



APPENDIX F

DRAFT SECTION 4(f) EVALUATION

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U.S. Department
of Transportation

**Federal Highway
Administration**

MDOT MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

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ABBREVIATIONS AND ACRONYMS

ACHP	Advisory Council on Historic Preservation
BRT	Bus Rapid Transit
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CLRP	Constrained Long-Range Plan
DEIS	Draft Environmental Impact Statement
DOI	Department of the Interior
EIS	Environmental Impact Statement
ESD	Environmental Site Design
ETL	Express Toll Lane
FAST	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
GP	General Purpose
HOT	High-Occupancy Toll

HOV	High-Occupancy Vehicle
HUD	Housing and Urban Development
ICC	Intercounty Connector
ICM	Innovative Congestion Management
LOD	Limits of Disturbance
LWCF	Land Water Conservation Fund
MDE	Maryland Department of the Environment
MDNR	Maryland Department of Natural Resources
MDOT SHA	Maryland Department of Transportation State Highway Administration
MDTA	Maryland Transportation Authority
MHT	Maryland Historical Trust
M-NCPPC	Maryland-National Capital Park and Planning Commission
NCA	Neighborhood Conservation Area
NCPC	National Capital Planning Commission
NEPA	National Environmental Policy Act
NHP	National Historic Preservation
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
OWJ	Official(s) with Jurisdiction
PA	Programmatic Agreement
POS	Program Open Space
SHPO	State Historic Preservation Office(r)
SVP	Stream Valley Park
THPO	Tribal Historic Preservation Office(r)
TPB	Transportation Planning Board
U.S.C.	United States Code
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
VDHR	Virginia Department of Historic Resources
VDOT	Virginia Department of Transportation
VMT	Vehicle Miles Traveled

1

1 INTRODUCTION

1.1 Overview

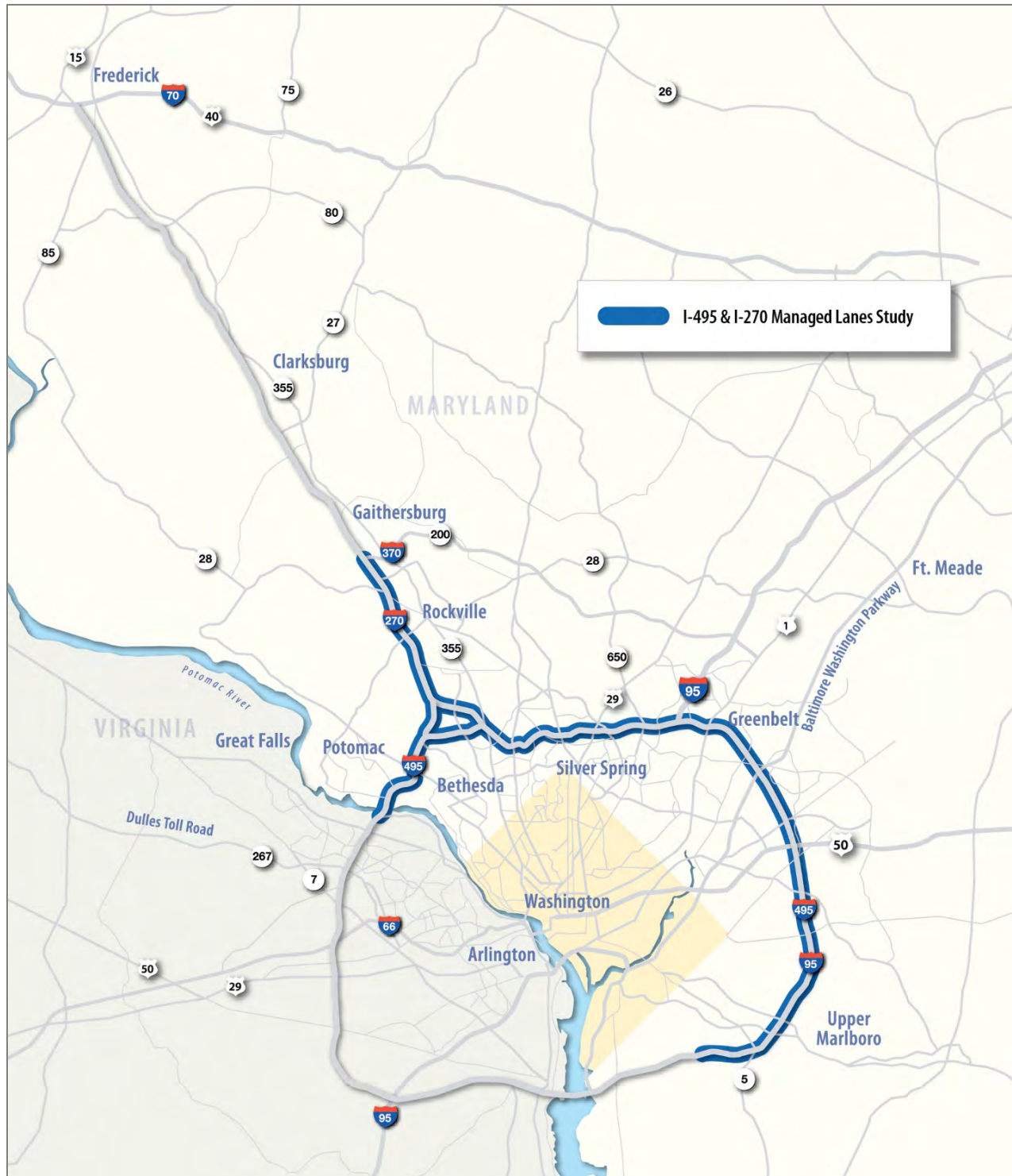
The Federal Highway Administration (FHWA), as the Lead Federal Agency, and the Maryland Department of Transportation State Highway Administration (MDOT SHA), as the Local Project Sponsor, are preparing an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA) for the I-495 & I-270 Managed Lanes Study (Study). The Study is evaluating potential transportation improvements to portions of the I-495 and I-270 corridors in Montgomery and Prince George's County, Maryland, and Fairfax County, Virginia. Specifically, the Study extends along I-495 from south of the American Legion Bridge in Fairfax County, Virginia, to west of MD 5 in Prince George's County, Maryland; and along I-270 from I-495 to north of I-370 in Montgomery County, Maryland, including the east and west I-270 spurs north of I-495 (**Figure 1-1**).

The EIS is being prepared in accordance with FHWA and Council on Environmental Quality (CEQ) regulations at 40 CFR 1500-1508 implementing NEPA and provisions of the Fixing America's Surface Transportation (FAST) Act of 2015 (Pub. L. No. 114-94). The content of the EIS also conforms to CEQ guidelines, which provide direction regarding implementation of the procedural provisions of NEPA, and the FHWA's *Guidance for Preparing and Processing Environmental and Section 4(f) Documents* (Technical Advisory T6640.8A, October 1987).

MDOT SHA established a Corridor Study Boundary for the Study that extends 300 feet to either side of the existing right-of-way along I-495 and I-270. This Draft Section 4(f) Evaluation describes Section 4(f) lands identified within the Corridor Study Boundary and potential use of the lands. Section 4(f) of the US Department of Transportation Act of 1966 as amended (49 U.S.C. Section 303) stipulates that the US Department of Transportation (USDOT), including FHWA, cannot approve the use of land from a significant publicly-owned public park, recreation area, wildlife or waterfowl refuge, or significant public or private historic site unless certain conditions apply, as described in **Section 1.2 Regulatory Context**.

The following sections in the **Introduction** present the regulatory context of Section 4(f), the Purpose and Need for the Study, and the alternatives evaluated in the EIS.

Figure 1-1: Limits of Managed Lanes Study



1.2 Regulatory Context

Section 4(f) of the US Department of Transportation Act of 1966 as amended (49 U.S.C. 303(c) and 23 U.S.C. 138) is a Federal Law that protects properties defined in 23 CFR 774.17 as “publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance.” Section 4(f) applies to all transportation projects that require funding or other approvals by the USDOT. As a USDOT agency, FHWA must comply with Section 4(f) and its implementing regulations at 23 CFR 774.

Regulations at 23 CFR 774.11(c) state Section 4(f) applies to a park, recreation area, or wildlife and waterfowl refuge determined to be significant. For properties where no determination exists, “the Section 4(f) property will be presumed to be significant.” 23 CFR 774.17 further defines “Historic site” to include any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). The criteria for defining a site as eligible for inclusion in the National Register is further detailed in **Section 1.2.8 (C)**.

FHWA cannot approve a transportation project that uses any Section 4(f) property, unless:

- FHWA determines that there is no feasible and prudent avoidance alternative to the use of land from the property, and the action includes all possible planning to minimize harm to the property resulting from such use (23 CFR 774.3(a)); or
- FHWA determines that the use of Section 4(f) property, including any measures to minimize harm (such as avoidance, minimization, mitigation, or enhancements measures) committed to by the applicant, will have a *de minimis* impact on the property (23 CFR 774.3(b)).

1.2.1 Roles and Responsibilities of Participants

A. Federal Highway Administration (FHWA)

The authority to administer Section 4(f) and make Section 4(f) approvals resides with the Secretary of the USDOT. The Secretary of Transportation has delegated the authority for administering Section 4(f) to the FHWA Administrator in 49 CFR 1.48. Authority has been re-delegated to FHWA Division Administrators by *FHWA Order M1100.1A*, Chapter 5, Section 17e and Chapter 6, Section 7d. Any approval of the use of Section 4(f) property, other than a use with a *de minimis* impact or a use processed with an existing programmatic Section 4(f) evaluation is subject to legal sufficiency review by the Office of Chief Counsel.

