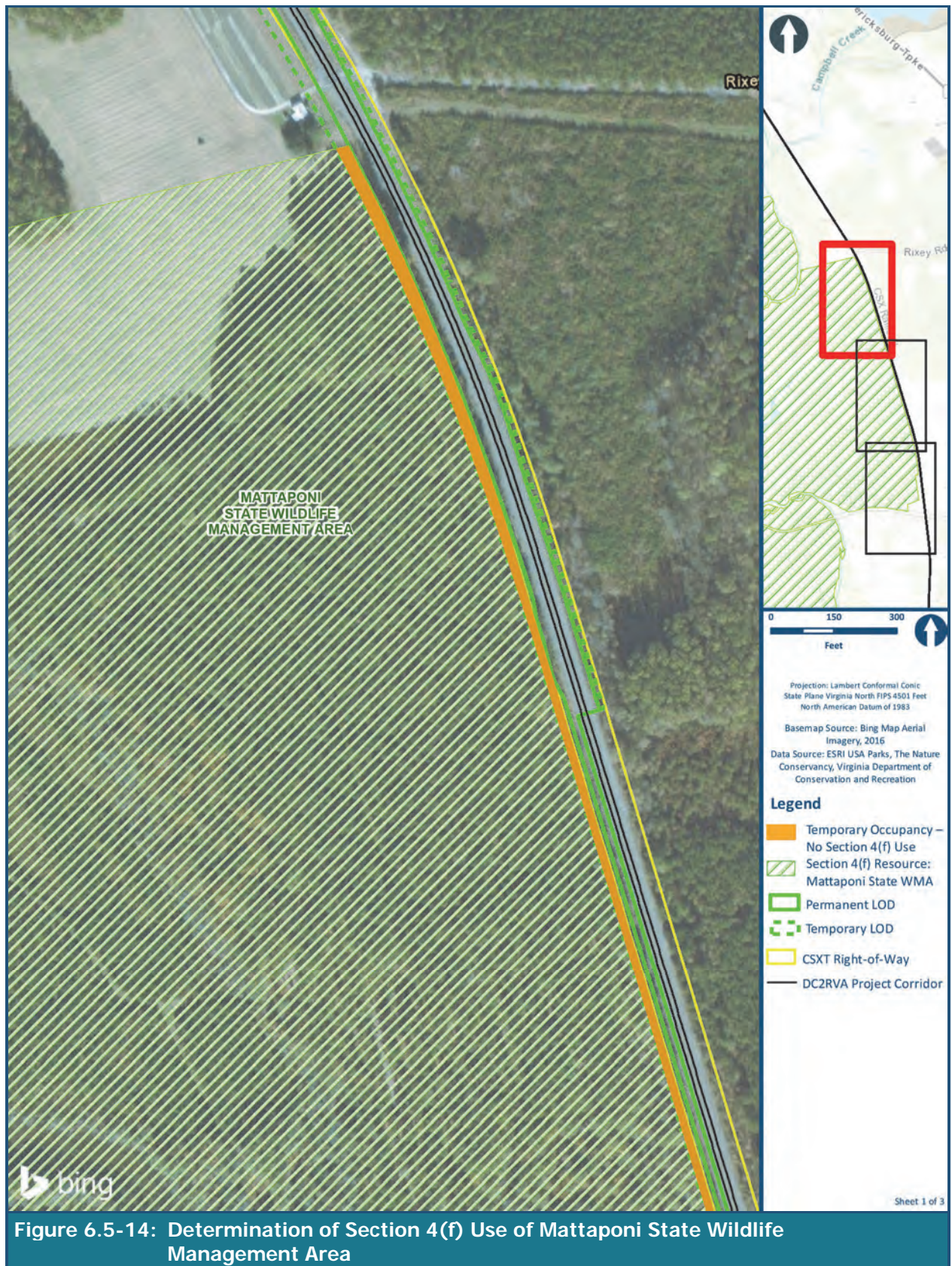


Figure 6.5-14: Determination of Section 4(f) Use of Mattaponi State Wildlife Management Area

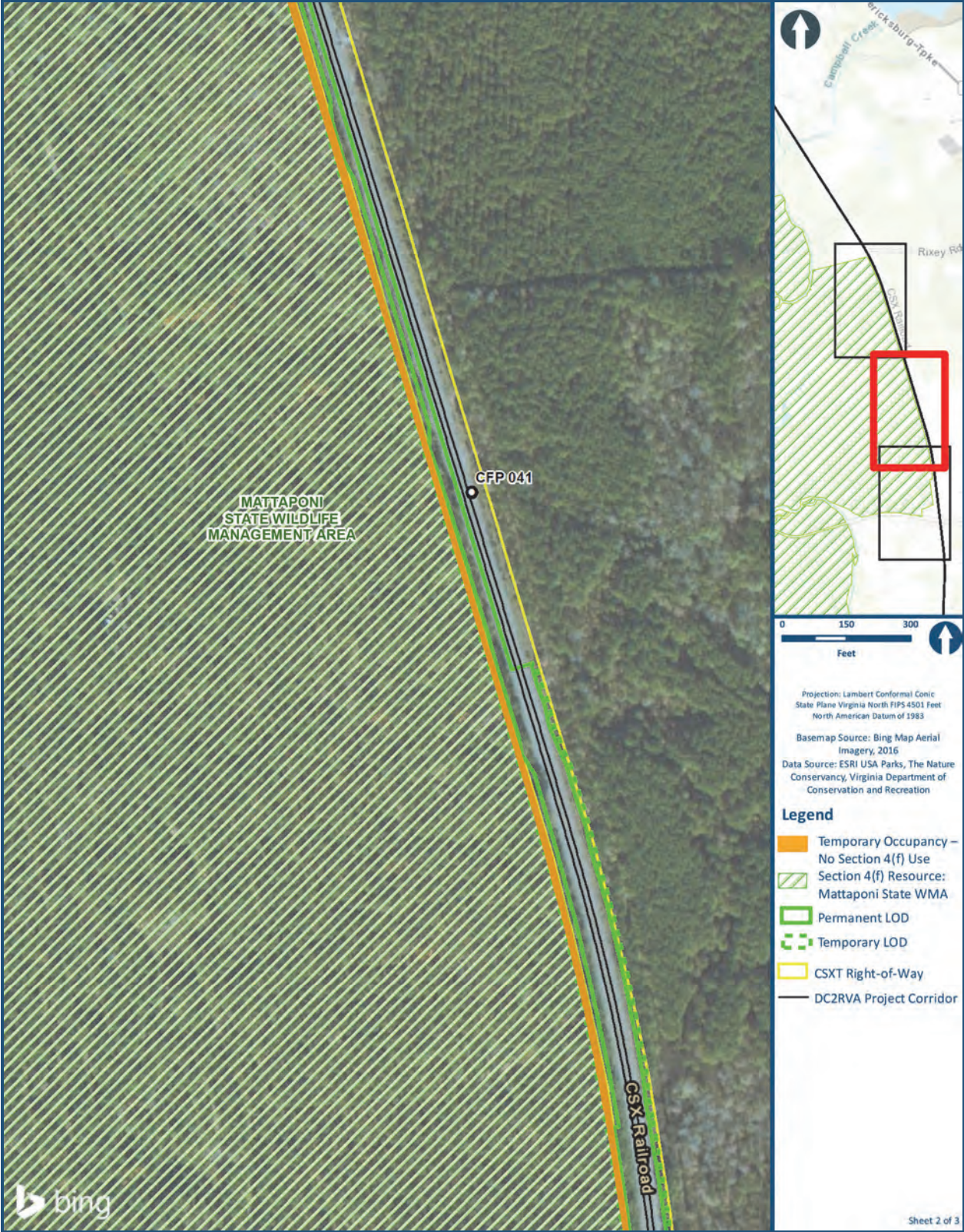


Figure 6.5-14: Determination of Section 4(f) Use of Mattaponi State Wildlife Management Area

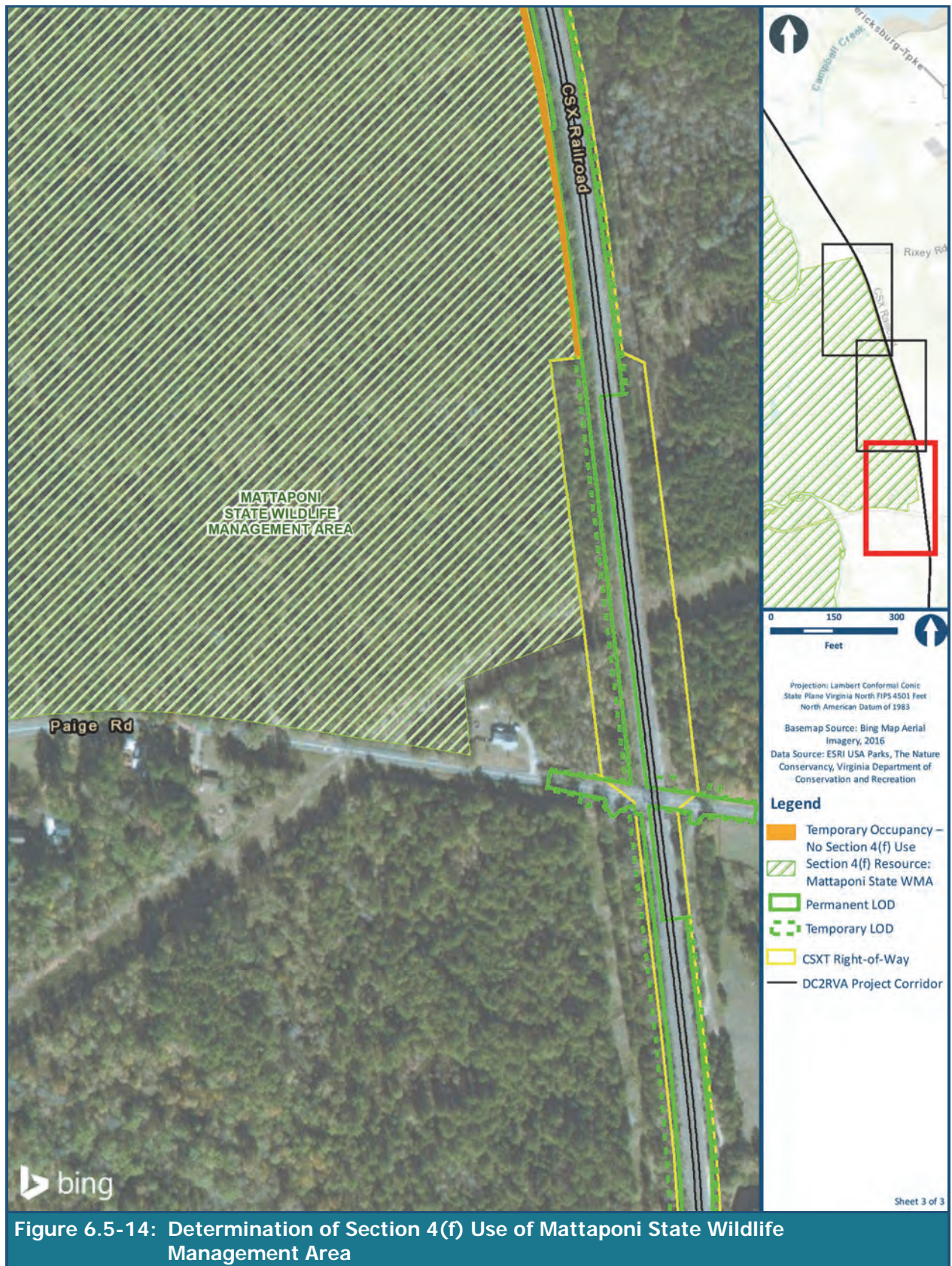


Figure 6.5-14: Determination of Section 4(f) Use of Mattaponi State Wildlife Management Area

6.5.3 Section 4(f) Use of Historic Properties

As previously stated, FRA's determinations of effect as part of the separate Section 106 process for the Project, as presented in Chapter 5 and Appendix D of this Final EIS, informed the determinations of Section 4(f) use; FRA and DRPT examined all 120 of the Section 106 resources to evaluate potential Section 4(f) use of historic properties. Table 6.5-3 summarizes the Section 4(f) determinations for historic properties within the DC2RVA corridor by area. Table 6.5-4 presents those same determinations of use by individual resource of the 120 historic properties.

Table 6.5-3: Summary of Section 4(f) Determinations for Section 106 Historic Properties

Alternative Area	Preferred Alternative	Section 4(f) Determinations		
		Use (Permanent Incorporation)	<i>de minimis</i>	No Use
Corridor Wide ¹	–	1	0	0
Area 1: Arlington	1B	0	1	1
Area 2: Northern Virginia	2A	2	2	7
Area 3: Fredericksburg	3B	6	7	10
Area 4: Central Virginia	4A	2	5	7
Area 5: Ashland	5A	3	1	14
Area 6: Richmond	6F	3	17	31
Total for the Preferred Alternative:		17	33	70

Note: 1. The historic RF&P Railroad traverses the Project corridor from the Potomac River to Main Street Station

Table 6.5-4: Preferred Alternative Section 4(f) Determinations for All Historic Properties

DHR ID	Name/Description	Section 4(f) Determination
All Areas (Corridor-wide)		
500-0001	Richmond, Fredericksburg, and Potomac Railroad	Use (Permanent Incorporation)
Alternative 1B: Add Two Main Tracks on the West		
029-0218	Mount Vernon Memorial Highway (portion of George Washington Memorial Parkway)	<i>de minimis</i>
000-0045	Washington National Airport (Reagan National Airport)	No Use
Alternative 2A: Add a Third or Fourth Main Track		
100-0160	George Washington Junior High School, 1005 Mt. Vernon Avenue	No Use
100-0133	Parker-Gray Historic District/Uptown	No Use
100-0137	Rosemont Historic District	<i>de minimis</i>
100-0124	Alexandria Union Station, 110 Callahan Drive	<i>de minimis</i>
100-0128	George Washington National Masonic Memorial	No Use
100-0277	Phoenix Mill, 3642 Wheeler Avenue	No Use
029-0953	Old Colchester Road, Potomac Path, King's Highway	No Use
029-0043	Colchester Arms, Fairfax Arms, 10712 Old Colchester Road	No Use
500-0001-0022	RF&P Bridge over Occoquan River	Use (Permanent Incorporation)
076-0023	Rippon Lodge	No Use
44ST1223	Civil War Campsite	Use (Permanent Incorporation)

► Continued – see end of table for notes.