B. State Historic Preservation Officer (SHPO)

The regulations define the entities and individuals who are considered the officials with jurisdiction (OWJ) for various types of property in 23 CFR 774.17. In the case of historic sites, the official with jurisdiction is the SHPO. The Maryland SHPO is the Maryland Historical Trust (MHT). The Virginia SHPO is the Virginia Department of Historic Resources.

C. Advisory Council on Historic Preservation (ACHP)

When the Advisory Council on Historic Preservation (ACHP) is involved in consultation concerning a property under Section 106 of the National Historic Preservation Act (NHPA), the ACHP is also the official with jurisdiction over that resource for the purposes of Section 4(f). FHWA notified ACHP on March 26,

2018 of the Managed Lanes Study. ACHP chose to participate in Section 106 consultation in a letter dated May 22, 2018.

Per 36 CFR 800.5(b), an agency official “in consultation with the SHPO/THPO” may propose a finding of no adverse effect when the undertakings do not meet the criteria of an adverse effect. Under Section 106, the ACHP is only involved in reviewing a SHPO decision if there is disagreement with a Section 106 finding (36 CFR 800.5(c)(2)(ii) and 800.5(c)(3)). For these reasons, the ACHP will only be informed of FHWA’s intent to apply *de minimis* on properties where there is no disagreement. Because there is a Section 106 finding of no adverse effect, the ACHP has no role in acknowledging FHWA’s intent to apply *de minimis*. As a result, for this Study the ACHP will only act as the official with jurisdiction over historic properties that would experience an impact greater than *de minimis*.

D. National Park Service (NPS)

Under Section 4(f) regulations at 23 CFR 774.5(a), DOT must coordinate with the Department of Interior (DOI) prior to making Section 4(f) approvals under 23 CFR 774.3(a). NPS usually serves as DOI’s lead bureau for preparing comments on projects that may affect units of the National Park System, other public park and recreation resources, historic and archaeological properties, and unique natural areas. When a Section 4(f) property is a National Historic Landmark (NHL), the designated official with jurisdiction over the resource for the purposes of Section 4(f) is the NPS. There were two NHLs inventoried within the Corridor Study Boundary: Washington Aqueduct and Greenbelt Historic District.

E. Officials with Jurisdiction over Parks

In the case of public parks, recreation areas, and wildlife and waterfowl refuges, the OWJ are the officials of the agency or agencies that own or administer the property in question and who are empowered to represent the agency on matters related to the property. There are no wildlife and waterfowl refuges within the Corridor Study Boundary. There are eight OWJ over parkland inventories in the Corridor Study Boundary: NPS; Maryland-National Capital Park and Planning (M-NCPPC), Montgomery County; M-NCPPC, Prince George’s County; Montgomery County Public Schools Board of Education; City of Gaithersburg; City of Greenbelt; City of New Carrollton; and City of Rockville.

Some public parks, recreation areas, and wildlife and waterfowl refuges are also historic properties included in, or eligible for inclusion in the NRHP. In other cases, historic sites are located within the property boundaries of public parks, recreation areas, and wildlife and waterfowl refuges. When either of those situations exists and a project alternative proposes use of land from the historic site, there will be more than one official with jurisdiction.

F. Coordination with Officials with Jurisdiction

The regulations require coordination with the official(s) with jurisdiction for the following situations prior to Section 4(f) approval (recognizing that additional coordination may be required under other statutes or regulations):

- Prior to making approvals (23 CFR 774.3(a))
- Determining least overall harm (23 CFR 774.3(c))
- Applying Section 4(f) to properties that are subject to Federal encumbrances (23 CFR 774.5(d))

- Applying Section 4(f) to archaeological sites discovered during construction (23 CFR 774.9(e))
- Determining if a property is significant (23 CFR 774.11(c))
- Determining application to multiple-use properties (23 CFR 774.11(d))
- Determining applicability of Section 4(f) to historic sites (23 CFR 774.11(e))
- Determining constructive use (23 CFR 774.15(d))
- Determining if proximity impacts will be mitigated to equivalent or better condition (23 CFR 774.15(f)(6)), and
- Evaluating the reasonableness of measures to minimize harm (23 CFR 774.3(a)(2) and 774.17).

The regulations require a finding that the official(s) with jurisdiction have been consulted and “have not objected” in the following situations:

- When applying the exception for maintenance, preservation, rehabilitation, operation, modernization, reconstruction, or replacement of historic transportation facilities (23 CFR 774.13(a)(3)), and
- When applying the exception for archaeological sites of minimal value for preservation in place (23 CFR 774.13(b)(2)).

The regulations require written concurrence of the official(s) with jurisdiction in the following situations:

- Finding there are no adverse effects prior to making *de minimis* impact findings (23 CFR 774.5(b));
- Applying the exception for temporary occupancies (23 CFR 774.13(d)), and
- Applying the exception for transportation enhancement activities and mitigation activities (23 CFR 774.13(g)).

1.2.2 Definition of Section 4(f) Use

Pursuant to 23 CFR 774.17, a “use” of Section 4(f) property occurs:

- When land is **permanently incorporated** into a transportation facility;
- When there is a **temporary occupancy** of land that is adverse in terms of the statute's preservation purpose as defined in 23 CFR 774.13(d); that is, when one of the following criteria for temporary occupancy are not met:
 - The duration of the occupancy must be less than the time needed for the construction of the project, and no change of ownership occurs;
 - Both the nature and magnitude of the changes to the Section 4(f) land are minimal;
 - No permanent adverse physical changes, nor interference with activities or purposes of the resources on a temporary or permanent basis, are anticipated;
 - The land must be returned to a condition that is at least as good as existed prior to the project; and
 - There is documented agreement with the appropriate Federal, State, or local officials having jurisdiction over the land that the above conditions have been met.

- When there is a **constructive use** of a Section 4(f) property. As defined in 23 CFR 774.15, a constructive use occurs when the transportation project does not incorporate land from a Section 4(f) property, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. The degree of impact and impairment must be determined in consultation with the OWJ in accordance with 23 CFR 774.15(d)(3).

A. **Constructive Use Analysis**

The purpose of constructive use analysis is to evaluate whether the proposed action, while not directly incorporating land from a Section 4(f) property(ies), has proximity impacts that would substantially impair the use or value of the resource(s). These analyses evaluate how the Proposed Action effects neighboring or nearby Section 4(f) properties and determines if impacts from the proposal would result in substantial impairment of the activities, features or attributes that qualify the resource for protection under Section 4(f). Constructive use analysis considers noise and visual intrusions, restrictions of access and vibrations.

Properties included in this constructive use analysis include public parks and recreation areas within or in close proximity to the Corridor Study Boundary, from which there will be no property taken. Section 106 of the National Historic Preservation Act of 1966 (36 CFR 800.5) identifies historic properties not encroached upon but possibly adversely effected (36 CFR 800.5), as having the potential for constructive use and would be additionally considered as Section 4(f) properties. MDOT SHA has not identified any properties in the latter category. In a concurrence letter dated March 12, 2020, MHT did not disagree with any of MDOT SHA's effect determinations.

Noise intrusions are considered constructive uses when there is substantial impairment to Section 4(f) property that derives some of its value and use from a generally accepted quiet setting. No constructive use would occur where the projected noise is mitigated to a level below that of the standards set by FHWA noise abatement criteria. Further, no constructive use would be considered when the projected noise increase is "barely perceivable" even when greater than FHWA noise abatement criteria. Barely perceivable is defined as a projected noise level increase of 3 dBA or less over existing no-build scenario noise levels. No constructive Section 4(f) uses are expected for noise intrusions as mitigation of noise impacts above the FHWA noise abatement criteria is being considered under the Proposed Action.

Visual intrusions are considered constructive use only if the property possesses significant aesthetic or visual qualities. Constructive use occurs only where there is substantial impairment of aesthetic features or attributes of the resource where such features or attributes are important contributing elements to the value of the resource. Per 23 CFR 774.15(e)(2), constructive use also occurs where the location of a transportation facility "substantially detracts from the setting of a Section 4(f) property which derives its value in substantial part from setting." Generally for Section 4(f) qualifying historic sites, as described in 36 CFR 60.4, properties listed or eligible for the NRHP under Criterion A would have to have a diminishment of the physical features that make up the character or appearance for which they are associated with in history. For a property eligible under NRHP Criterion C, the emphasis for determining substantial diminishment involves a degrading or loss of integrity of design or material, with lesser emphasis on changes to the integrity of location, setting, feeling and association.

Current engineering plans take mitigating measures for all Section 4(f) properties, providing retaining walls and noise barriers. Design of such walls in proximity to Section 4(f) properties will consider the features and attributes that qualify for the resource for protection and will be done in coordination with the relevant OWJ.

Restriction of access as constructive use is considered in the Section 4(f) process where access restrictions would create a substantial diminishment of the utility of a public park, recreation area or significant historic site. The Proposed Action provides direct access to two Section 4(f) properties: the Baltimore Washington Parkway and George Washington Memorial Parkway. Because access to Baltimore Washington Parkway and George Washington Memorial Parkway would not be restricted by the Proposed Action, constructive use in this manner is not applicable. No other permanent restriction of access would occur as a result of the Proposed Action. Temporary restriction of access to trails may occur during construction, would be coordinated with the OWJ and would not be considered a substantial diminishment of the use of the resource.

Vibration as constructive use involves vibration impacts from the operation of a project which substantially impairs the use of Section 4(f) properties. In the case of parks and recreation areas, substantial impairment from constructive vibration use would be the distraction from the primary activities of the property. With concern for historic properties, the literature review section of NCHRP 25-25/Task 72 *Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects* (September 2012) cites ample studies and provides a volume of evidence indicating operational highway traffic vibrations are below criteria for architectural or structural damage to nearby buildings. MDOT SHA is committed to monitor construction vibration at locations along the limits of the study adjacent to sensitive sites. It is expected that advance planning and monitoring during construction can effectively limit vibration to levels that will not cause any structural or architectural damage to resources protected by Section 4(f).

While constructive use is not anticipated, a final determination will be made in the Final Section 4(f) Evaluation.

1.2.3 Feasible and Prudent Avoidance Alternative

A feasible and prudent avoidance alternative avoids using any Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property (23 CFR 774.17). 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. The preservation purpose of Section 4(f) is described in 49 U.S.C. 303(a), which states: "It is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

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;
- It causes severe social, economic, or environmental impacts even after reasonable mitigation; 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 above that while individually minor, cumulatively cause unique problems, or impacts of extraordinary magnitude.

1.2.4 All Possible Planning

All possible planning means that all reasonable measures identified in the Section 4(f) Evaluation to minimize harm or mitigate for adverse impacts and effects must be included in the project (23 CFR 774.17).

For public parks, recreation areas and wildlife and waterfowl refuges, the measures may include (but are not limited to): design modifications; replacement of land or facilities of comparable value and function; or monetary compensation to enhance the remaining property or to mitigate the adverse impacts of the project in other ways.

For historic sites, the measures normally serve to preserve the historic activities, features, or attributes of the site as agreed by FHWA and the official(s) with jurisdiction over the Section 4(f) resource in accordance with the consultation process under 36 CFR 800.

In evaluating the reasonableness of measures to minimize harm, FHWA would consider the preservation purpose of the statute and:

- The views of the official(s) with jurisdiction over the Section 4(f) property;
- Whether the cost of the measures is a reasonable public expenditure in light of the adverse impacts of the project on the Section 4(f) property and the benefits of the measure to the property; and
- Any impacts or benefits of the measures to communities or environmental resources outside of the Section 4(f) property.

1.2.5 Least Overall Harm

Pursuant to 23 CFR 774.3(c)(1), if the avoidance analysis determines that there is no feasible and prudent avoidance alternative, then FHWA may only approve the alternative that causes the least overall harm. **Section 5** of this document provides a review and analysis of the alternatives that use one or more Section 4(f) property(ies). The analysis includes alternatives that would eliminate or reduce the use of individual Section 4(f) property(ies). The seven factors balanced and analyzed to identify the alternative with the least overall harm are listed in **Section 5**.

1.2.6 Exceptions to Section 4(f)

FHWA has identified various exceptions to the requirement for Section 4(f) approval. The following exceptions are applicable to this evaluation (23 CFR 774.13):

- The use of historic transportation facilities in certain circumstances:
 - Common post-1945 concrete or steel bridges and culverts that are exempt from individual review under 54 U.S.C. 306108;
 - Improvement of railroad or rail transit lines that are in use or were historically used for the transportation of goods or passengers, including but not limited to, maintenance, preservation, rehabilitation, operation, operation, modernization, reconstruction, and replacement of railroad or rail transit line elements, except for: stations, bridges or tunnels on rail lines that have been abandoned, or historic sites unrelated to railroad or transit lines; and
 - Maintenance, preservation, rehabilitation, operation, modernization, reconstruction, or replacement of historic transportation facilities, if the administration concludes, as a result of the consultation under 36 CFR 800.6, that: (i) such work would not adversely affect the historic qualities of the facility that caused it to be on or eligible for the National Register, or this work achieves compliance with Section 106 through a program alternative under 36 CFR 800.14; and (II) the OWJ over the Section 4(f) resource have not objected to the Administration conclusion that the proposed work does not adversely affect the historic qualities of the facility that caused it to be on or eligible for the National Register, or the Administration concludes this work achieves compliance with 54 U.S.C. 306108 (Section 106) through a program alternative under 36 CFR 800.14.
- Archaeological sites that are on or eligible for the National Register when:
 1. The Administration concludes that the archeological resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place. This exception applies both to situations where data recovery is undertaken and where the Administration decides, with agreement of the official(s) with jurisdiction, not to recover the resource; and
 2. The official(s) with jurisdiction over the Section 4(f) resource have been consulted and have not objected to the Administration finding in paragraph (b)(1) of this section (above).
- Designations of park and recreation lands, wildlife and waterfowl refuges, and historic sites that are made, or determinations of significance that are changed, late in the development of a proposed action. With the exception of the treatment of archeological resources in § 774.9(e), the Administration may permit a project to proceed without consideration under Section 4(f) if the property interest in the Section 4(f) land was acquired for transportation purposes prior to the designation or change in the determination of significance and if an adequate effort was made to identify properties protected by Section 4(f) prior to acquisition. However, if it is reasonably

foreseeable that a property would qualify as eligible for the National Register prior to the start of construction, then the property should be treated as a historic site for the purposes of this section.

- Temporary occupancies of land that are so minimal as to not constitute a use within the meaning of Section 4(f). The following conditions must be satisfied:
 1. Duration must be temporary, i.e. less than the time needed for construction of the project, and there should be no change in ownership of the land;
 2. Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal;
 3. There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
 4. The land being used must be fully restored, i.e. the property must be returned to a condition which is at least as good as that which existed prior to the project; and
 5. There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.
- Certain trails, paths, bikeways, and sidewalks, in the following circumstances:
 1. Trail-related projects funded under the Recreational Trails Program, 23 U.S.C. 206(h)(2);
 2. National Historic Trails and the Continental Divide National Scenic Trail designated under the National Trails System Act, 16 U.S.C. 1241-1251, with the exception of those trail segments that are historic sites as defined in 774.17
 3. Trails, paths, bikeways, and sidewalks that occupy a transportation facility right-of-way without limitation to any specific location within that right-of-way, so long as the continuity of the trail, path, bikeway, or sidewalk is maintained (23 CFR 774.13(f)(3)); and
 4. Trails, paths, bikeways, and sidewalks that are part of the local transportation system and which function primarily for transportation. (23 CFR 774.13(f)(4))

1.2.7 *De minimis* Impacts

An impact to a significant public park, recreation area, or wildlife and waterfowl refuge may be determined to be *de minimis* if the transportation use of the Section 4(f) property, including incorporation of any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures), does not adversely affect the activities, features, or attributes that qualify the resource for protection under Section 4(f) (23 CFR 774.17). For historic sites, a *de minimis* impact means that FHWA has determined (in accordance with 36 CFR 800) that either no historic property is affected by the project or that the project will have "no adverse effect" on the historic property. A *de minimis* impact

determination does not require analysis to determine if avoidance alternatives are feasible and prudent, but consideration of avoidance, minimization, mitigation or enhancement measures should occur.

Following 23 CFR 774.5(b), the public should be afforded an opportunity to review and comment on the effects of the Proposed Action on the protected activities, features, or attributes of the Section 4(f) parks, recreation areas or wildlife and waterfowl refuges. Opportunity for public review applies to historic sites as well. This is accomplished during the Section 106 process. Documentation of consulting party involvement is required (23 CFR 774.5(b) and 774.7(b)). Moreover, the official(s) with jurisdiction over the property, after being informed of the public comments and FHWA's intent to make the *de minimis* impact finding, must concur in writing that the project will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).

1.2.8 Other Relevant Authority

A. Capper-Cramton Act of 1930

The Capper-Cramton Act of May 29, 1930 (46 Stat. § 482), as amended, is a federal statute enacted for the acquisition, establishment, and development of the George Washington Memorial Parkway and for the acquisition of lands in the District of Columbia, Maryland and Virginia for a comprehensive park, parkway, and playground system in and around the National Capital Region. The Capper-Cramton Act empowered the National Capital Planning Commission (NCPC) to acquire lands in Maryland and Virginia for the George Washington Memorial Parkway, owned by the federal government and operated by NPS. Property records provided by NPS indicate portions of Chesapeake and Ohio Canal National Historical Park and Clara Barton Parkway known as Tracts 114-006, 114-009, 119-034, 119-040, 119-043, 119-044, 120-001, 120-003, 120-008 were acquired by funds from the Capper-Cramton Act. All impacts to of Chesapeake and Ohio Canal National Historical Park and Clara Barton Parkway are within the above referenced tracts.

For those lands acquired for the park, parkway, and playground system, the Capper-Cramton Act states that land titles purchased with Capper-Cramton Act funds for the park, parkway, and playground system shall vest with the States of Maryland or Virginia and shall be developed and administered in accordance with plans approved by the NCPC. The M-NCPPC administers more than 2,200 acres of Maryland Stream Valley Parks in Montgomery and Prince George's Counties. Many of these lands were purchased with funds from the Capper-Cramton Act.

The Capper-Cramton Act is discussed in this Section 4(f) Evaluation because impacts to some park properties under the jurisdiction of M-NCPPC require additional coordination and approval under the Capper-Cramton Act. There are no implementing regulations or mitigation requirements associated with the Capper-Cramton Act. However, M-NCPPC is the designated applicant to NCPC for any proposed changes to parks funded by the Capper-Cramton Act. Inventoried parks that are known to have used funds from the Capper-Cramton Act are listed in **Table 1-1**.