Table 6.5-4: Preferred Alternative Section 4(f) Determinations for All Historic Properties

DHR ID	Name/Description	Section 4(f) Determination
Area 3B: Add a Third Main Track Through the City		
111-0147	Fredericksburg & Spotsylvania Co. Battlefields National Military Park & Cemetery, Lee Drive	<i>de minimis</i>
111-5295	Battle of Fredericksburg I	<i>de minimis</i>
111-5296	Battle of Fredericksburg II	<i>de minimis</i>
111-0132-0025	Rappahannock River Railroad Bridge and Associated Structures/Platform	Use (Permanent Incorporation)
44SP0187	Bridge/Marye's Mill	Use (Permanent Incorporation)
111-0132	Fredericksburg Historic District	Use (Permanent Incorporation)
44SP0688	Block 49	Use (Permanent Incorporation)
111-0067/111-0132-0505	Dr. Charles Mortimer House, House, 213 Caroline Street	No Use
111-0132-0458	Robert Adams Residence, 528 Caroline Street	No Use
111-0132-0147	Shiloh Baptist Church New Site, 521 Princess Anne Street	No Use
44SP0687	Block 48	Use (Permanent Incorporation)
111-0132-0704	Fredericksburg Train Station, 200 Lafayette Boulevard	<i>de minimis</i>
111-0132-0126	The 1770 House, 227 Princess Anne Street	No Use
111-0132-0020	Purina Tower	No Use
111-0132-0522	House, 314–316 Frederick Street	No Use
111-0009-0795	Pulliam's Service Station, 411 Lafayette Boulevard	No Use
111-0009	Fredericksburg Historic District Extension	<i>de minimis</i>
088-5181	Salem Church Battlefield (Banks Ford Battlefield)	<i>de minimis</i>
088-5364	Virginia Central Railway Historic District	No Use
111-0145	Fredericksburg Gun Manufactory	No Use
088-0254	Slaughter Pen Farm, 11232 Tidewater Trail (Wayside Farm or Pierson Farm)	No Use
44SP0468	Earthwork/Jackson's Earthwork	Use (Permanent Incorporation)
088-0039	La Vue, 3232 LaVue Lane (Prospect View)	<i>de minimis</i>
Area 4A: Add a Third Main Track		
016-0092	Fairfield Plantation Office, Jackson Shrine, 12019 Stonewall Jackson Road	No Use
016-0208	House, 12096 Guinea Drive	No Use
016-5165	Excelsior Industry of Caroline County MPD	<i>de minimis</i>
016-0223	First Woodford Post Office	No Use
016-0222	Woodford Freight & Passenger Depot, Woodford Road	<i>de minimis</i>
016-0220	Carolina Mansion, 11146 Woodford Road	No Use
016-5136	Milford Historic District	<i>de minimis</i>
016-0270	Milford State Bank, 15461 Antioch Road	No Use
016-0286	Coghill-Jeter Store, 22275 Penola Road; Penola, 16095 Polecat Lane	No Use
042-0123	North Anna Battlefield	<i>de minimis</i>
042-5448	Doswell Historic District	Use (Permanent Incorporation)

► Continued – see end of table for notes.

Table 6.5-4: Preferred Alternative Section 4(f) Determinations for All Historic Properties

DHR ID	Name/Description	Section 4(f) Determination
042-0093	Doswell Depot and Tower, 10577 Doswell Rd	Use (Permanent Incorporation)
042-5307	Taylorsville Road Historic District	<i>de minimis</i>
042-0556	Hoopers, 11108 McConnell Lane	No Use
Area 5A: Maintain Two Tracks Through Town (No Station Improvements)		
166-5073	Berkleystown Historic District	Use (Permanent Incorporation)
166-0001	Ashland Historic District	No Use
166-0001-0015	Business Office, Randolph-Macon, 310 N. Center Street	No Use
166-5072	Randolph-Macon College Historic District Expansion	No Use
166-0002	Randolph-Macon College Historic District	No Use
166-0001-0008	Ashland Station Depot, 112 N. Railroad Avenue	No Use
166-5041	Priddy House, 107 Stebbins Street	No Use
166-0001-0055	Emily Gray House, 702 S. Center Street	No Use
166-0001-0060	Fleming Fox House, 708 S. Center Street	No Use
166-0036	MacMurdo House, 713 S. Center Street	No Use
166-0037	Hugo House/Lefebvre House, 904 S. Central Street	No Use
166-0001-0077	House, 1005 S. Center Street	No Use
042-0113	Charles Gwathmey House, 11247 Gwathmey Church Road	No Use
043-0694	Hunton Treasures, 11701 Greenwood Road	No Use
043-5108	Yellow Tavern Battlefield	<i>de minimis</i>
043-0690	Lewis-McLeod House, 2945 Mountain Road	No Use
043-0292	Laurel Industrial School Historic District, Hungary Road	Use (Permanent Incorporation)
043-0292-0001	Main Building/Robert Stiles Building/Bluford Office Building, 2900 Hungary Road	Use (Permanent Incorporation)
Alternative 6F: Full Service, Staples Mill Road / Main Street Stations		
127-6136	Scott's Addition Historic District	<i>de minimis</i>
127-6188	Movieland Bowtie Cinema, 1331 North Boulevard	<i>de minimis</i>
127-6730	Hermitage Road Warehouse Historic District	No Use
127-5978	Todd Lofts, 1128 Hermitage Road	No Use
127-6145	Southern Stove Works, 1215 Hermitage Road	No Use
127-0414	Governor's School, 1000 North Lombardy Street	No Use
127-0354	Virginia Union University Historic District, 1500 North Lombardy Street	No Use
127-0822	Carver Residential Historic District	No Use
127-0428	George W. Carver Elementary School, 1110 West Leigh Streets	No Use
127-6171	Richmond and Chesapeake Bay Railway Barn), Richmond-Ashland Railway Company Car Barn	No Use
127-6883	Gilpin Court Apartment Complex, 203 Charity Street West/ 4 E. Hill Street/1403 St. James St./1100 N 2nd Street	No Use
127-5679	Barton Heights Cemetery, 1600 Lamb Avenue	No Use
127-0353	Richmond Nursing Home, 210 Hospital Street	No Use
127-6166	Hebrew Cemetery, 320 Hospital Street	No Use

► Continued – see end of table for notes.

Table 6.5-4: Preferred Alternative Section 4(f) Determinations for All Historic Properties

DHR ID	Name/Description	Section 4(f) Determination
44HEI203	Grave Yard for Free People of Color and Slaves	<i>de minimis</i>
I27-0344	Shockoe Valley & Tobacco Row Historic District	Use (Permanent Incorporation)
44HEI053	Lumpkins Jail/Devil's Half Acre	No Use
44HEI098	Main Street Station Parking Lot/Railroad	No Use
I27-6129	Winfree Cottage, East Main Street	No Use
44HEI097	Railroad, Warehouse	No Use
I27-0172	Main Street Station and Trainshed, New Union Station, Seaboard Airline & Chesapeake & Ohio Railroad Depot	Use (Permanent Incorporation)
I27-6271	Seaboard Air Line Railroad Corridor	Use (Permanent Incorporation)
I27-0019	Masons' Hall, 1805 Franklin Street	No Use
I27-0344-0123	Railroad Y.M.C.A., 1552 East Main Street	No Use
I27-0219	Shockoe Slip Historic District and Expansions	<i>de minimis</i>
44HEI094	Warehouse	No Use
I27-6793	Chesapeake & Ohio (C&O) Railroad Segment	<i>de minimis</i>
I27-0171	James River and Kanawha Canal Historic District	<i>de minimis</i>
I27-5809	Bridge #1857, North 14th Street; Mayo Bridge North	No Use
I27-6792	Southern Railway	<i>de minimis</i>
I27-0457	Manchester Warehouse Historic District	<i>de minimis</i>
I27-6193	J.P. Taylor Leaf Tobacco, Southern Stove Works, 516 Dinwiddie Ave	No Use
I27-6245	Williams Bridge Company, Emergency Fleet Corporation Factory, 700 East 4th Street	No Use
I27-6248	Pure Oil Company, 1314 Commerce Street, Transmontaigne	<i>de minimis</i>
I27-6213	Davee Gardens Historic District	No Use
I27-5818	Philip Morris Operations Complex, 3601 Commerce Road	<i>de minimis</i>
020-5474	DuPont Spruance	No Use
043-0307	Battle of Chaffin's Farm (New Market Heights Battlefield), New Market Road	<i>de minimis</i>
020-0063	Falling Creek Ironworks Archaeological Site	No Use
020-5320	Proctor's Creek Battlefield	<i>de minimis</i>
020-0147	Drewry's Bluff Battlefield (Fort Darling, Fort Drewry), Fort Darling Road	<i>de minimis</i>
I23-5025	Assault on Petersburg (Petersburg Battlefield II), Bermuda Hundred Road (Alt Route 697)	<i>de minimis</i>
020-5336	The Bellwood-Richmond Quartermaster Depot Historic District, U.S. Department of Defense Supply Center Historic District	No Use
020-0007	Bellwood, Sheffields, Auburn Chase, Building 42, Defense Supply Center Richmond, 8000 Jefferson Davis Hwy	No Use
44CF0680/020-0022	Fort Darling/Battlefield, Earthworks, Fort/Centralia Earthworks	<i>de minimis</i>
020-5351	Richmond & Petersburg Electric Railway	<i>de minimis</i>
020-0013	House, 3619 Thurston Road	No Use
I27-6251	Atlantic Coast Line Railroad Corridor, Richmond and Petersburg Railroad	<i>de minimis</i>

► Continued – see end of table for notes.

Table 6.5-4: Preferred Alternative Section 4(f) Determinations for All Historic Properties

DHR ID	Name/Description	Section 4(f) Determination
020-5378	VEPCo Power Transmission Line	No Use
020-0140	Circle Oaks/4510 Centralia Road	No Use
020-0552	Centralia Post Office	No Use
Total for the Preferred Alternative:		Use (Permanent Incorporation): 17 de minimis: 33 No Use: 70

Note: Section 4(f) use determinations presented here for resources located between Richmond and Centralia may not parallel the determinations rendered for the previous SEHSR Richmond to Raleigh (R2R) project as the DC2RVA Project limits of disturbance are based on infrastructure per the Basis of Design for the Project; refer to Chapter 4 of this Final EIS for details.

As presented in Chapter 5 of this Final EIS, FRA determined during the Section 106 process, and DHR concurred,¹³ that the Project will have an adverse effect on 21 historic properties and no adverse effect/no effect on 99 historic properties. The bullets below describe the Section 4(f) uses (as presented in Table 6.5-3 and Table 6.5-4 above) by the Section 106 determinations.

- Of the 21 historic properties with an adverse effect under Section 106:
 - The FRA determined that the Project will have a Section 4(f) use (permanent incorporation)¹⁴ in 17 of these instances, and the DHR was notified of these determinations by letter dated January 4, 2019 (see Appendix E of this Final EIS). The 17 historic properties with a Section 106 adverse effect and a Section 4(f) use are explained in detail for each resource in Section 6.5.3.1.
 - FRA also determined that the remaining 4 of 21 adversely effected Section 106 resources will have no Section 4(f) use. These four resources are discussed in Section 6.5.3.2 to provide contextual data for the no use determination. In these instances, the adverse effect is the result of a viewshed modification wherein there is no physical encroachment or the resource is an archaeological site that is only eligible under NRHP Criterion D, thus preservation in place is not warranted and a no use determination is appropriate. No further action is required on these four resources, and these results were presented to DHR to inform DHR of FRA's determinations.
- Of the 99 historic properties with no adverse effect/no effect under Section 106, FRA also determined that the Project will have no use or a *de minimis*¹⁵ under Section 4(f), and the DHR was notified of these determinations by letter dated January 4, 2019 (see Appendix E of this Final EIS). Resources with no Section 4(f) use are summarized in Section 6.5.3.2.

¹³ Preliminary dialogues with DHR on effect took place on August 10, 2016. Follow-up meetings were held on June 19, 2018, July 2, 2018, and August 8, 2018. The results of these meetings helped to inform FRA's Section 4(f) use determinations. Refer to Appendix E of this Final EIS for Section 106 and Section 4(f) coordination details.

¹⁴ As previously presented in Section 6.2.4, a use (permanent incorporation) to a historic property occurs when the undertaking physically encroaches on the NRHP-eligible boundaries of a historic property and the Project will permanently alter the physical integrity of a character-defining feature or function of the resource. For archaeological sites, there is a use if the site is eligible for the NRHP for reasons other than the data it contains, namely that it has an association with an important event, individual, or architectural style.

¹⁵ As previously presented in Section 6.2.4, a *de minimis* use occurs if the NRHP-eligible boundaries are within the encroachment area but the undertaking will not alter the physical integrity and function of the resource. For example, if the Project is requiring the slight widening of a roadway within the NRHP boundaries of a dwelling that is significant for its architectural styling, the use of the land for road widening will not impact the physical integrity or importance of the dwelling's architectural style.

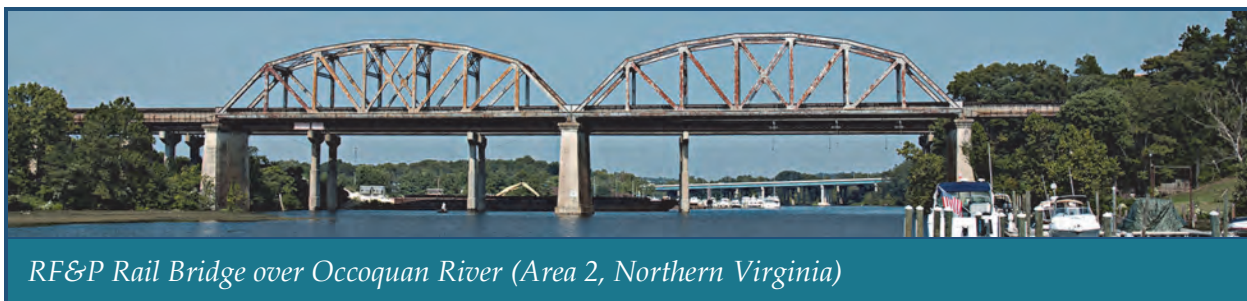
It is important to note that the Section 4(f) use determinations presented herein may not mirror FRA's preliminary determinations presented in the Draft Section 4(f) Evaluation, as additional cultural resource studies were completed between the completion of the Draft EIS and this Final EIS and, in addition, the Project LOD was refined as the Preferred Alternative was selected as part of this Final EIS. In any instance where the Section 4(f) determination varies between the Draft EIS and Final EIS, a comment on this change is provided in the sections below. Appendix D of this Final EIS provides a full listing of resources that have changed since the Draft EIS.