Table 1-1: Section 4(f) Properties in the Corridor Study Boundary Acquired with Capper-Cramton Act Funds

George Washington Memorial Parkway	Rock Creek Stream Valley Park, Unit 2
Chesapeake and Ohio Canal National Historical Park	Locust Hill Neighborhood Park (previously part of Rock Creek Park)
Clara Barton Parkway	Sligo Creek Parkway
Cabin John Stream Valley Park, Unit 2	Northwest Branch Stream Valley Park, Unit 3
Rock Creek Stream Valley Park, Unit 3	Cabin John Regional Park

B. Section 6(f) of the Land and Water Conservation Fund Act

Section 6(f) of the Land and Water Conservation Fund Act of 1965 (LWCF) comprised a federal program of assistance to federal, state, and local governments for the acquisition of land and water for the benefit of all Americans. The LWCF is administered by the Department of Interior's NPS, which retains oversight of development projects that would cause impacts to or permanent conversion of recreational property acquired with LWCF monies. The implementing regulations at 36 CFR 59 apply solely to the "Program of Assistance to States." Section 36 CFR 59.1 discusses the post-completion responsibilities that "apply to each area of facility for which LWCF assistance is obtained, regardless of the extent of participation of the program in the assisted area or facility and consistent with the contractual agreement between NPS and the State. Responsibility for compliance and enforcement of these provisions rests with the State for both State and locally sponsored projects."

Section 6(f) is discussed concurrently with Section 4(f) because recreational properties could have been acquired or improved with funds from the LWCF. While mitigation opportunities are more flexible under Section 4(f) and may or may not include replacement land, Section 6(f) directs NPS to assure replacement lands are of equal value, location and usefulness (NPS, 2019). Therefore, Section 6(f) requirements may influence the Section 4(f) mitigation for this project. In Maryland, the Director of Land Acquisition and Planning of the Maryland Department of Natural Resources (MDNR) administers the program. In Virginia, the Director of the Department of Conservation and Recreation administers the program.

MDOT SHA has not identified any State or locally sponsored projects which received LWCF assistance from the "Program of Assistance to States" that would experience an impact from the Managed Lanes Study. NPS has informed MDOT SHA that the two properties identified in **Table 1-2**: received LWCF assistance from the federal side of the program. These properties are not subject to the specific requirements set forth in Section 6(f) and its implementing regulations are 36 CFR 59.

Table 1-2: Parks in the Corridor Study Boundary Improved or Acquired with funds from LWCF

Chesapeake and Ohio Canal National Historical Park	Baltimore Washington Parkway
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C. Section 106 of the National Historic Preservation Act

Section 106 of the NHPA as amended and its implementing regulations at 36 CFR 800 are intended to preserve historical and archaeological sites in the United States. Regulations require that each federal agency take into account the effects of their undertakings on historic properties and to provide the Advisory Council on Historic Preservation (ACHP) with a reasonable opportunity to comment. Section 106 requires that federal agencies consult with the SHPO, Tribal Historic Preservation Officer (THPO), and Native Hawaiian Organizations, among other parties. The regulations at 36 CFR 800 define an undertaking, and specify how to identify historic properties, assess potential effects on historic properties, and resolve adverse effects. An historic property is any historic district, site, building, structure or object that is listed in or determined eligible for inclusion in the NRHP. Under Section 106, each federal agency must consider public views and concerns about historic preservation issues when making final project decisions. Refer to Appendix G of the Draft Environmental Impact Statement (DEIS) for the Cultural Resources Technical Report which includes details on how the Study is complying with Section 106 regulations.

Section 4(f) stipulates that in order for a historic site to be granted protection, it must be considered significant (i.e., eligible for or listed in the NRHP).¹ Archaeological sites only qualify for Section 4(f) protection if they are significant *and* warrant preservation in place. Judgments about a site's importance and preservation value are made by the FHWA after consultation with the SHPO and/or THPO, Federally recognized Indian Tribe as appropriate, and the ACHP if participating in the project.

In the event an archaeological site which warrants preservation in place is discovered during construction, the Section 4(f) process may be expedited, and any required evaluation of feasible and prudent avoidance alternatives will consider the level of investment already made. The review process, including the consultation with other agencies, will be shortened as appropriate.

D. Section 110(e) of the National Historic Preservation Act

Section 110 of the NHPA as amended establishes the broad preservation responsibilities of Federal agencies to ensure that historic preservation is fully integrated into the ongoing programs of all Federal agencies. Section 110(f) of the NHPA and its implementing regulations at 36 CFR 800.10 require that Federal agencies exercise a higher standard of care when considering undertakings that may directly and adversely affect National Historic Landmarks (NHLs). Prior to the approval of any Federal undertaking that may directly or adversely affect any NHL, the head of the agency shall undertake such planning and actions as may be necessary to minimize harm to such landmark, and to provide the ACHP with a reasonable opportunity to comment.

¹ *National Register Criteria for Evaluation*: The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded or may be likely to yield, information important in prehistory or history.

The regulations at 36 CFR 800 also specify the participation of the ACHP in the resolution of adverse effects on NHLs, the invitation of the Secretary to participate in the consultation where there may be an adverse effect, and the ACHP's reporting of the outcome.

E. Maryland Program Open Space

Program Open Space (POS) was established under MDNR in 1969. The POS is split into a statewide program that purchases fee simple land for establishing state parks, forest, and wildlife and fisheries management areas and a local program that provides financial and technical assistance to subdivisions for the planning, acquisition, and/or development of recreation land and open space areas. Potential impacts to land or easements purchased with POS funds requires coordination with MDNR. The conversion of POS property to transportation use would require replacement of that property with land of equal or greater value; this requirement may influence 4(f) mitigation provided for these resources. Further, the conversion of state-funded parks and open space must demonstrate a net positive benefit to the public; demonstrating that the site or the jurisdiction's open space resources will significantly benefit from the proposed conversion. This process will be coordinated with OWJ over relevant park property and documented in Appendix B.

1.3 Study Purpose and Need

I-495 and I-270 in Maryland are the two most heavily traveled freeways in the National Capital Region, each with an Average Annual Daily Traffic volume of approximately 260,000 vehicles per day in 2016 (MDOT SHA, 2017). I-495 is the only circumferential route that provides interregional connections to many radial routes, such as I-270, US 29 (Colesville Road), I-95, the Baltimore Washington Parkway, US 50 (John Hanson Highway), and MD 5 (Branch Avenue). I-270 is the only freeway link between I-495 and the fast-growing northwest suburbs in northern Montgomery County and the suburban area in Frederick County. In addition to heavy commuter traffic demand, I-495 is merged with I-95 in Maryland for 25 miles around the east side of Washington, DC, providing connectivity along the East Coast.

The purpose of the Study is to develop a travel demand management solution(s) that addresses congestion, improves trip reliability on I-495 and I-270 within the Study limits and enhances existing and planned multimodal mobility and connectivity. The Study will address the following needs:

- **Accommodate Existing Traffic and Long-Term Traffic Growth** - High travel demand from commuter, business, and recreational trips results in severe congestion from 7 to 10 hours per day on the Study corridors, which is expected to deteriorate further by the planning horizon year of 2040. Additional capacity is needed to address existing and future travel demand and congestion, reduce travel times, and allow travelers to use the facilities efficiently.
- **Enhance Trip Reliability** - Congestion on I-495 and I-270 results in unpredictable travel times. Travelers and freight commodities place a high value on reaching their destinations in a timely and safe manner, and in recent years, the Study corridors have become so unreliable that uncertain travel times are experienced daily. More dependable travel times are needed to ensure trip reliability.
- **Provide Additional Roadway Travel Choices** - Travelers on I-495 and I-270 do not have enough options for efficient travel during extensive periods of congestion. Additional roadway

management options are needed to improve travel choices, while retaining the general-purpose lanes.

- **Accommodate Homeland Security** - The National Capital Region is considered the main hub of government, military, and community installations related to homeland security. These agencies and installations rely on quick, unobstructed roadway access during a homeland security threat. Additional capacity would assist in accommodating a population evacuation and improving emergency response access should an event related to homeland security occur.
- **Improve Movement of Goods and Services** - I-495 and I-270 are major regional transportation networks that support the movement of passenger and freight travel within the National Capital Region. Existing congestion along both corridors increases the cost of doing business due to longer travel times and unreliable trips. The effects of this congestion on the movement of goods and services is a detriment to the health of the local, regional, and national economy. Efficient and reliable highway movement is necessary to accommodate passenger and freight travel, moving goods and services through the region.

Additional capacity and improvements to enhance reliability must be financially viable. MDOT's traditional funding sources would be unable to effectively finance, construct, operate, and maintain improvements of this magnitude. Revenue sources that provide adequate funding, such as pricing options, are needed to achieve congestion relief and address existing high travel demand.

Given the highly constrained area surrounding the interstates in the Study corridors, MDOT SHA recognizes the need to plan and design this project in an environmentally responsible manner. MDOT SHA will strive to avoid and minimize community, natural, cultural, and other environmental impacts, and mitigate for any unavoidable impacts at an equal or greater value. MDOT SHA will work with our federal, state, and local resource agency partners in a streamlined, collaborative, and cooperative way to meet all regulatory requirements to ensure the protection of significant environmental resources. Any Build Alternatives will adequately offset unavoidable impacts while prioritizing and coordinating comprehensive mitigation measures near the Corridor Study Boundary which are meaningful for the environment and to the community.

1.4 Proposed Action

For the purposes of this Section 4(f) Evaluation, the Proposed Action includes six Build Alternatives that are being retained for detailed study in the **Chapter 2, Section 2.6** of the DEIS. These alternatives include managed lanes that differ in the manner in which the proposed travel lanes would be designated and configured. The limits of disturbance (LOD) are the same on I-495 for each of the Build Alternatives described below, except for Alternative 9M between I-270 West Spur and the I-95 Interchange. Therefore, the Section 4(f) use will be the same for each of these alternatives on I-495, except along the topside of I-495 under Alternative 9M, as presented in **Section 2** of this document. The LODs for the Build Alternatives differ slightly on I-270 due to the existing High Occupancy Vehicle (HOV) system. The differences in Section 4(f) use for resources along I-270 is described in **Section 2**, when applicable. The six Build Alternatives are described in detail in **Chapter 2, Section 2.6** of the DEIS and are summarized below.

1.4.1 Alternative 8: 2 ETL Managed Lanes on I-495 and 1 ETL and 1 HOV Managed Lane on I-270

This alternative consists of adding two managed Express Toll Lanes (ETL) in each direction on I-495, retaining one existing High-Occupancy Vehicle (HOV) lane in each direction on I-270, and adding one ETL managed lane in each direction on I-270. Buses would be permitted to use the managed lanes.

1.4.2 Alternative 9: 2 HOT Managed Lanes

This alternative consists of adding two managed High-Occupancy Toll (HOT) lanes in each direction on I-495, converting the one existing HOV lane in each direction to a HOT managed lane on I-270, and adding one HOT managed lane in each direction on I-270, resulting in a two-lane, managed lanes network on both highways. Buses would be permitted to use the managed lanes.

1.4.3 Alternative 9 Modified

MDOT SHA and FHWA evaluated an additional alternative identified as Alternative 9 Modified (Alternative 9M) in response to public and agency comments. Alternative 9M consists of a blend of Alternative 5 and Alternative 9, to determine if the reduction of lanes and associated LOD on the top side of I-495 would sufficiently meet the Purpose and Need to justify a reduction of traffic benefits. Alternative 5 consists of adding one HOT lane on I-495 and converting the existing HOV lane on I-270 to a HOT lane. This alternative was not considered reasonable to carry forward as a Build Alternative in the DEIS. Please refer to **Section 2.5.2** of the DEIS for more detail on Alternative 5. Alternative 9M has the same LOD as Alternative 9 along I-495 from south of the George Washington Memorial Parkway in Virginia to the I-270 West Spur and from the I-95 interchange to west of MD 5 as well as along I-270 from I-495 to I-370. Alternative 9M has the same LOD as Alternative 5 along I-495 from I-270 West Spur to the I-95 interchange. Alternative 9M includes the same build elements as the other Build Alternatives including direct access locations and interchange improvements.

1.4.4 Alternative 10: 2 ETL Managed Lanes and 1 HOV Managed Lane on I-270

This alternative consists of adding two ETL managed lanes in each direction on I-495, retaining one existing HOV lane per direction on I-270, and adding two ETL managed lanes in each direction on I-270. Buses would be permitted to use the managed lanes.

1.4.5 Alternative 13B: 2 HOT Managed Lanes on I-495 and 2 Reversible HOT Managed Lanes on I-270

Alternative 13B would provide a two-lane, HOT managed lanes network on I-495 similar to Alternative 9. This alternative would also convert the existing HOV lanes on I-270 to two HOT managed reversible lanes while maintaining the existing General Purpose (GP) lanes. Buses would be permitted to use the managed lanes.

1.4.6 Alternative 13C: 2 ETL Managed Lanes on I-495 and Reversible ETL Managed Lanes Plus 1 HOV Managed Lane on I-270

Alternative 13C would provide a two-lane, ETL managed lanes network on I-495 similar to Alternatives 8 and 10. This alternative considers retaining the existing HOV lanes in both directions and adding two ETL managed, reversible lanes on I-270. Buses would be permitted to use the managed lanes.

1.5 Common Elements of the Build Alternatives

Alternatives 8, 9, 9M, 10, 13B, and 13C each propose widening of existing I-495 and I-270 within the Study limits. These managed lanes alternatives differ in the manner in which the proposed travel lanes would be designated and configured. Alternatives 8, 9, 10, 13B and 13C include adding two lanes on I-495 as either HOT or ETL; therefore, the LOD are the same on I-495. Impacts to Section 4(f) properties along I-495 will be the same for each of these alternatives. The LOD for Alternative 9M varies from the other Build Alternatives on I-495 between I-270 West Spur and the I-95 interchange as a one lane HOT system is proposed in the section. The Build Alternatives differ on I-270 due to the existing HOV system. Alternatives 8, 9, 9M, and 13B would have similar LODs on I-270 because of the addition of one lane or the conversion of the existing HOV lane combined with the addition of one lane. Alternative 13C would have a slightly wider footprint on I-270 than Alternatives 8, 9, and 13B due to the addition two reversible ETL and retaining the existing HOV managed lanes. However, this alternative would have a slightly narrower footprint than Alternative 10 due to its configuration of reversible lanes in the median of I-270. Therefore, Alternative 10 would have the widest footprint on I-270 compared to the other alternatives and the highest amount of impact to Section 4(f) resources.

Elements common to all the alternatives under the Proposed Action include:

- Direct access at certain interchanges
- Removal and replacement of the American Legion Bridge
- Removal and replacement of structures on I-495 and I-270
- Replacement in -kind of existing bicycle and pedestrian facilities along roadways
- A new trail along the American Legion Bridge
- Installation of retaining walls
- Removal, replacement or construction of noise barriers
- Installation of stormwater management facilities

For the purposes of this Section 4(f) Evaluation, the Proposed Action represents all six Build Alternatives described above. Impacts to Section 4(f) properties will be differentiated by alternative, when applicable, in **Section 2**.

2

2 INVENTORY AND USE OF SECTION 4(F) PROPERTY

MDOT SHA established a Corridor Study Boundary for the Study that extends 300 feet to either side of the existing right-of-way along I-495 and I-270. Within the Corridor Study Boundary, 111 Section 4(f) properties were inventoried consisting of national parks, county and local parks, parkways, stream valley units of larger park facilities, local neighborhood parks, and historic sites that are eligible for, or listed in, the NRHP.

Of the 111 Section 4(f) properties identified in the Corridor Study Boundary, 68 would experience an impact as a result of the Proposed Action (**Table 2-1**). Of these 68 properties, 22 warrant an Individual Section 4(f) Evaluation. As many of the impacts to Section 4(f) properties consist of minor impacts along the edge of the existing transportation facility that would not affect characteristics that contribute to the significance of historic sites or recreational amenities and features, FHWA intends to apply *de minimis* impact findings at 36 properties. Impacts to the remaining ten Section 4(f) properties, including six archaeological sites, listed in **Table 2-2** are identified as exceptions to a Section 4(f) use. To protect location information, archaeological sites are not inventoried on Section 4(f) mapping. The 43 Section 4(f) properties listed in **Table 2-3** are within the Corridor Study Boundary and would not experience an impact from the Proposed Action.

During final design, certain uses of Section 4(f) property may be determined to be temporary in nature. Currently there is not enough information to make such a determination. For the purposes of this Draft Section 4(f) Evaluation, all impacts to Section 4(f) property are assumed to be permanently incorporated into the transportation facility.

The greatest area of impacts to Section 4(f) properties from the proposed action is 149.0 acres. Nearly 47% of this total, or 69.3 acres, is derived from impacts to the Baltimore Washington Parkway, a public park and historic transportation facility. The impacted portions of Baltimore Washington Parkway are in an existing transportation use. Impacts from the proposed action would consist of grading, tree removal, and landscape plantings; widening the parkway at I-495 to accommodate direct access ramps to and from the managed lanes; reconfiguring the interchange with Southway and Greenbelt Road; replacing the bridge carrying Greenbelt Road over Baltimore Washington Parkway; constructing and maintaining stormwater management facilities; updating and installing signage; and providing access for construction equipment and materials. Through coordination with the OWJ, MDOT SHA will strive to make the proposed impacts compatible with the design, setting, and character of the existing Baltimore Washington Parkway.

The vast majority of impacts to Section 4(f) properties are composed of sliver property impacts to areas that currently abut the existing transportation facility without affecting the features and attributes that qualify the properties for Section 4(f) protection. Moreover, the constrained built-environment surrounding I-495 and I-270 consisting of a large amount of commercial and residential development in close proximity to the limits of the Study means that there are only minimal differences between each alternative in the number, type, and area of Section 4(f) properties impacted. MDOT SHA has worked diligently to implement reasonable measures to avoid and minimize the impacts to Section 4(f) property as part of the Proposed Action.

Each description identifies the type of Section 4(f) property, the OWJ over the property, and the attributes that qualify the property for Section 4(f) protection. The type, location, and area of the impacts to each Section 4(f) property are described in detail. Where the potential use is anticipated to be minor, the applicability of Section 4(f) *de minimis* use criteria is also presented. Efforts to minimize impacts to each Section 4(f) property are also presented.

Impacts to Section 4(f) properties are differentiated by alternative, when applicable. All Build Alternatives would impact the same number of Section 4(f) properties. With regard to impacts to historic properties, there is no difference in the Section 106 findings across the range of the Build Alternatives considered.

Figure 2-1, Figure 2-2, and Figure 2-3 provide an overview of the LOD for the Proposed Action and identify the distribution of Section 4(f) properties throughout the Study limits. In this evaluation, Section 4(f) properties are sorted from west to east along I-495, then south to north along I-270.