6.5.3.1 Historic Properties with a Section 4(f) Use

As previously stated, of the 21 historic properties that FRA determined, and DHR concurred, would have an adverse effect as part of the separate Section 106 process, FRA also determined that the Project will have a Section 4(f) use (permanent incorporation) on 17 of these same resources. By letter dated January 4, 2019, the DHR was notified of the Section 4(f) use determinations (see Appendix E of this Final EIS). These 17 resources, which are listed above in Table 6.5-4, are described in detail below in north to south order. Maps showing the location of architectural resources¹⁶ with a Section 4(f) use (permanent incorporation) in relation to the Preferred Alternative are provided at the end of this section.

Richmond, Fredericksburg, and Potomac Railroad (500-0001). The location of this resource in relation to the Preferred Alternative is shown in Figure 6.5-15. Construction associated with the Preferred Alternative will result in removal or large-scale modifications to several contributing elements to the railroad district, including the Doswell Tower in the Doswell Historic District (042-5448), Main Street Station (127-0172) and adjacent properties in Richmond, and several bridges along the corridor. As such, the Preferred Alternative will have a Section 4(f) use (permanent incorporation) on this historic property.

RF&P Bridge over Occoquan River (500-0001-0022). The location of this resource in relation to the Preferred Alternative is shown in Figure 6.5-16. The NRHP boundaries of the resource were modified after completion of the Draft EIS based on additional archival and architectural studies. As such, the Section 4(f) use was reevaluated from its preliminary determination of no use. The Preferred Alternative includes constructing a second bridge directly east of the existing span, thus introducing a new element adjacent to the current bridge. The approach to the bridge, which is included in the NRHP boundaries of this resource and is a contributing feature, will also be physically modified. The Preferred Alternative has the potential to diminish the property's integrity through the introduction of a large new element and physical modifications to the rail design. The revised NRHP boundaries of this historic property are encroached by the Preferred Alternative; as such, it will have a Section 4(f) use (permanent incorporation) of this resource.



¹⁶ Locations for archaeological resources are not provided per guidelines set forth in the Archeological Resources Protection Act of 1979 and other applicable legislation (contact DRPT for details).

Archaeological Site 44ST1223 (Civil War Campsite). This archaeological site is eligible under both Criteria A and D, so preservation in place is warranted. The site was recorded after issuance of the Draft EIS during archaeological studies completed in areas where the LOD was expanded; thus, it was not included in the Draft Section 4(f) Evaluation. The Preferred Alternative modifies the rail corridor in this area to add an additional rail track along the existing corridor. The new track will partially overlap this archaeological site and physically destroy data-bearing deposits. Since this action will diminish the data potential of this site, the Preferred Alternative will result in a Section 4(f) use (permanent incorporation) of this historic property.

Rappahannock River Railroad Bridge and Associated Structures/Platform (111-0132-0025). The location of this resource in relation to the Preferred Alternative is shown in Figure 6.5-17. During the Draft EIS evaluation, FRA's preliminary determination was that the Project would have no use on this resource. Since completion of the Draft EIS, the NRHP boundaries of the resource have been expanded to include both the bridge and associated set of platforms and structures in downtown Fredericksburg, thus requiring a Section 4(f) reevaluation. The resource is both individually eligible and a contributing element to the Fredericksburg Historic District (111-0132) and the RF&P Railroad (500-0001). Addition of a third track to the east of the existing alignment as part of Preferred Alternative will require construction of a new bridge adjacent to the old structure, thus diminishing its integrity. In addition, portions of the platform and structural system will be removed and rebuilt during the work, thus physically impacting character-defining elements of this resource. As such, the Preferred Alternative will have a Section 4(f) use (permanent incorporation) of the historic property.



Rappahannock River Railroad Bridge (Area 3, Fredericksburg)

Fredericksburg Historic District (111-0132): The location of this resource in relation to the Preferred Alternative is shown in Figure 6.5-18. Installation of the third track associated with the Preferred Alternative would be constructed in the existing rail right-of-way, but it would entail building a multi-story parking deck to the east (south) of the tracks in an existing parking lot. This new structure would impact the viewshed of the district. It would also physically impact numerous contributing elements to the district, including the existing rail structures and platforms, as well as a potential new rail station. Because work encroaches on the NRHP boundaries of the district and there are physical impacts, the Preferred Alternative will have a Section 4(f) use (permanent incorporation) of the district.

Archaeological Sites 44SP0187 (Marye's Mill), 44SP0688 (Block 49), and 44SP0687 (Block 48). These three archaeological sites are eligible under both Criteria A and D, so preservation in place is warranted. While Site 44SP0187 was included in the Draft EIS, sites 44SP0688 and 44SP0687 were recorded with the DHR after issuance of the Draft EIS and therefore were not included in that document. Construction of a new bridge across the Rappahannock River to accommodate a third track for Preferred Alternative will physically impact the subsurface archaeological deposits in this area, thus diminishing the data potential of these three sites. The Preferred Alternative will have a Section 4(f) use (permanent incorporation) of these sites.

Archaeological Site 44SP0468 (Earthworks/Jackson's Earthworks). This archaeological site is eligible under both Criteria A and D, so preservation in place is warranted. Changes to the LOD after completion of the Draft EIS resulted in additional archaeological studies, which led to an expansion of the boundaries of this site. As such, the Section 4(f) impacts were reevaluated during the Final EIS analysis. Modifications to the rail corridor associated with the Preferred Alternative in this area to aid in rail performance will result in physical impacts to this archaeological site. It is possible that small portions of intact earthworks may also be altered. Since this action will diminish the data potential of this resource, the Preferred Alternative will have a Section 4(f) use (permanent incorporation) of this historic property.

Doswell Historic District (042-5448). The location of this resource in relation to the Preferred Alternative is shown in Figure 6.5-19. Although the community was founded along the rail lines, the Preferred Alternative will adversely affect one contributing element to the district, the Doswell Depot and Tower (042-0093), as listed below. This includes physically moving the tower and taking land from the parcel, thus diminishing the characteristics that render it eligible for the NRHP. In addition, roads within the district will also be physically modified during the Project, thus altering its historic road plan. Because of the adverse physical effects to a contributing element and other physical changes, the Preferred Alternative will have a Section 4(f) use (permanent incorporation) of this historic property.



Doswell Historic District (Area 4, Central Virginia)

Doswell Depot and Tower (042-0093). The location of this resource in relation to the Preferred Alternative is shown in Figure 6.5-20. The Doswell Depot is located on the west of a Y intersection of two railroads; the tower is located just south of the depot on the east side of the active rail corridor. Both are contributing elements to the Doswell Historic District (042-5448). The LOD of the Preferred Alternative in this area was refined after the publication of the Draft EIS. The modified LOD encroaches on the NRHP boundaries of this resource and requires changes to the physical matrix of the Doswell Tower. In particular, adding the third track associated with the Preferred Alternative east of the extant tracks in this area will result in permanent impacts on the

tower, which will be moved as a result of this action. This activity compromises the integrity of this resource, including its design, workmanship, and materials. As such, the Preferred Alternative will have a Section 4(f) use (permanent incorporation) of this historic property.

Berkleytown Historic District (166-5073). The location of this resource in relation to the Preferred Alternative is shown in Figure 6.5-21. While this resource was presented in the Draft Section 4(f) Evaluation, additional research and architectural survey completed after the issuance of the Draft EIS resulted in the expansion of the property's NRHP-eligible boundaries. Concurrently, the LOD was refined in this area during the selection of the Preferred Alternative after the publication of the Draft EIS. Together, these actions required a reevaluation of the Section 4(f) use of this resource.

Construction of an overpass carrying Vaughan Road over the rail tracks associated with the Preferred Alternative will require physical alterations to the historic road pattern within the district and require a new bridge structure within the viewshed of the district and several contributing elements. Because the Preferred Alternative encroaches on the district boundaries and results in a physical impact, the Preferred Alternative will have a Section 4(f) use (permanent incorporation) of the district.

Laurel Industrial School Historic District (043-0292) and Main Building/Robert Stiles Building/Bluford Office Building (043-0292-0001). The location of these resources in relation to the Preferred Alternative are shown in Figures 6.5-22 and 6.5-23. These resources were presented in the Draft Section 4(f) Evaluation, but additional research and architectural survey completed after issuance of the Draft EIS refined resource boundaries. In addition, the LOD was modified in this area as the Preferred Alternative was refined. These actions resulted in a reevaluation of the Section 4(f) use of these resources. The Preferred Alternative includes grade-separating (i.e., raising) Hungary Road over the rail corridor. This action will result in the construction of a new road overpass structure and physical modifications of the road system and parking areas. It will also result in a modified physical relationship between the Main Building and the surrounding landscape/streetscape, which are contributing elements to the Main Building. These actions will impact the physical integrity both the historic district and the main building, and the Preferred Alternative will result in a Section 4(f) use (permanent incorporation) of both resources.

Shockoe Valley & Tobacco Row Historic District (127-0344). The location of this resource in relation to the Preferred Alternative is shown in Figure 6.5-24. The Preferred Alternative includes several physical changes to the existing rail infrastructure, including lengthening the passenger platforms at Main Street Station and creating new structural elements (piers) to support the platforms. In addition, the district contains numerous archaeological sites associated with the early history and prehistory of the Shockoe Bottom area, including pre-Civil War sites associated with the slave trade, such as the "Burial Ground for Negros" (44HE1089) and Lumpkins Jail/Devil's Half Acre (44HE1053). The Project will not physically impact these resources, but a new platform will be added within the viewshed of the Devil's Half Acre site and other potential, unknown slave-trade-related sites (see below for minimization and mitigation efforts associated with these potential resources). As such, the Preferred Alternative will have a Section 4(f) use (permanent incorporation) of the Shockoe Valley & Tobacco Row Historic District.

Main Street Station and Trainshed (127-0172). The location of this resource in relation to the Preferred Alternative is shown in Figure 6.5-25. The building is a National Historic Landmark (NHL) and is also a contributing element to both RF&P Railroad (500-0001), which is listed above) and the Seaboard Air Line Railroad (127-6271), listed below.

Construction of the Preferred Alternative will alter physical elements of the property including the addition of a new passenger platform on both sides of the train shed, installation of new support piers, and construction of a new maintenance platform southeast of the station. The Preferred Alternative will result in a permanent Section 4(f) use (permanent incorporation) of this resource due to physical modifications..

Seaboard Air Line Railroad Corridor (127-6271). The location of this resource in relation to the Preferred Alternative is shown in Figure 6.5-26. Work associated with improvements to the Preferred Alternative will include physical modifications to contributing elements to this resource, such as Main Street Station, the S-Line bridge over the James River, and other road and rail structures south of Richmond. As such, the Preferred Alternative will result in a Section 4(f) use (permanent incorporation) of the historic property.



Main Street Station (Area 6, Richmond)