Figure 2-1: Section 4(f) Property Overview (Map 1 of 3)

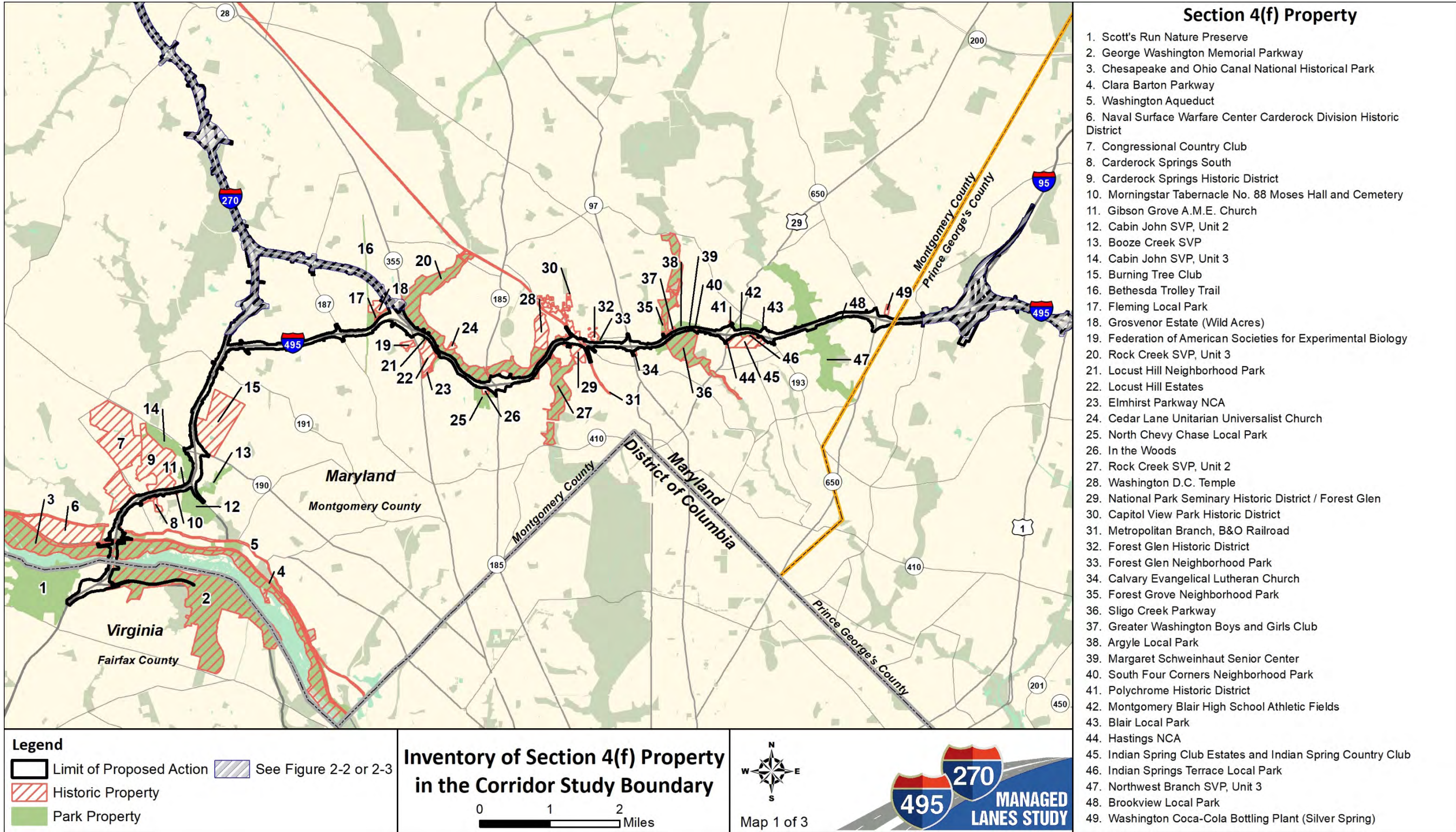


Figure 2-2: Section 4(f) Property Overview (Map 2 of 3)

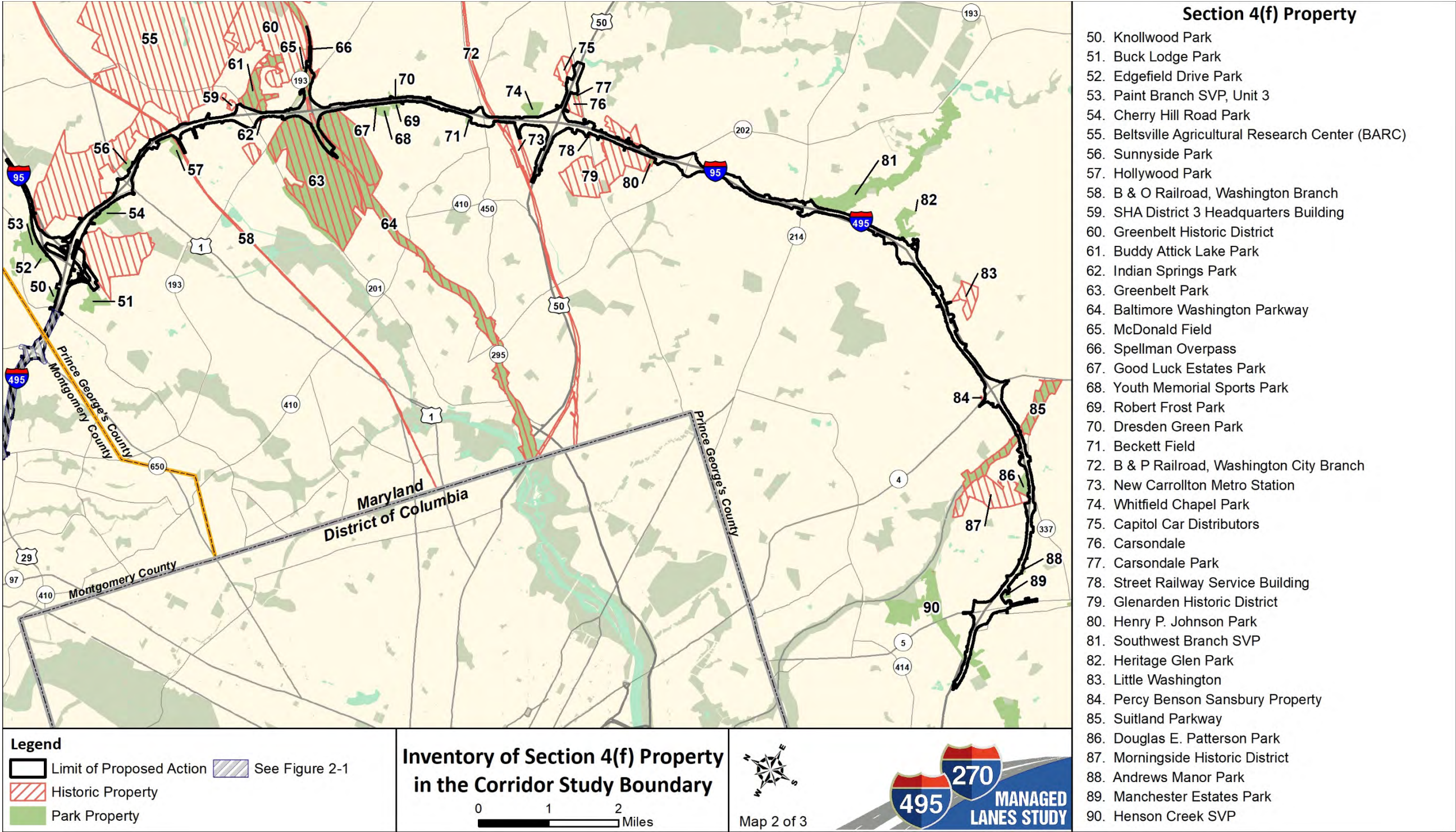


Figure 2-3: Section 4(f) Property Overview (Map 3 of 3)

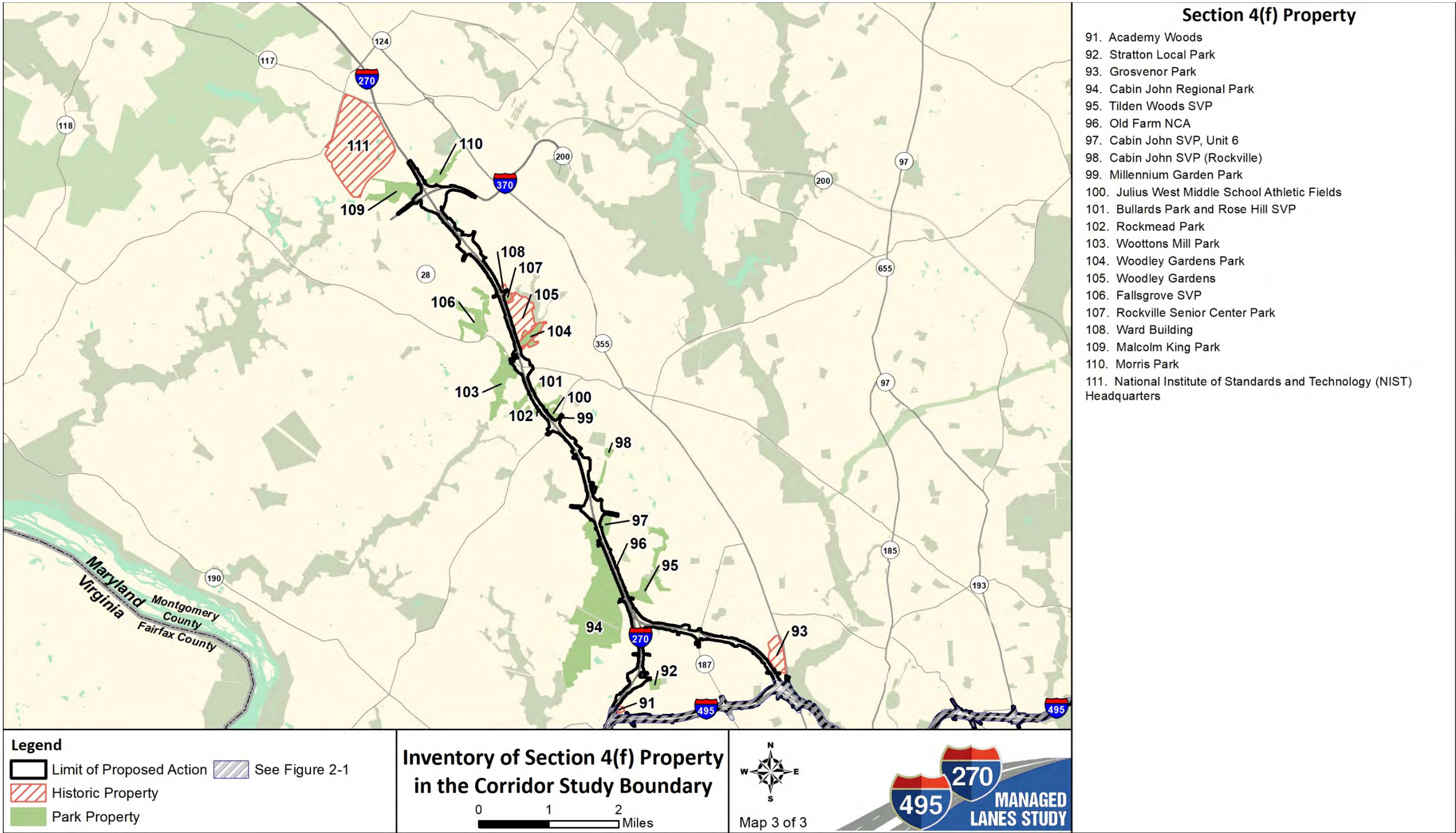


Table 2-1: Inventory of Section 4(f) Properties with Use or *de minimis* impact

Map ID	Section 4(f) Property	Size (Acres)	Potential Impacts from Proposed Action (Acres)	Officials with Jurisdiction	Type of Section 4(f) Property	Type of Section 4(f) Approval
2	George Washington Memorial Parkway	7,146.0	12.2	ACHP, NPS, VDHR	Public Park, Historic Site	Individual Evaluation
3	Chesapeake and Ohio Canal National Historical Park	~19,575	15.4	ACHP, NPS, MHT	Public Park, Historic Site	Individual Evaluation
4	Clara Barton Parkway	96.2	1.8	ACHP, NPS, MHT	Public Park, Historic Site	Individual Evaluation
10	Morningstar Tabernacle No. 88 Moses Hall and Cemetery	1.5	0.3	ACHP, MHT	Historic Site	Individual Evaluation
12	Cabin John SVP, Unit 2	105.0	1.1	M-NCPPC	Public Park	<i>de minimis</i>
15	Burning Tree Club	221.0	0.8	MHT	Historic Site	<i>de minimis</i>
17	Fleming Local Park	24.0	0.1	M-NCPPC, MHT	Public Park, Historic Site	<i>de minimis</i>
18	Grosvenor Estate (Wild Acres)	34.7	0.1 0.2 (Alt 10)	MHT	Historic Site	<i>de minimis</i>
20	Rock Creek SVP, Unit 3	326.6	3.3 2.5 (Alt 9M)	M-NCPPC, MHT, ACHP	Public Park, Historic Site	Individual Evaluation
21	Locust Hill Neighborhood Park	5.0	0.3 0.2 (Alt 9M)	M-NCPPC	Public Park	<i>de minimis</i>
27	Rock Creek SVP, Unit 2	277.0	0.4 0.2 (Alt 9M)	M-NCPPC, ACHP, MHT	Public Park, Historic Site	Individual Evaluation
29	National Park Seminary Historic District/ Forest Glen	23.0	1.2	ACHP, MHT	Historic Site	Individual Evaluation
31	Metropolitan Branch, B&O Railroad	405.7	8.8	ACHP, MHT	Historic Site	Individual Evaluation
32	Forest Glen Historic District	10.3	0.2 0.1 (Alt 9M)	MHT	Historic Site	<i>de minimis</i>
33	Forest Glen Neighborhood Park	3.7	0.3 0.2 (Alt 9M)	M-NCPPC	Public Park	<i>de minimis</i>
34	Calvary Evangelical Lutheran Church	1.8	< 0.1	MHT	Historic Site	<i>de minimis</i>
36	Sligo Creek Parkway	543.0	4.1 3.3 (Alt 9M)	Montgomery County, M-NCPPC, ACHP, MHT	Public Park, Historic Site	Individual Evaluation
40	South Four Corners Neighborhood Park	3.6	0.1 < 0.1 (Alt 9M)	M-NCPPC	Public Park	<i>de minimis</i>
42	Montgomery Blair High School Athletic Fields	30.0	1.4 1.1 (Alt 9M)	M-NCPPC; Montgomery County Public Schools Board of Education	Public Park	<i>de minimis</i>
43	Blair Local Park	10.2	0.4 0.3 (Alt 9M)	M-NCPPC	Public Park	<i>de minimis</i>
45	Indian Spring Club Estates and Indian Spring Country Club	51.0	1.2 1.1 (Alt 9M)	ACHP, MHT	Historic Site	Individual Evaluation

Map ID	Section 4(f) Property	Size (Acres)	Potential Impacts from Proposed Action (Acres)	Officials with Jurisdiction	Type of Section 4(f) Property	Type of Section 4(f) Approval
46	Indian Springs Terrace Local Park	30.0	1.4 1.2 (Alt 9M)	M-NCPPC	Public Park	Individual Evaluation
47	Northwest Branch SVP, Unit 3	144.0	3.2	M-NCPPC	Public Park	Individual Evaluation
54	Cherry Hill Road Park	43.1	1.8	M-NCPPC	Public Park	Individual Evaluation
55	Beltsville Agricultural Research Center (BARC)	6,852.0	0.5	MHT	Historic Site	<i>de minimis</i>
57	Hollywood Park	22.3	<0.1	M-NCPPC	Public Park	<i>de minimis</i>
60	Greenbelt Historic District	789.0	0.3	NPS, MHT	Historic Site (NHL)	<i>de minimis</i>
61	Buddy Attick Lake Park	85.3	0.1	City of Greenbelt, NPS, MHT	Public Park, Historic Site (NHL)	<i>de minimis</i>
62	Indian Springs Park	3.0	0.1	City of Greenbelt, NPS, MHT	Public Park, Historic Site (NHL)	<i>de minimis</i>
63	Greenbelt Park	1100.0	0.6	ACHP, MHT, NPS	Public Park, Historic Site	Individual Evaluation
64	Baltimore Washington Parkway	~1400	69.3	ACHP, MHT, NPS	Public Park, Historic Site	Individual Evaluation
65	McDonald Field	2.1	<0.1	City of Greenbelt	Public Park	<i>de minimis</i>
71	Beckett Field	7.0	0.2	City of New Carrollton	Public Park	<i>de minimis</i>
76	Carsondale	35.1	0.1	ACHP, MHT	Historic Site	Individual Evaluation
79	Glenarden Historic District	306.0	0.8	ACHP, MHT	Historic Site	Individual Evaluation
80	Henry P. Johnson Park	7.1	<0.1	M-NCPPC, ACHP, MHT,	Public Park	Individual Evaluation
81	Southwest Branch SVP	264.0	0.3	M-NCPPC	Public Park	<i>de minimis</i>
82	Heritage Glen Park	38.2	0.5	M-NCPPC	Public Park	<i>de minimis</i>
85	Suitland Parkway	418.9	0.3	ACHP, MHT, NPS	Public Park, Historic Site	Individual Evaluation
86	Douglas E. Patterson Park	26.2	0.7	M-NCPPC	Public Park	<i>de minimis</i>
88	Andrews Manor Park	4.1	2.6	M-NCPPC	Public Park	Individual Evaluation
89	Manchester Estates Park	4.6	0.5	M-NCPPC	Public Park	<i>de minimis</i>
90	Henson Creek SVP	1103.0	0.1	M-NCPPC	Public Park	<i>de minimis</i>
91	Academy Woods	6.4	0.2	MHT	Historic Site	<i>de minimis</i>
94	Cabin John Regional Park	514.0	5.7 (Alts 8&9) 7.2 (Alt 10) 4.5 (Alt 13B) 5.2 (Alt 13C)	M-NCPPC	Public Park	Individual Evaluation
95	Tilden Woods SVP	67.4	0.2	M-NCPPC	Public Park	<i>de minimis</i>