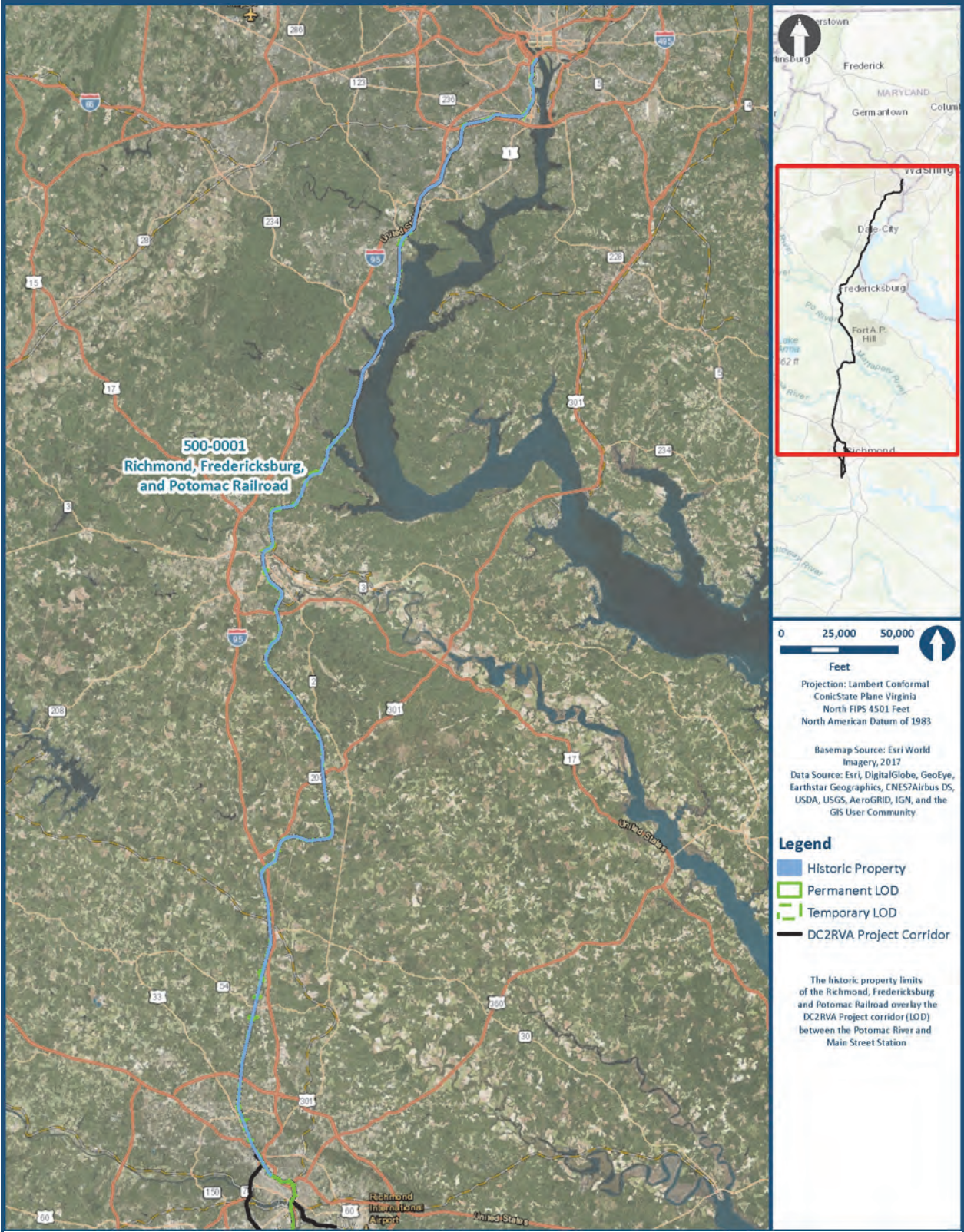


Figure 6.5-15: Section 4(f) Use (Permanent Incorporation) of the RF&P Railroad

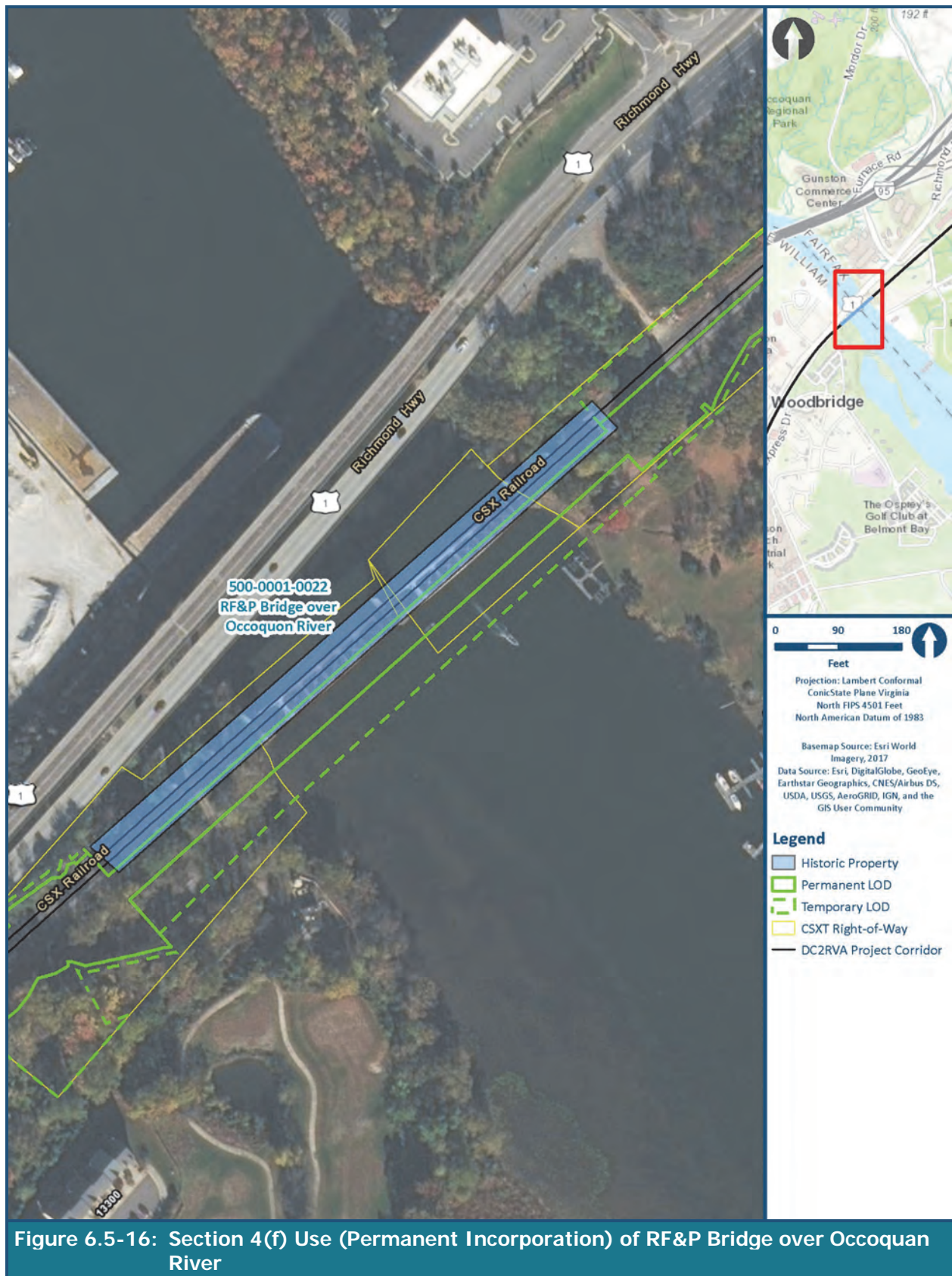


Figure 6.5-16: Section 4(f) Use (Permanent Incorporation) of RF&P Bridge over Occoquan River



Figure 6.5-17: Section 4(f) Use (Permanent Incorporation) of Rappahannock River Railroad Bridge and Associated Structures/Platform

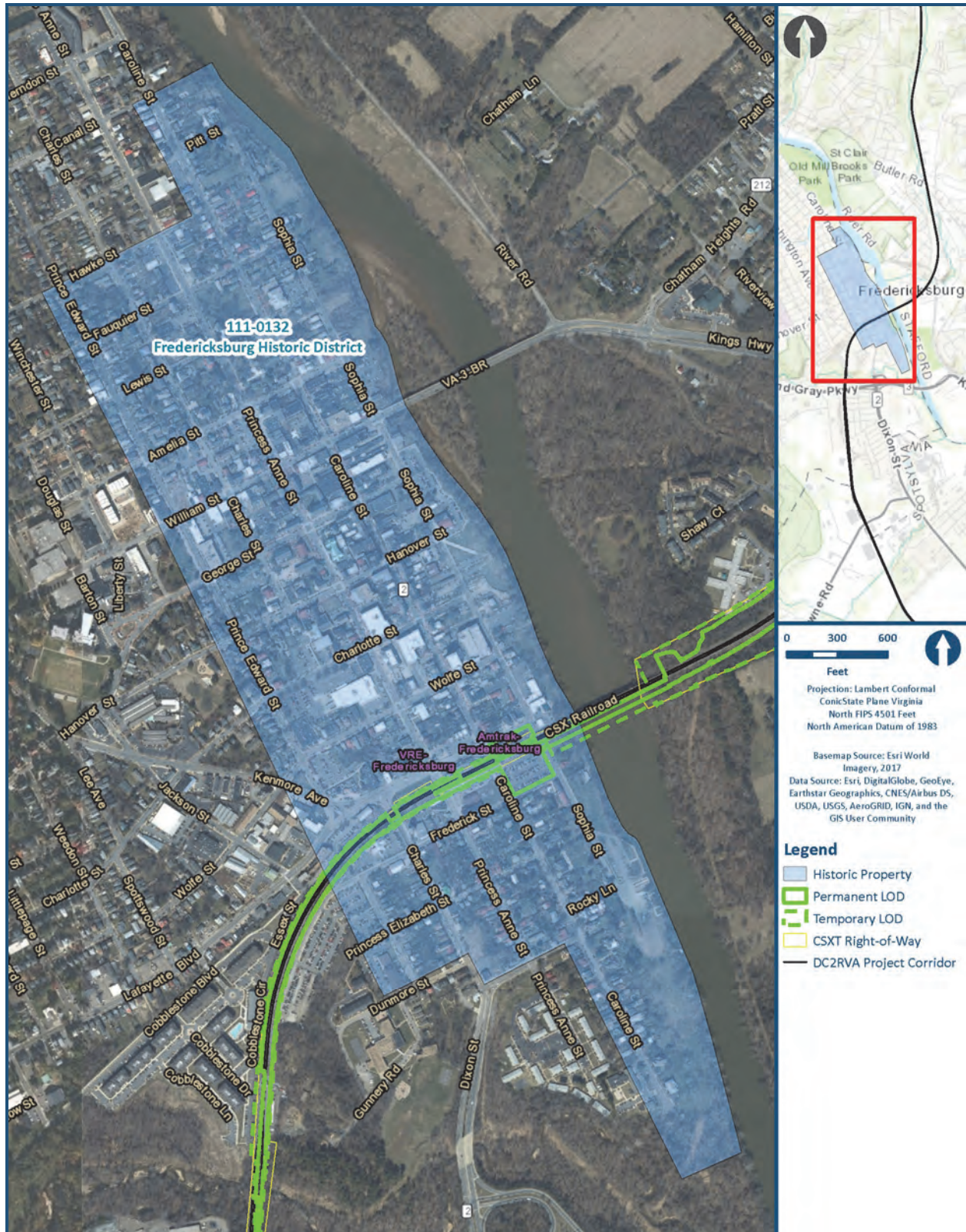


Figure 6.5-18: Section 4(f) Use (Permanent Incorporation) of Fredericksburg Historic District



Figure 6.5-19: Section 4(f) Use (Permanent Incorporation) of Doswell Historic District



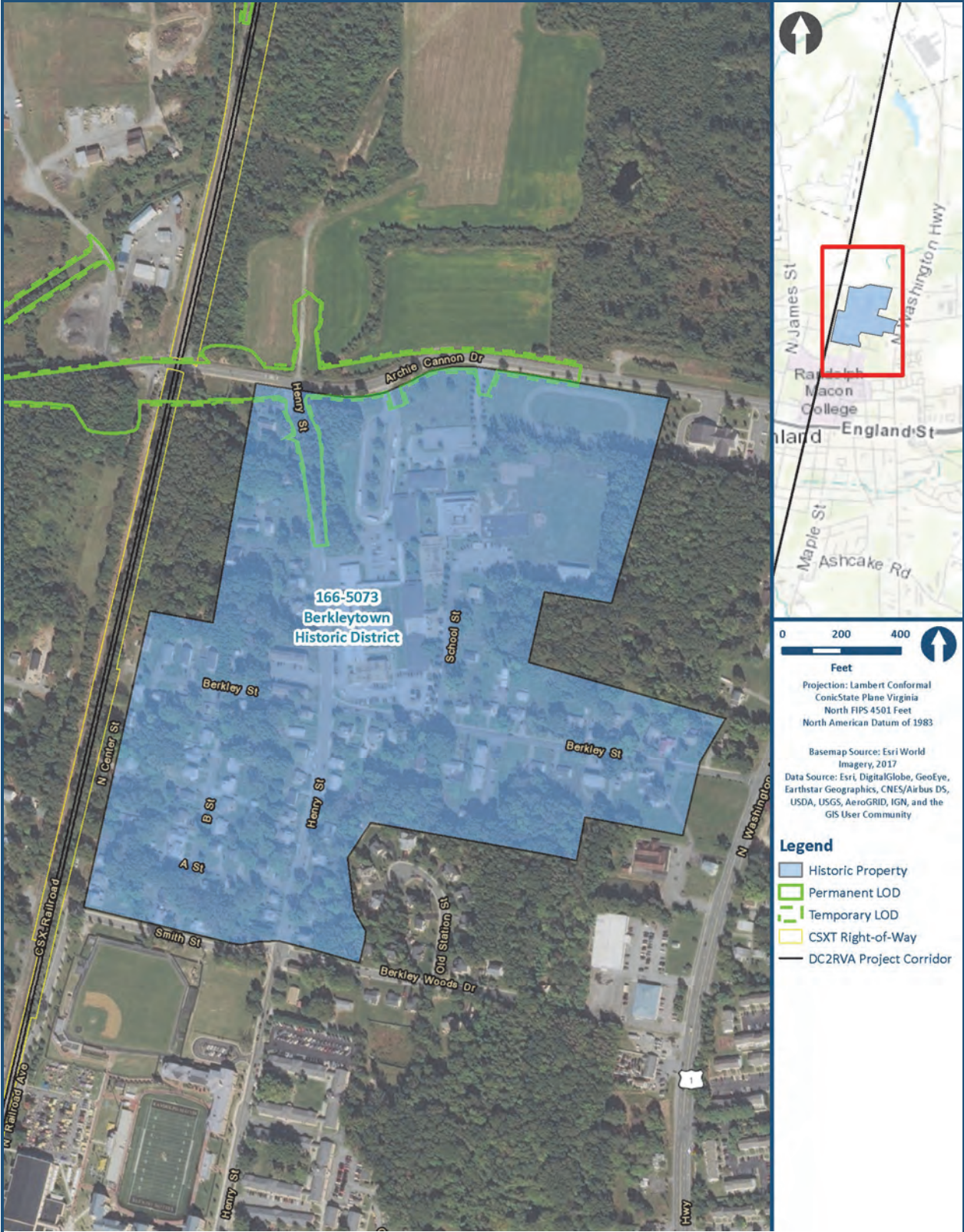


Figure 6.5-21: Section 4(f) Use (Permanent Incorporation) of Berkleytown Historic District

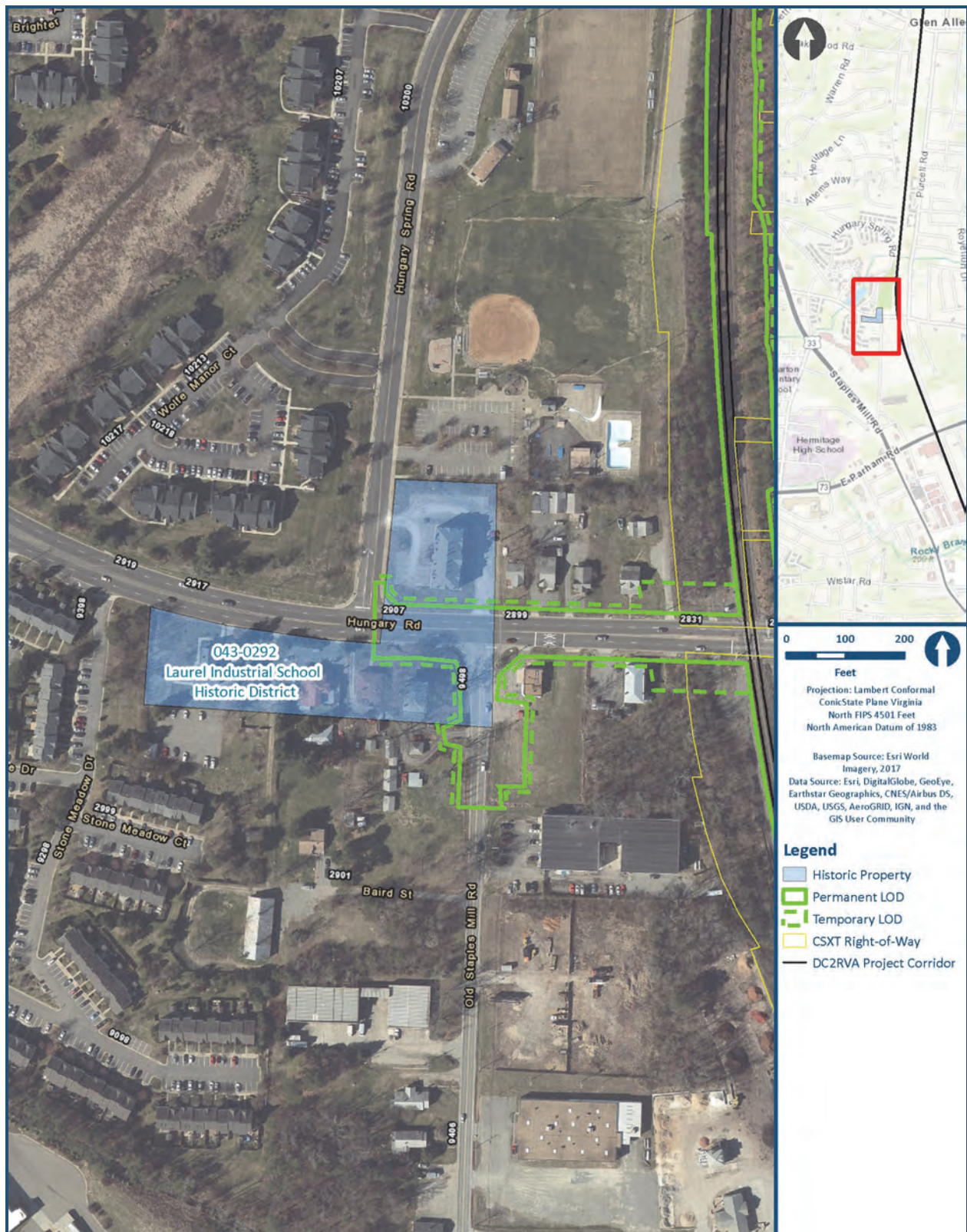


Figure 6.5-22: Section 4(f) Use (Permanent Incorporation) of Laurel Industrial School Historic District

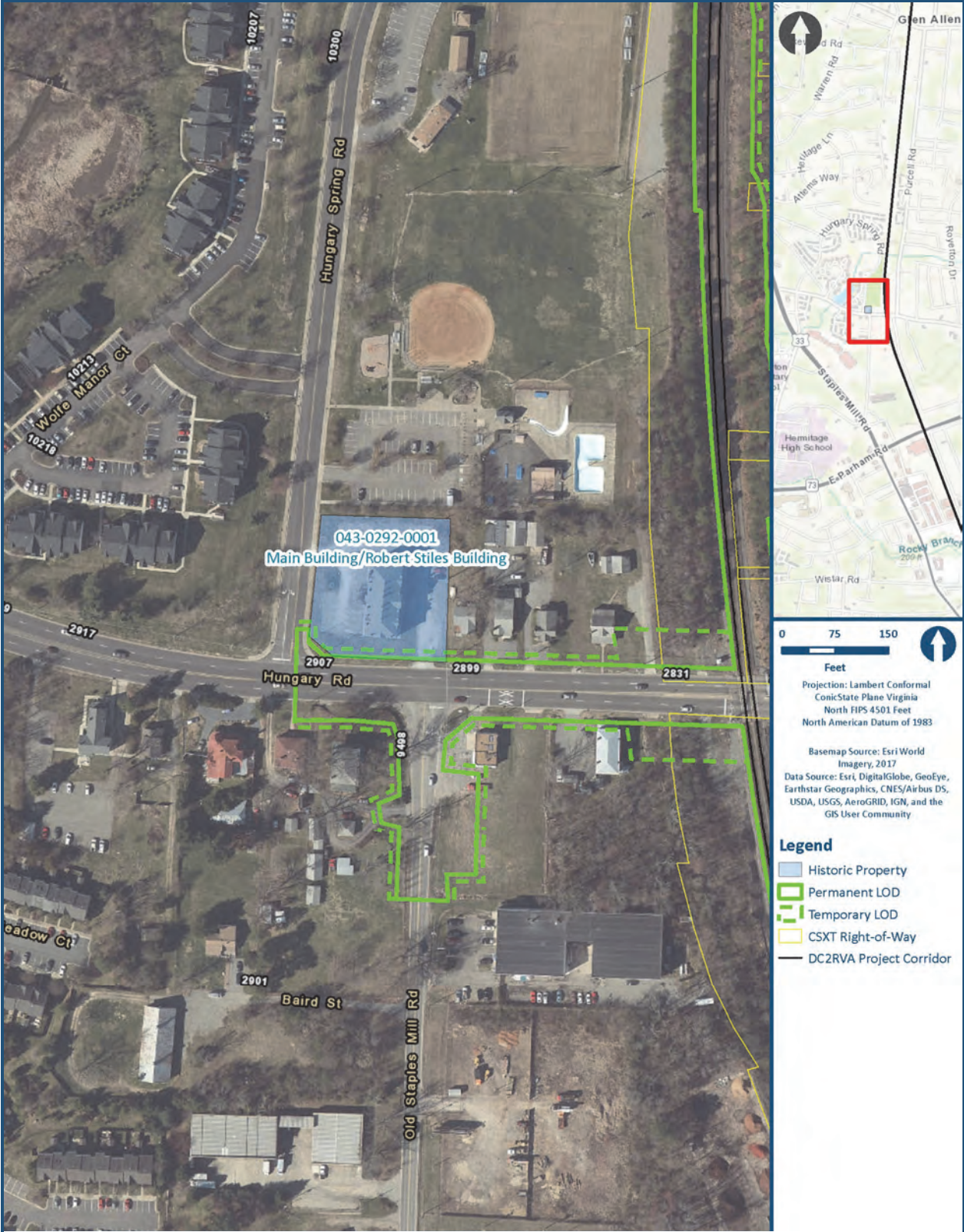


Figure 6.5-23: Section 4(f) Use (Permanent Incorporation) of Main Building/Robert Stiles Building/Bluford Office Building

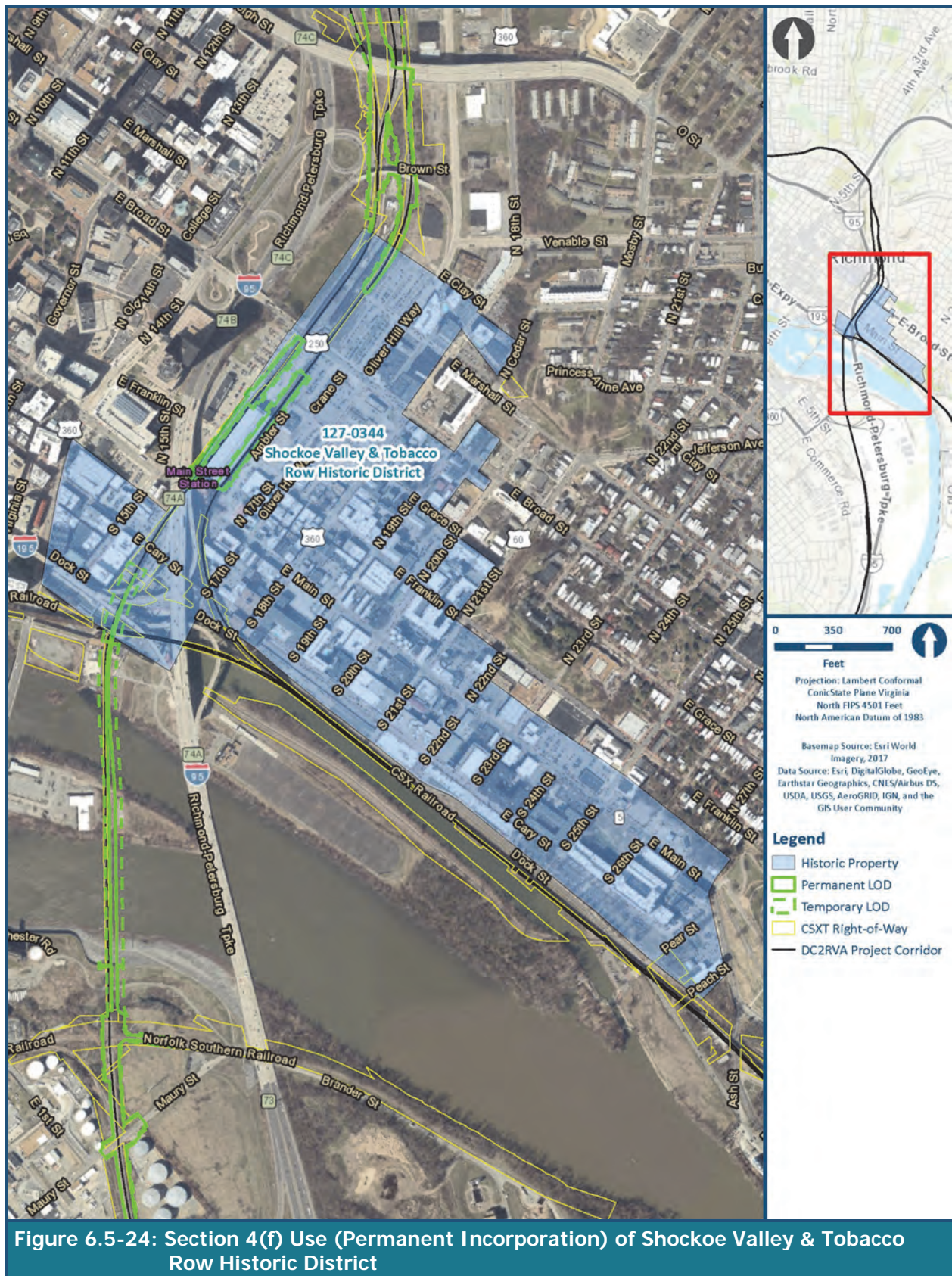
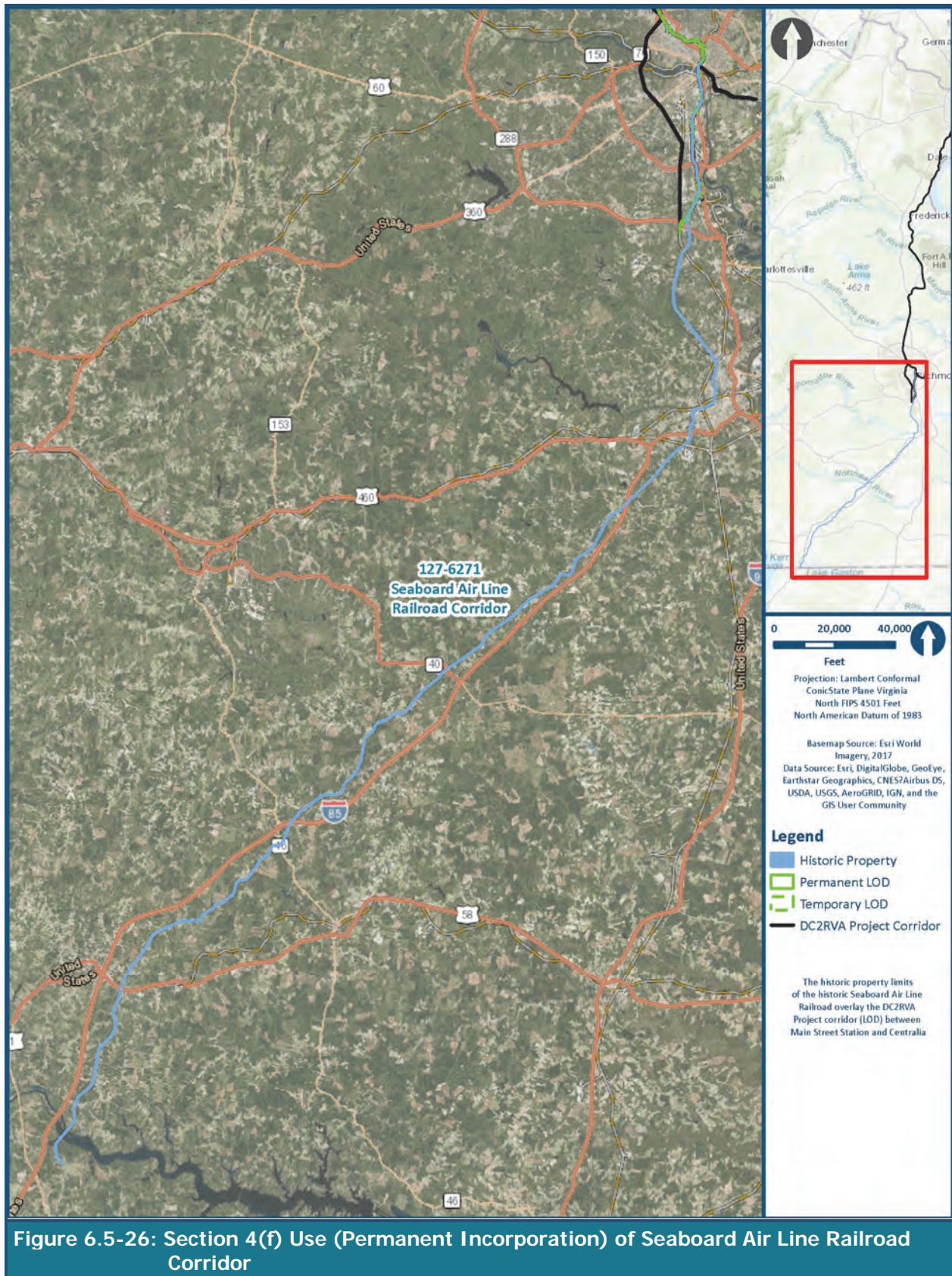




Figure 6.5-25: Section 4(f) Use (Permanent Incorporation) of Main Street Station and Trainshed



6.5.3.2 Historic Properties with No Section 4(f) Use or *de minimis* Use

As stated at the beginning of this section, FRA determined, and DHR concurred, that there are 103 historic properties that will have no use (70 properties) or *de minimis* use (33 properties) under Section 4(f), as previously listed in Table 6.5-3 and Table 6.5-4. Of the 70 properties with no use, there are 4 resources for which the Preferred Alternative will also have a Section 106 adverse effect; these 4 resources with Section 106 adverse effect are discussed below separately from the remaining 99 resources with no Section 106 adverse effect, to provide additional contextual data for the determination.

Historic Properties with a Section 106 Adverse Effect but No Section 4(f) Use

Rippon Lodge (076-0023). The location of this resource in relation to the Preferred Alternative is shown in Figure 6.5-27. The vista from Rippon Lodge looking down Neabsco Creek (and current site of the railroad and associated bridge) was documented by Benjamin Latrobe in the late-eighteenth century, and the waterway viewshed is a character-defining feature. A new railroad bridge across Neabsco Creek will be built as part of this Preferred Alternative. The new bridge will be west of the existing span and will be a new primary element within the viewshed from Rippon Lodge, thus impacting a significant element of the property. This historic property is located over 5,000 feet west of the Project corridor. As such, the Preferred Alternative will have no Section 4(f) use as the action will not result in a substantial impairment to the resource.



Rippon Lodge (Area 2, Northern Virginia)

Archaeological Sites 44HE1098, 44HE1097, and 44HE1094. The Preferred Alternative includes installation of new piers to support expanded tracks near Main Street Station. Installation of the piers will result in subsurface disturbances within these three recorded archaeological sites. However, all three sites are only eligible under Criterion D (which has been determined since the publication of the Draft EIS) for their data potential, and they do not require preservation in place. Thus, the Preferred Alternative will have no Section 4(f) use of these resources.

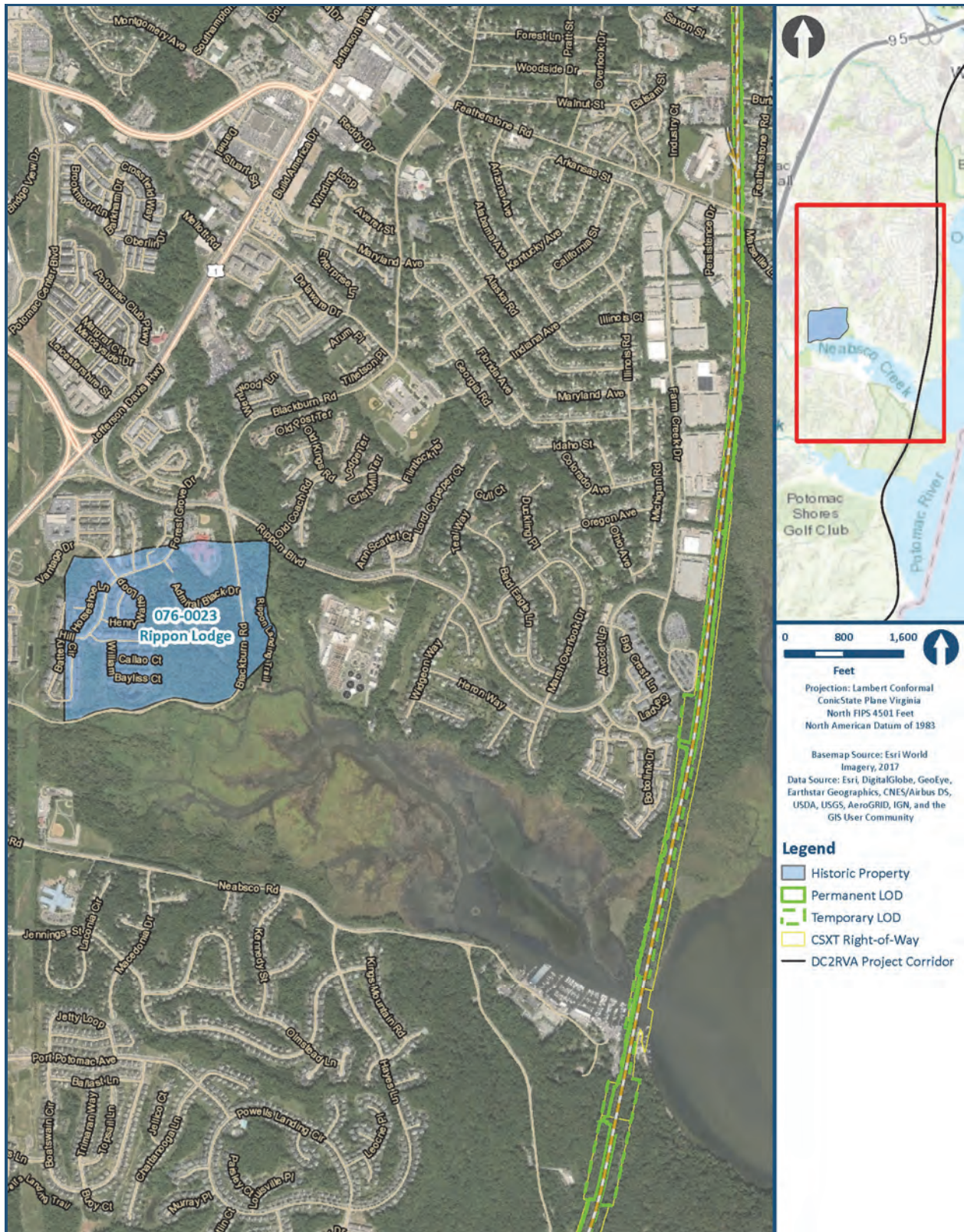


Figure 6.5-27: No Section 4(f) Use of Rippon Lodge

Historic Properties with No Section 106 Adverse Effect and No Section 4(f) Use or *de minimis* Use

Of the 120 historic properties in the Project APE, 99 received a no adverse effect/no effect determination during the Section 106 evaluation. In evaluating the 99 properties for Section 4(f) use, FRA determined that the Project will have no use or a *de minimis* use on these resources as follows:

- For the 66 properties that received a Section 4(f) no use determination (as previously listed in Table 6.5-3 and Table 6.5-4 above), the Preferred Alternative will not encroach on the NRHP boundaries; thus, there is no use.
- In the 33 instances where the Preferred Alternative will encroach on the boundaries but there will be no physical impacts to character-defining features or changes in function, the Project will have a *de minimis* use on these resources; these properties were previously included in Table 6.5-4 above and are further detailed (north-to-south) in Table 6.5-5 below. The DHR was informed of these determinations in a letter dated December 4, 2018 and they acknowledged receipt on January 4, 2019.



Excelsior Industry of Caroline County MPD (Area 4, Central Virginia)

Table 6.5-5: Historic Properties with Section 4(f) *de minimis* Determination

DHR ID	Name/Description	Justification for <i>de minimis</i> Determination
Alternative 1B: Add Two Main Tracks on the West		
029-0218	Mount Vernon Memorial Highway (portion of George Washington Memorial Parkway)	Highway generally parallels Project area, but there are small areas of minor physical encroachment; however, the Project will not impact character-defining features or property function.
Alternative 2A: Add a Third or Fourth Main Track		
100-0137	Rosemont Historic District	Minor physical encroachment on the southeastern edge of the district as the railroad is the resource boundary, but the Project will not impact character-defining features or property function.
100-0124	Alexandria Union Station, 110 Callahan Drive	Physical encroachment along the rail tracks and within the parking lot but avoidance of physical changes to the historic station assure that the Project does not impact character-defining features or property function.
Area 3B: Add a Third Main Track Through the City		
111-0147	Fredericksburg & Spotsylvania Co. Battlefields National Military Park & Cemetery, Lee Drive	Minor physical encroachment along Lansdowne Road that does not impact character-defining features or property function.
111-5295	Battle of Fredericksburg I	Minor physical encroachment along extant rail corridor that does not impact character-defining features or property function.
111-5296	Battle of Fredericksburg II	Minor physical encroachment along rail corridor that does not impact character-defining features or property function.
111-0132-0704	Fredericksburg Train Station, 200 Lafayette Boulevard	Minor physical encroachment along the southern resource boundary where it abuts the extant platform and rail structures, but changes will not impact character-defining features or property function.
111-0009	Fredericksburg Historic District Extension	Minor physical encroachment in southern half of district along rail corridor that does not impact character-defining features or property function.
088-5181	Salem Church Battlefield (Banks Ford Battlefield)	Minor physical encroachment along rail corridor that does not impact character-defining features or property function.
088-0039	La Vue, 3232 LaVue Lane (Prospect View)	Minor physical encroachment along eastern edge of property boundary that does not impact character-defining features or property function.
Area 4A: Add a Third Main Track		
016-5165	Excelsior Industry of Caroline County MPD	Minor physical encroachment along extant rail corridor that does not impact character-defining features or property function.
016-0222	Woodford Freight & Passenger Depot, Woodford Road	Minor physical encroachment along eastern edge of property boundary that does not impact character-defining features or property function.
016-5136	Milford Historic District	Minor physical encroachment along rail tracks that does not impact character-defining features or property function.
042-0123	North Anna Battlefield	Minor physical encroachment along rail tracks that does not impact character-defining features or property function.
042-5307	Taylorsville Road Historic District	Minor physical encroachment along rail tracks that does not impact character-defining features or property function.
Area 5A: Maintain Two Tracks Through Town (No Station Improvements)		
043-5108	Yellow Tavern Battlefield	Minor physical encroachment along rail tracks that does not impact character-defining features or property function.

► Continued.

Table 6.5-5: Historic Properties with Section 4(f) *de minimis* Determination

DHR ID	Name/Description	Justification for <i>de minimis</i> Determination
Alternative 6F: Full Service, Staples Mill Road / Main Street Stations		
127-6136	Scott's Addition Historic District	Minor physical encroachment along northeastern edge of district that includes rail as property boundary, but Project will not impact character-defining features or property function.
127-6188	Movieland Bowtie Cinema, 1331 North Boulevard	Minor physical encroachment along northeastern edge of district that includes rail as property boundary, but Project will not impact character-defining features or property function.
44HE1203	Grave Yard for Free People of Color and Slaves	Per coordination with the FRA and DHR, the Project will have no adverse effect on this resource; however DRPT has agreed to three commitments upon final design: landscape study with boundary evaluation; archaeological testing; and archaeological monitoring.
127-0219	Shockoe Slip Historic District and Expansions	Minor physical encroachment along rail corridor that does not impact character-defining features or property function.
127-6793	Chesapeake & Ohio (C&O) Railroad Segment	Minor physical encroachment at crossing of C&O Railroad with Project corridor, just north of the James River in Richmond, that does not impact character-defining features or property function.
127-0171	James River and Kanawha Canal Historic District	Minor physical encroachment at crossing with rail corridor that does not impact character-defining features or property function.
127-6792	Southern Railway	Minor physical encroachment at crossing of Southern Railway and Project rail corridor that does not impact character-defining features or property function.
127-0457	Manchester Warehouse Historic District	Minor physical encroachment along rail corridor that does not impact character-defining features or property function.
127-6248	Pure Oil Company, 1314 Commerce Street, Transmontaigne	Minor physical encroachment along eastern resource boundary that does not impact character-defining features or property function.
127-5818	Philip Morris Operations Complex, 3601 Commerce Road	Minor physical encroachment along western resource boundary that does not impact character-defining features or property function.
043-0307	Battle of Chaffin's Farm (New Market Heights Battlefield), New Market Road	Minor physical encroachment along rail corridor that does not impact character-defining features or property function.
020-5320	Proctor's Creek Battlefield	Minor physical encroachment along rail corridor that does not impact character-defining features or property function.
020-0147	Drewry's Bluff Battlefield (Fort Darling, Fort Drewry), Fort Darling Road	Minor physical encroachment along rail corridor that does not impact character-defining features or property function.
123-5025	Assault on Petersburg (Petersburg Battlefield II), Bermuda Hundred Road (Alt Route 697)	Minor physical encroachment along rail corridor that does not impact character-defining features or property function.
44CF0680 / 020-0022	Fort Darling/Battlefield, Earthworks, Fort/Centralia Earthworks	Minor physical encroachment along rail corridor that does not impact character-defining features or property function.
020-5351	Richmond & Petersburg Electric Railway	Minor physical encroachment at intersections of Richmond & Petersburg Electric Railway and Project corridor, south of the James River, that does not impact character-defining features or property function.
127-6251	Atlantic Coast Line Railroad Corridor, Richmond and Petersburg Railroad	Minor physical encroachment at intersection of two rail corridors in Centralia that does not impact character-defining features or property function.

6.6 AVOIDANCE ALTERNATIVES

A feasible and prudent avoidance alternative avoids using Section 4(f) property and does not cause other effects of a magnitude that substantially outweigh the importance of protecting the Section 4(f) property. In assessing the importance of protecting the Section 4(f) property, it is appropriate to consider the relative value of the resource to the preservation purpose of the statute. An alternative is not feasible if it cannot be built as a matter of sound engineering judgment. An alternative is not prudent if:

- It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
- It results in unacceptable safety or operational problems;
- After reasonable mitigation, it still causes:
 - Severe social, economic, or environmental impacts;
 - Severe disruption to established communities;
 - Severe disproportionate impacts to minority or low-income populations; or
 - Severe impacts to environmental resources protected under other Federal statutes;
- It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- It causes other unique problems or unusual factors; or
- It involves multiple factors that, while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

If FRA concludes that there is no feasible and prudent alternative to the use of Section 4(f) property, then it may approve only the alternative that causes the least overall harm in light of the statute's preservation purpose. The least overall harm is determined by balancing the following factors:

- The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property);
- The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection;
- The relative significance of each Section 4(f) property;
- The views of the official(s) with jurisdiction over each Section 4(f) property;
- The degree to which each alternative meets the purpose and need for the project;
- After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
- Substantial differences in costs among the alternatives.

An avoidance alternative for an individual Section 4(f) resource used by the Project must be evaluated within the area of the Project where the resource is located. An avoidance alternative must not impact other Section 4(f) resources.

Avoidance alternatives are not required when a finding of *de minimis* use is made for Section 4(f) resources because Section 4(f) is satisfied once *de minimis* applies.

The following avoidance alternative sections discuss the resources for which FRA has determined that the Preferred Alternative would result in a 4(f) use, excluding *de minimis* use for the reason noted above. The resources are discussed by the overall corridor first and then by Alternative Areas 1 through 6. See Chapter 5 of the Draft EIS for a discussion of historic properties as they relate to all other alternatives previously under consideration, including whether any of the other alternatives would qualify as feasible and prudent avoidance alternatives under Section 4(f).

6.6.1 Summary of Section 4(f) Use Determinations

As presented in Section 6.5 above, FRA has determined that all impacts to parklands, recreational areas, and wildlife refuges will result in *de minimis* impacts; therefore, no avoidance alternatives analysis is required. FRA's determination is that there are 17 historic resources for which the Preferred Alternative will result in a permanent Section 4(f) use. One resource, the historic RF&P Railroad, traverses the Project corridor from the Potomac River to Main Street Station. There is no avoidance alternative for this resource other than the No Build Alternative, which does not meet the Project Purpose and Need.

No other Section 4(f) resources are located along the Preferred Alternative in Area 1 (Arlington). There are two historic properties along the Preferred Alternative in Area 2 (Northern Virginia) with a permanent Section 4(f) use, and there are six historic properties along the Preferred Alternative in Area 3 (Fredericksburg) with a permanent Section 4(f) use. There are no feasible and prudent avoidance alternatives in Areas 2 or 3. The No Build Alternative would be the avoidance alternative for resources in these areas, and it does not meet the Project Purpose and Need.

There are two historic resources with a permanent Section 4(f) use along the Preferred Alternative in Area 4 (Central Virginia). No avoidance alternatives were identified for the Preferred Alternative in this area; therefore, the No Build Alternative would be the avoidance alternative. The No Build Alternative does not meet the Project Purpose and Need. Three resources along the Preferred Alternative in Area 5 (Ashland) have a permanent Section 4(f) use. There is no avoidance alternative besides the No Build in this area. There are three resources along the Preferred Alternative in Area 6 (Richmond) with a permanent Section 4(f) use. Due to extensive resources in Area 6 (Richmond), there is no avoidance alternative that would avoid all potential Section 4(f) use other than the No Build Alternative. The No Build Alternative does not meet the Project Purpose and Need.

Each alternative area is discussed individually below.

6.6.2 Entire DC2RVA Corridor

One historic property is located throughout the majority of the Project corridor. Given that the historic RF&P Railroad (500-0001) traverses the Project corridor from the Potomac River on the north to Main Street Station on the south, FRA has determined that there is a permanent Section 4(f) use with the Preferred Alternative in all six of the alternative areas. The No Build is the only alternative that would avoid all Section 4(f) uses within the corridor, and this would not meet the Project Purpose and Need.

6.6.3 Preferred Alternative in Area 1

FRA determined that Preferred Alternative in Area 1 will not result in a Section 4(f) use for any resources.

6.6.4 Preferred Alternative in Area 2

FRA determined that the Preferred Alternative in Area 2 will result in a Section 4(f) use of two resources: the RF&P Bridge over the Occoquan River (500-0001-0022) and archaeological site 44ST1223, a Civil War campsite that abuts the railroad tracks. The only alternative that avoids these resources is the No Build, which does not meet the Project Purpose and Need.

6.6.5 Preferred Alternative in Area 3

FRA determined that the Preferred Alternative in Area 3 will result in a Section 4(f) use of six historic resources. Four of the six resources with a Section 4(f) use are archaeological sites that straddle the rail line: site 44SP0187 (Marye's Mill), site 44SP0688 (Block 49), site 44SP0687 (Block 48), and site 44SP0468 (Jackson's Earthwork). Because the archaeological sites straddle the extant rail corridor and the bridge/structures comprise the physical fabric of the elevated rail system in this area, there is no prudent and feasible avoidance to these resources except for the No Build Alternative.

The remaining two historic resources are the Rappahannock River Railroad Bridge and Associated Structures/Platform (111-0132-0025) and the Fredericksburg Historic District (111-0132). Impacts to both resources are the result of physical modifications to the built environment. The Project would necessitate changes to the extant rail structures and platforms in downtown Fredericksburg through the widening of the extant rail structural system, rebuilding piers, and redesigning the passenger waiting area. It will also require the construction of a new parking deck near the rail station. Use of both areas is required to achieve the Project goals, and reuse of the historic rail structural system rather than building a new system limit impacts on surrounding historic properties. The only alternative that avoids all impacts in this area is the No Build Alternative, which does not meet the Project Purpose and Need.

6.6.6 Preferred Alternative in Area 4

FRA determined that the Preferred Alternative in Area 4 will result in a Section 4(f) use of two historic resources along the existing tracks: the Doswell Depot and Tower (042-0093) and the Doswell Historic District (042-5448). The depot and tower are located on opposite sides of the tracks. With the addition of a third track, the depot will remain, but the tower will be moved to the east. This action will result in a 4(f) use of this resource. The only prudent and feasible alternative is the No Build Alternative, which would leave the extant track system intact. This does not meet the Project Purpose and Need. The Doswell Historic District is located on both sides of the existing tracks; as such there is no avoidance alternative other than the No Build Alternative which does not meet the Purpose and Need of the Project.

6.6.7 Preferred Alternative in Area 5

FRA determined that the Preferred Alternative in Area 5 will result in a Section 4(f) use of three historic resources along the existing tracks. Although the Preferred Alternative in Area 5 avoids the addition of a third track in this area, work requires the construction of road overpasses at Vaughan Road (Archie Cannon Drive) and Ashcake Road. The new overpass and associated road modifications at Vaughan Road (Archie Cannon Drive) will result in a 4(f) use of the Berkleytown Historic District (166-5073). The district is located east of the track, and the only avoidance alternative is to not modify the road. This does not meet the Project Purpose and Need.

The Preferred Alternative also includes grade-separating (i.e., raising) Hungary Road over the rail corridor. This action will result in the construction of a new road overpass structure and physical changes to the road system, which will result in a Section 4(f) use of the Laurel Industrial School Historic District (043-0292) and Main Building/Robert Stiles Building within the Laurel District (043-0292-0001). The only avoidance alternative is to not construct the overpass and not modify the road to accommodate the new bridge, both of which are part of the No Build Alternative. This does not meet the Project Purpose and Need.

6.6.8 Preferred Alternative in Area 6

FRA determined that the Preferred Alternative in Area 6 will result in a Section 4(f) use of three historic resources. The three resources with a 4(f) use include one historic district, one above ground resource, and one linear district. The Preferred Alternative includes several modifications in Shockoe Bottom. These include construction of new passenger platforms on new piers, installation of a new rail on existing viaducts on both the east and west sides of Main Street Station, and construction of a new rail maintenance access platform southwest of the station.

FRA has determined that the Preferred Alternative in Area 6 will result in a Section 4(f) use of Main Street Station and Trainshed (127-0172) and the surrounding Shockoe Valley and Tobacco Row Historic District (127-0344) due to these physical alterations. There is no prudent and feasible avoidance alternative for these resources with the exception of the No Build Alternative, which would not meet the Purpose and Need of the Project. The Station is also a contributing element to the Seaboard Air Line (SAL) Railroad Corridor (127-6271); thus, impacts to the station, the structures, and the rail line itself will result in a Section 4(f) use of the associated rail line as a historic property. There is no avoidance alternative.



Seaboard Air Line (SAL) Railroad Corridor (Area 6, Richmond)

6.7 MEASURES TO MINIMIZE HARM

Section 4(f), as applied by FRA and in this document, requires a description of the measures undertaken to minimize harm where the Preferred Alternative will result in a Section 4(f) use and where there is no feasible and prudent alternative to that use. Minimization measures are not required when a finding of *de minimis* use is made for Section 4(f) resources because Section 4(f) is satisfied once *de minimis* applies.

FRA has determined that all impacts to parklands, recreational areas, and wildlife refuges will result in *de minimis* impacts; therefore, no further minimization measures are required.

FRA has determined that the Preferred Alternative will result in a Section 4(f) use of 17 historic resources. For all 17 resources with Section 4(f) use, as presented below in north-to-south order, FRA and DRPT evaluated measures to minimize harm and identified mitigation measures for unavoidable impacts.¹⁷ The following sections describe these measures for each of the 17 resources. Full details of mitigation measures are included in the Section 106 Draft Memorandum of Agreement (MOA), which is Appendix K of this Final EIS.

6.7.1 Richmond, Fredericksburg, and Potomac Railroad (500-0001)

The Preferred Alternative is parallel to, and in some instances overlaps, the historic RF&P Railroad, which extends from the Potomac River on the north to Main Street Station on the south. The design of the Project has minimized impacts on the extant rail corridor to the maximum extent practicable through retention of the general alignment, maintenance of existing tracks, and minimizing the LOD outside of the current right-of-way. Preferred Alternative impacts come through replacement of several contributing bridges and culverts—replacements that are required to bring the alignment in compliance with current safety standards and operational protocols—as well as modifications to the Doswell Tower and Main Street Station which are contributing elements to this resource. Measures to mitigate the adverse impacts are detailed in the Section 106 Draft MOA (Appendix K) and include the following:

- Architectural evaluation/Phase II-level study of bridges to be demolished as part of the Project that are contributing elements to the railroad district
- Oral histories of two individuals with an in-depth knowledge/long tenure working on structures along the historic RF&P
- Creation of an online Project map/story board to highlight historic properties along the corridor

6.7.2 RF&P Bridge over Occoquan River (500-001-0022)

The circa 1915 bridge carries the rail over the Occoquan River. Plans include the construction of a new bridge adjacent to the existing structure and physical modifications to the bridge approach. To minimize harm, the existing bridge will be left intact and the new bridge will be constructed to the east of the existing structure, with both bridges to be used for rail travel after the modifications. The new bridge will mirror the general configurations of the historic structure.

¹⁷ In addition to the 17 resources with Section 4(f) use, FRA and DRPT evaluated measures to avoid and mitigate the remaining 4 adversely effected Section 106 resources with no Section 4(f) use, as part of the Section 106 process. Similarly, commitments have been made to conduct additional studies on the Grave Yard for Free People of Color and Slaves (44HE1203) outside of the Section 106 and 4(f) processes. Details on all commitments are included in the list of Project commitments, which is provided as a preface to the chapters in this Final EIS.

Changes to the rail system were also minimized to the greatest degree possible. However, the work still includes physical encroachment on the NRHP-eligible boundaries of this resource. Mitigation measures are detailed in the Section 106 Draft MOA (Appendix K) and include the following:

- Design review of new structure to assure historic resource compatibility
- Historic American Engineering Record (HAER) documentation of extant structure to include measured drawings, large-format photographs, archival research and production of HAER report

6.7.3 Site 44ST1223 (Civil War Campsite)

This resource includes the remains of a Civil War-era encampment used during the winter of 1862 through spring 1863. The camp was purposefully placed along the historic rail corridor for ease of access to both transportation and goods.

There is no avoidance alternative; however, revised designs of the Preferred Alternative have further minimized harm by reducing the LOD to the greatest degree possible in this area while still meeting all required safety and design components. Mitigation of impacts to this resource are detailed in the Section 106 Draft MOA (Appendix K) and includes the following:

- Archaeological data recovery on the portion of the site to be impacted by the Project
- Installation of interpretive sign on archaeology and camp life in a location deemed appropriate by NPS-Fredericksburg
- Scholarly article discussing the historical and archaeological importance of the site

6.7.4 Rappahannock River Railroad Bridge and Associated Structures/Platform (111-0132-0025) and Fredericksburg Historic District (111-0132)

These resources include the bridge that carries the railroad tracks across the Rappahannock River, the rail passenger platform, and a series of raised structures that bring the rail through Fredericksburg. All are contributing elements to the surrounding Fredericksburg Historic District. The bridge and the raised rail facility were constructed in 1927 when the rail was raised to avoid at-grade crossings in the city's core. The resource only included the bridge during preliminary studies associated with the Draft EIS but the historic boundaries were expanded to include all rail structures during architectural evaluation studies completed in association with the Final EIS. The Preferred Alternative includes the construction of a new bridge adjacent to the extant structure, which will not in itself result in a 4(f) use, as well as the replacement and repair of some of the structural elements and the rail platform; these constitute a use.

The bridge, structural elements, and platform are contributing elements to the Fredericksburg Historic District. The changes associated with these elements will cause physical impacts to the district. In addition, the construction of a new parking deck, building a new rail station, and modifications to the roadways will cause additional physical impacts. For all of these resources, there is no avoiding these impacts. In an effort to minimize harm, Project engineers worked with cultural resource professionals to reduce the impacts to the greatest degree possible while still meeting the Project's Purpose and Need as well as applicable rail standards.

Mitigation of impacts to these resources are detailed in the Section 106 Draft MOA (Appendix K). For the Rappahannock River Railroad Bridge and associated structures and platform (111-0132-0025), mitigation includes:

- Design review of new structure to assure historic resource compatibility
- HAER documentation of extant structure to include measured drawings, large-format photographs, archival research, and the production of HAER report
- Cultural landscape study of the Rappahannock River watershed and historic transportation crossings within the City of Fredericksburg

For the Fredericksburg Historic District (111-0132), mitigation includes:

- Design review of new parking deck and passenger train station to assure historic district compatibility
- Historic context on the evolution of the rail system in downtown Fredericksburg
- Lecture for the general public on the results of the contextual study on the evolution of the railroad in Fredericksburg
- Abbreviated narrative for use in developing a webpage on the history of the railroad in Fredericksburg, as well as details of the Project

6.7.5 Site 44SP0187 (Bridge/Marye's Mill), Site 44SP0688 (Block 49) and Site 44SP0687 (Block 48)

Site 44SP0187 comprises a set of stone piers located within and directly adjacent to the Rappahannock River, just east of the rail trestle, in Fredericksburg. The piers may represent a mill once located in this area or be associated with the pre-1927 rail bridge, but additional research is needed to determine their exact use. Sites 44SP0688 (Block 49) and 44SP0687 (Block 48) are newly recorded resources that were not presented in the Draft EIS. Modifications to the LOD in this area due to additional engineering associated with the Preferred Alternative resulted in their addition to the list of historic properties. These two sites represent two blocks of dense historic use straddling the rail corridor just west of the river. The footprints of all three sites overlap with the LOD for the new Rappahannock River rail bridge and associated structural/platform modifications. Construction of the bridge, and more specifically the approach to the structures and the construction of the structures/platform themselves, will physically impact significant archaeological deposits. DRPT evaluated alternatives to the currently designed bridge approach/structural changes of the Preferred Alternative in order to minimize harm to these archaeological sites; however, other approaches and new structural locations caused greater disturbances to nearby historic properties. The footprint of the Project was lessened to the greatest extent possible to minimize impacts on the site. Mitigation measures for the impacts to these resources are detailed in the Section 106 Draft MOA (Appendix K) and include the following:

- Archaeological data recovery on the portions of each site to be impacted by the Project
- Scholarly article discussing the historical and archaeological importance of the sites
- Lecture presented to the general public on the history and archaeology of the three sites
- Museum display in new Fredericksburg passenger station to highlight the sites and showcase artifacts retrieved during data recovery

- Interpretive sign to be placed within or near Fredericksburg passenger station describing the archaeology of the area

6.7.6 Site 44SP0468 (Earthworks/Jackson's Earthworks)

This set of earthworks is located on both sides of the railroad tracks south of Fredericksburg. They represent the intense occupation of the Fredericksburg area by both Union and Confederate armies throughout the duration of the Civil War. Additional archaeological studies completed after the publication of the Draft EIS associated with LOD modifications resulted in the expansion of this site. Proposed work in this area will include construction of a third railroad track, which will result in impacts to this archaeological site. Because the site straddles the track, there is no avoidance alternative. Impacts were minimized through design efforts of DRPT to reduce the LOD as much as possible while still achieving the Project goals. Mitigation of impacts to this resource are outlined in the Section 106 Draft MOA (Appendix K) and includes the following:

- Archaeological data recovery on the portion of the site to be impacted by the Project
- Installation of interpretive sign on archaeology and camp life in a location deemed appropriate by NPS-Fredericksburg
- Scholarly article discussing the historical and archaeological importance of the site

6.7.7 Doswell Historic District (042-5448) and Doswell Depot and Tower (042-0093)

The Doswell Historic District is located at the intersection of the main rail corridor (historic RF&P Railroad) and the Buckingham Branch Railroad, which was historically a main line of the Chesapeake and Ohio Railroad. The community developed around the two railroads, including a store, a bank, an inn, and numerous dwellings. The current rail station and associated tower were built in 1929. The district straddles the extant rail lines and, as such, the Project runs through the center of the district. Similarly, the depot is located on the west of the tracks while the associated tower is on the east side of the tracks, and the existing rail that is part of the DC2RVA Project corridor threads through the narrow space in between these two historic buildings.

DRPT carefully refined plans of the Preferred Alternative in this area to minimize impacts to the district. Original design concepts ranged from a rail bridge spanning the historic district to enlarging the intersection to accommodate additional rail traffic. DRPT conducted consulting party charrettes on the design of the rail in this location (see Appendix E of this Final EIS for additional details). The resulting plans are greatly reduced and minimize the footprint in this area to the maximum extent practicable. Plans for utilities were also minimized to limit impacts. Despite these efforts, the rail will be widened on the east side of the railroad right-of-way in the vicinity of the Doswell interlocking tower, a contributing element to the district, causing the tower to be moved from its original location to a new site to the east. While retention of the tower minimizes the Project impacts, moving the structure constitutes a 4(f) use. Mitigation measures for the adverse effects to these resources are detailed in the Section 106 Draft MOA (Appendix K), and include the following:

- NRHP nomination form for the Doswell Historic District
- Virginia state historical highway marker on the Doswell Historic District
- Abbreviated narrative for use in developing a webpage on the history of Doswell, as well as details of the Project

- Historic American Building Survey (HABS) Level II documentation of the tower to include measured drawings, large-format photography, archival research, and production of a HABS report
- Move tower from limits of disturbance to new site adjacent to tracks but outside Project limits
- Interpretive sign to be placed within or near depot or tower on the history of the resource

6.7.8 Berkleytown Historic District (166-5073)

This historic district is located southeast of the intersection of the railroad and Vaughan Road (Archie Cannon Drive). The area was settled by African-American residents of Ashland as a domestic enclave outside of town. The Preferred Alternative includes the construction of an overpass bringing the roadway over the rail in this area, thus requiring physical modifications to the road system inside the district boundaries and the construction of a new, large structure within the viewshed of the district. Project engineers have worked to refine Preferred Alternative plans in this area to minimize impacts to the district, including narrowing the LOD to the degree possible while still achieving the Project Purpose and Need. The footprint of the road has thus been minimized, but changes to the original road configuration are still required, as well as building the new overpass itself. Mitigation for these impacts is detailed in the Section 106 Draft MOA (Appendix K), and includes the following:

- Design review of new road structure (Vaughan Road) to assure historic district compatibility
- Oral histories of two individuals with long tenure living or working in district
- NRHP nomination form for the historic district
- Create text for historic walking tour of district in consultation with Town of Ashland and Ashland Museum
- Virginia state historical highway marker on the Berkleytown Historic District

6.7.9 Laurel Industrial School Historic District (043-0292) and Main Building/Robert Stiles Building (043-0292-0001)

The historic district and main building are located west of Hungary Road. The school was established in 1892 to educate wayward youth; the main building was constructed as the primary administrative center in 1985. The Preferred Alternative involves the construction of an overpass to bring Hungary Road over the railroad corridor. The new overpass will result in physical modifications to the road system within the district and surrounding the main building. It will also involve the construction of the overpass itself, a new visual element. Engineering associated with the Preferred Alternative was minimized to the greatest degree possible, including lowering the height of the overpass and narrowing the LOD to minimize road changes while meeting the Project Purpose and Need. Mitigation for the impacts to both resources is detailed in the Section 106 Draft MOA (Appendix K), and includes the following:

- Design review of new road structure (Hungary Road) to assure historic district compatibility
- Historic context on late-nineteenth/early-twentieth century reform schools in Central Virginia

- Series of georeferenced, GIS-based overlays to illustrate the evolution of the landscape and road system in this area
- Interpretive sign to be placed within or near Main Building/Robery Styles Building on the history of the resource

6.7.10 Shockoe Valley and Tobacco Row Historic District (127-0344) and Main Street Station Trainshed (127-0172)

The Shockoe Valley and Tobacco Row Historic District comprises the historic core of Shockoe Bottom and includes resources spanning the eighteenth through twentieth centuries. Main Street Station, located within the district, was built in 1901 as the main terminal for the Seaboard Air Line (SAL) Railroad and was a major station for the historic Chesapeake and Ohio Railroad. The property includes the Beaux Arts-style station as well as the associated trainshed, platform, and other landscape elements. The area within the district and around Main Street Station has been the subject of extensive coordination and consultation among FRA, DRPT, the City of Richmond, other cooperating agencies, consulting parties, ACHP, and the public. DRPT worked to minimize the extent of the changes to the District and its contributing elements by making the footprint of the Preferred Alternative as minimal as possible, reducing the size of the new platforms, and committing to include design review in the final designs to minimize harm to this resource. This includes avoiding recorded nearby archaeological sites associated with the slave trade, such as the “Burial Ground for Negroes” (44HE1089) and Lumpkins Jail/Devil’s Half Acre (44HE1053). In addition, DRPT will conduct archaeological studies in all pier locations within the historic district, regardless of the presence or absence of recorded sites to assure that any intact archaeological sites in the LOD are explored. The Section 106 Draft MOA (Appendix K) details all mitigation for the adverse effects to the Shockoe Valley and Tobacco Row Historic District and Main Street Station, and includes the following:

- Design review of platform and other station modifications to assure historic district compatibility
- Development of historic context on the association of the slave trade and the RF&P railroad/ the downtown Richmond segment of the Virginia Central Railroad and other precursors of the Chesapeake and Ohio/Seaboard Railroad
- Lecture presented to the general public on the association of the slave trade and the RF&P railroad/ the downtown Richmond segment of the Virginia Central Railroad and other precursors of the Chesapeake and Ohio/Seaboard Railroad
- Work with City of Richmond and others to create boundaries for a potential slave trade-related historic district in Shockoe Bottom
- Fabrication and installation of a Virginia state historical highway marker documenting the slave trade and nearby associated sites
- Design review of platform modifications and new structures to assure resource compatibility
- Development of historic context on the evolution of the rail system in downtown Richmond
- Creation of webpage documenting the evolution of the rail system in downtown Richmond

6.7.11 Seaboard Air Line (SAL) Railroad Corridor (127-6271)

The historic SAL Railroad was a competing company to the ACL. This operation also ran between Richmond and Florida, commencing at Main Street Station and crossing the James River, then running parallel to the ACL before veering west in Petersburg. Known today as the “S-Line,” this historic property is composed of the rail itself, stations, track houses, and structures. As with the RF&P, DRPT vigorously sought to minimize harm by narrowing the LOD where possible, maintaining historic bridges, and reusing the extant corridor. Despite these efforts, several structures—and Main Street Station itself—require modifications to meet ridership needs and safety features. As such, avoidance of all contributing elements is not possible. Due to the adverse effect/use of the property, the Section 106 Draft MOA (Appendix K) includes mitigation measures to address the adverse effects to the SAL, and includes the following:

- Design review of modifications to contributing elements to the district to assure resource compatibility
- Development of historic context on railroad depots along the SAL Railroad in Virginia
- Document stations and towers that are contributing elements to the Seaboard Air Line Railroad that have not been previously recorded with the Virginia SHPO

6.8 COORDINATION

This section describes the Section 4(f) coordination with the agencies with jurisdiction over the properties and the U.S. Department of the Interior (DOI), including correspondence and meetings:

- Section 6.8.1 describes the coordination related to parks, recreation areas, and wildlife and waterfowl refuges.
- Section 6.8.2 describes the coordination related to historic resources.
- Section 6.8.3 describes the coordination with the DOI.

6.8.1 Parks, Recreation Areas, Wildlife and Waterfowl Refuge Coordination

Throughout the Project, DRPT has coordinated with the Section 4(f) resource owners regarding permanent incorporation and temporary occupancy of park resources, as summarized in Table 6.8-1. Copies of letters and concurrence statements are included in Appendix U of the Draft EIS and Appendix E of the Final EIS.



National Park Service's Fredericksburg and Spotsylvania National Military Park (Area 3)

Table 6.8-1: Parks, Recreation, Wildlife and Waterfowl Refuge Section 4(f) Coordination

Resource Owner	Type ¹	Date	Purpose
Arlington County Department of Parks and Recreation	Letter	June 16, 2017	Provided summary of preliminary impacts to Long Bridge Park and Mount Vernon Trail and requested concurrence with <i>de minimis</i> use and temporary occupancy
NPS – George Washington Memorial Parkway Headquarters	Letter	June 16, 2017	Provided summary of preliminary impacts and requested concurrence regarding temporary occupancy of George Washington Memorial Parkway
City of Alexandria	Letter	June 30, 2017	Provided summary of preliminary impacts and requested concurrence with <i>de minimis</i> use and temporary occupancy of Dog Run Park at Carlyle
NPS – Fredericksburg and Spotsylvania National Military Park	Letter	June 16, 2017	Provided summary of preliminary impacts and requested concurrence regarding temporary occupancy of Fredericksburg and Spotsylvania National Military Park
Prince William County Parks and Recreation Department	Letter	June 16, 2017	Provided summary of preliminary impacts and requested concurrence regarding temporary occupancy of Veterans Memorial Park
Town of Ashland Parks and Recreation	Letter	June 16, 2017	Provided summary of preliminary impacts and requested concurrence regarding temporary occupancy of North Ashland Park, and Railside Park, and <i>de minimis</i> use of Carter Park
Hanover County Department of Parks and Recreation	Letter	June 16, 2017	Provided summary of preliminary impacts and requested concurrence regarding <i>de minimis</i> use of Ashland Trolley Line
Virginia Department of Game and Inland Fisheries	Letter	June 16, 2017	Provided summary of preliminary impacts and requested concurrence regarding temporary occupancy of Mattaponi Wildlife Management Area
Maggie Walker Governors School	Letter	June 16, 2017	Provided summary of preliminary impacts and requested concurrence regarding temporary occupancy of Maggie Walkers Governors School Fields
City of Richmond, Department of Public Works	Letter	June 16, 2017	Provided summary of preliminary impacts and requested concurrence with <i>de minimis</i> use and temporary occupancy of Walker's Creek Retention Basin Park
Prince William County Parks and Recreation	Response Letter	June 29, 2017	Concurrence with temporary occupancy of Veterans Memorial Park
Virginia Department of Game and Inland Fisheries	Meeting	July 14, 2017	Discussed Section 4(f) impacts
City of Alexandria	Teleconference	July 14, 2017	Discussed Section 4(f) impacts
Town of Ashland	Meeting	July 14, 2017	Discussed Section 4(f) impacts
NPS – George Washington Memorial Parkway	Meeting	August 29, 2017	Project update
Arlington County	Response Letter	September 8, 2017	Expressed concern with <i>de minimis</i> assumption based on Draft EIS impacts
Virginia Department of Game and Inland Fisheries	Response Letter	October 12, 2017	Concurrence with temporary occupancy of Mattaponi Wildlife Management Area

► Continued – see end of table for notes.

Table 6.8-1: Parks, Recreation, Wildlife and Waterfowl Refuge Section 4(f) Coordination

Resource Owner	Type ¹	Date	Purpose
Arlington County	Meeting	February 2, 2018	Review of Draft EIS comments
City of Richmond, Department of Public Works	Letter	October 22, 2018	Provided update of impacts, requested concurrence with <i>de minimis</i> use and temporary occupancy of Walker's Creek Retention Basin Park
City of Richmond, Department of Parks, Recreation, and Community Facilities	Letter	October 22, 2018	Provided update of impacts, requested concurrence with <i>de minimis</i> use and temporary occupancy of Walker's Creek Retention Basin Park
Arlington County Department of Parks and Recreation	Letter	October 29, 2018	Provided update of impacts to Long Bridge Park and Mount Vernon Trail, and requested concurrence with temporary occupancy for Long Bridge Park
NPS – George Washington Memorial Parkway Headquarters	Letter	October 29, 2018 and December 6, 2018	Provided update of impacts and requested concurrence regarding temporary occupancy of George Washington Memorial Parkway and Mount Vernon Trail
City of Alexandria	Letter	October 29, 2018	Provided update of impacts and requested concurrence with temporary occupancy of Dog Run Park at Carlyle, Four Mile Run Trail, Potomac Yard Park, Potomac Yard Landbay N., and Rail Park
NPS – Fredericksburg and Spotsylvania National Military Park	Letter	October 29, 2018	Provided update of impacts and requested concurrence regarding temporary occupancy of Fredericksburg and Spotsylvania National Military Park
Prince William County Parks and Recreation Department	Letter	October 29, 2018	Provided update of impacts and requested concurrence regarding temporary occupancy of Veterans Memorial Park
Henrico County Recreation and Parks	Letter	October 29, 2018	Provided impacts and requested concurrence regarding temporary occupancy of Laurel Recreation Area
Henrico County Recreation and Parks	Response Letter	October 31, 2018	Concurrence regarding temporary occupancy of Laurel Recreation Area
Prince William County Parks and Recreation Department	Response Letter	November 2, 2018	Concurrence regarding temporary occupancy of Veterans Memorial Park
City of Richmond, Department of Public Works	Response Letter	November 16, 2018	Concurrence regarding <i>de minimis</i> use and temporary occupancy of Walker's Creek Retention Basin Park
NPS – Fredericksburg and Spotsylvania National Military Park	Response Letter	December 7, 2018	Concurrence regarding temporary occupancy of Fredericksburg and Spotsylvania National Military Park
NPS – George Washington Memorial Parkway Headquarters	Response Letter	December 12, 2018	Concurrence regarding temporary occupancy of George Washington Memorial Parkway and Mount Vernon Trail
City of Alexandria	Response Letter	December 13, 2018	Concurrence regarding temporary occupancy of Dog Run Park at Carlyle, Four Mile Run Trail, Potomac Yard Park, Potomac Yard Landbay N., and Rail Park
Arlington County Department of Parks and Recreation	Response Letter	December 18, 2018	Concurrence regarding temporary occupancy of Long Bridge Park

Notes: 1. "Letter" denotes a letter from DRPT to the resource owner; "Response Letter" denotes a letter from the resource owner to DRPT. Row highlighted in gray denotes meeting that was held or letter sent/received subsequent to the release of the Draft EIS in September 2017.

6.8.2 Historic Resources Section 4(f) Coordination

DRPT coordinated with numerous property owners and officials with jurisdiction over resources protected under Section 4(f), both before and after the issuance of the Draft EIS. Most of the coordination was done as part of the Section 106 process, but, when relevant, Section 4(f) was also discussed. In total, DRPT held over 50 meetings and formal conference calls with interested parties and sent over 75 formal emails and letters soliciting feedback from consulting parties, interested citizens, and involved agencies. In addition, by letter dated December 4, 2018, DRPT notified the DHR of FRA's 4(f) determinations, including all *de minimis* determinations. By letter dated January 4, 2019, DHR acknowledged FRA's 4(f) determinations. Full rosters of all coordination efforts and copies of all of the correspondence can be found in Appendix U of the Draft EIS and Appendix E of the Final FEIS.

6.8.3 U.S. Department of Interior

The Draft Section 4(f) Evaluation was included as Chapter 5 of the Draft EIS and submitted to the DOI for review in September 2017. Comments were received from several DOI agencies on both documents and are presented in Appendix B1 of this Final EIS.

This Final Section 4(f) Evaluation is being submitted to DOI for review and their concurrence will be provided in the Record of Decision.

6.9 FINAL SECTION 4(F) EVALUATION

FRA will issue its final Section 4(f) determination as part of the Record of Decision for the DC2RVA Project.