Map ID	Section 4(f) Property	Size (Acres)	Potential Impacts from Proposed Action (Acres)	Officials with Jurisdiction	Type of Section 4(f) Property	Type of Section 4(f) Approval
96	Old Farm Neighborhood Conservation Area	0.8	0.1	M-NCPPC	Public Park	<i>de minimis</i>
97	Cabin John SVP, Unit 6	19.8	0.4 0.3 (Alt 13B)	Montgomery County, M-NCPPC	Public Park	<i>de minimis</i>
98	Cabin John SVP (Rockville)	33.1	2.1	City of Rockville	Public Park	Individual Evaluation
99	Millennium Garden Park	1.3	0.2	City of Rockville	Public Park	<i>de minimis</i>
101	Bullards Park and Rose Hill SVP	16.8	0.3	City of Rockville	Public Park	<i>de minimis</i>
102	Rockmead Park	27.4	0.2 0.3 (Alt 10)	City of Rockville	Public Park	<i>de minimis</i>
103	Woottons Mill Park	95.3	0.2	City of Rockville	Public Park	<i>de minimis</i>
105	Woodley Gardens	200.0	0.7 1.1 (Alt 10) 1.0 (Alt 13C)	MHT	Historic Site	<i>de minimis</i>
107	Rockville Senior Center Park	12.2	0.7 0.9 (Alt 10) 0.8 (Alt 13C)	City of Rockville, MHT	Public Park, Historic Site	<i>de minimis</i>
108	Ward Building	4.8	0.1 < 0.1 (Alt 13B)	MHT	Historic Site	<i>de minimis</i>
109	Malcolm King Park	78.5	0.1	City of Gaithersburg	Public Park	<i>de minimis</i>
110	Morris Park	30.7	0.1	City of Gaithersburg	Public Park	<i>de minimis</i>
Total Potential Impacts of Section 4(f) Properties by Build Alternative			144.7 (Alt 9M) 145.5 (Alt 13B) 146.7 (Alt 13C) 146.8 (Alts 8 & 9) 149.0 (Alt 10)			

Notes:

1. The size of Section 4(f) properties is sourced from data or documentation provided by the Officials with Jurisdiction.
2. Section 4(f) properties in Table 2-1 are sorted from west to east along I-495 and from south to north along I-270.
3. The size of the Baltimore-Washington Parkway in Table 2-1 is only the area within the historic boundary, which ends at the Anne Arundel County border. The full size of the Baltimore Washington Parkway is larger.

Table 2-2: Impacts to Properties that Qualify as Exceptions to Section 4(f)

Map ID	Section 4(f) Property	Size (Acres)	Potential Impacts from Proposed Action (Acres)	Officials with Jurisdiction	Type of Section 4(f) Property	Exception Criteria
16	Bethesda Trolley Trail	4 miles	0.2	Montgomery County Department of Transportation	Public Park/Trail	23 CFR 774.13(f)(3)
58	Baltimore & Ohio Railroad, Washington Branch	146.4	0.6	MHT	Historic Site	23 CFR 774.13(a)(3)
66	Spellman Overpass	1.0	<0.1	City of Greenbelt	Public Park	23 CFR 774.13(f)(3)
72	Baltimore & Potomac Railroad, Washington City Branch	284.4	1.0	MHT	Historic Site	23 CFR 774.13(a)(3)
N/A	Site 18MO749	N/A	N/A	MHT, NPS	Historic Site	23 CFR 774.13(b)
N/A	Site 18MO751	N/A	N/A	MHT, NPS	Historic Site	23 CFR 774.13(b)
N/A	Site 44FX0374	N/A	N/A	VDHR, NPS	Historic Site	23 CFR 774.13(b)
N/A	Site 44FX0379	N/A	N/A	VDHR, NPS	Historic Site	23 CFR 774.13(b)
N/A	Site 44FX0381	N/A	N/A	VDHR, NPS	Historic Site	23 CFR 774.13(b)
N/A	Site 44FX0389	N/A	N/A	VDHR, NPS	Historic Site	23 CFR 774.13(b)

1. To protect location information, archaeological sites are not inventoried on Section 4(f) mapping.

Table 2-3: Inventory of Section 4(f) Properties where there is no Use or Impact

Map ID	Section 4(f) Property	Size (Acres)	Official with Jurisdiction	Type of Section 4(f) Property
1	Scott's Run Nature Preserve	336.0	Fairfax County	Park
5	Washington Aqueduct	163.0	MHT, NPS	Historic Site (NHL)
6	Naval Surface Warfare Center Carderock Division Historic District	30.3	MHT	Historic Site
7	Congressional Country Club	31.8	MHT	Historic Site
8	Carderock Springs South	18.6	MHT	Historic Site
9	Carderock Springs Historic District	146.0	MHT	Historic Site
11	Gibson Grove A.M.E. Church	0.4	MHT	Historic Site
13	Booze Creek SVP	24.1	M-NCPPC	Public Park
14	Cabin John SVP, Unit 3	50.0	M-NCPPC	Public Park
19	Federation of American Societies for Experimental Biology	11.4	MHT	Historic Site
22	Locust Hill Estates	47.0	MHT	Historic Site
23	Elmhurst Parkway Neighborhood Conservation Area (NCA)	7.6	M-NCPPC	Public Park
24	Cedar Lane Unitarian Universalist Church	6.3	MHT	Historic Site
25	North Chevy Chase Local Park	30.9	M-NCPPC	Public Park
26	In the Woods	1.9	MHT	Historic Site

Map ID	Section 4(f) Property	Size (Acres)	Official with Jurisdiction	Type of Section 4(f) Property
28	Washington, DC Temple	31.7	MHT	Historic Site
30	Capitol View Park Historic District	124.0	ACHP, MHT	Historic Site
35	Forest Grove Neighborhood Park	7.0	M-NCPPC	Public Park
37	Greater Washington Boys and Girls Club	1.2	MHT	Historic Site
38	Argyle Local Park	8.8	M-NCPPC	Public Park
39	Margaret Schweinhaut Senior Center	8.9	M-NCPPC	Public Park
41	Polychrome Historic District	1.1	MHT	Historic Site
44	Hastings Neighborhood Conservation Area (NCA)	0.4	M-NCPPC, MHT	Public Park
48	Brookview Local Park	12.4	M-NCPPC	Public Park
49	Washington Coca-Cola Bottling Plant (Silver Spring)	4.6	MHT	Historic Site
50	Knollwood Park	12.4	M-NCPPC	Public Park
51	Buck Lodge Park	40.0	M-NCPPC	Public Park
52	Edgefield Drive Park	7.2	M-NCPPC	Public Park
53	Paint Branch SVP, Unit 3	51.9	M-NCPPC	Public Park
56	Sunnyside Park	8.7	M-NCPPC	Public Park
59	SHA District 3 Headquarters Building	7.5	MHT	Historic Site
67	Good Luck Estates Park	6.6	M-NCPPC	Public Park
68	Youth Memorial Sports Park	3.9	City of New Carrollton	Public Park
69	Robert Frost Park	5.9	M-NCPPC	Public Park
70	Dresden Green Park	2.1	M-NCPPC	Public Park
73	New Carrollton Metro Station	71.7	MHT	Historic Site
74	Whitfield Chapel Park	26.2	M-NCPPC	Public Park
75	Capitol Car Distributors	38.7	MHT	Historic Site
77	Carsondale Park	2.9	M-NCPPC	Public Park
78	Street Railway Service Building	0.4	MHT	Historic Site
83	Little Washington	63.0	MHT	Historic Site
84	Percy Benson Sansbury Property	0.8	MHT	Historic Site
87	Morningside Historic District	191.0	MHT	Historic Site
92	Stratton Local Park	11.0	M-NCPPC	Public Park
93	Grosvenor Park	57.4	MHT	Public Park
100	Julius West Middle School Athletic Fields	22.0	Montgomery Board of Ed.	Montgomery
104	Woodley Gardens Park	37.5	City of Rockville, MHT	Public Park
106	Fallsgrove SVP	50.2	City of Rockville	Public Park
111	National Institute of Standards and Technology (NIST) Headquarters	578.0	MHT	Historic Site

2.1 Section 4(f) Property along I-495

2.1.1 George Washington Memorial Parkway

Type of Section 4(f) Property: Historic Site and Public Park

Officials with Jurisdiction: ACHP, NPS, VDHR

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

George Washington Memorial Parkway (**Figure 2-4**) is a publicly-owned park and NRHP-listed historic district that extends along the Potomac River from I-495 to Mount Vernon in Virginia. The George Washington Memorial Parkway is administered by the NPS. The George Washington Memorial Parkway is a scenic roadway honoring the nation's first president that protects and preserves cultural and natural resources along the Potomac River below Great Falls to Mount Vernon. It is also a historic district listed in the NRHP for its association with twentieth-century parkway design, engineering, landscape architecture, park planning and conservation, commemoration, and its association with George Washington. Features within George Washington Memorial Parkway include the Potomac Heritage National Scenic Trail and Turkey Run Park conservation area. The park boundary of George Washington Memorial Parkway extends 38.3 miles and comprises approximately 7,300 acres, including all administrative units and features.

In 1989, the George Washington Memorial Parkway running along the Maryland side of the Potomac River was renamed Clara Barton Parkway. A principal part of the legislated purpose of the George Washington Memorial Parkway, which includes the Clara Barton Parkway, is to protect the vistas and views along both sides of the Potomac River. The Parkway was the first comprehensively designed modern motorway built by the federal government based on the idea of a landscaped, park-like roadway corridor that protected riverfront lands and today includes an extension north to the Capital Beltway, as well as Spout Run Parkway and Clara Barton Parkway. Because Clara Barton Parkway is divided from George Washington Memorial Parkway by the Potomac River and possesses a separate historic boundary, it is described as a separate Section 4(f) property in **Section 2.1.3** of this document.

The National Trails System designated Potomac Heritage National Scenic Trail as a recreational trail and feature of George Washington Memorial Parkway and the C&O Canal National Historic Park. The Potomac Heritage National Scenic Trail is a network of existing and planned trails spanning 710 miles between the mouth of the Potomac River and the Alleghany Highlands. Within the Study Corridor, the Potomac Heritage Trail passes beneath the American Legion Bridge on the Virginia side of the Potomac River.

Another feature of George Washington Memorial Parkway, the Turkey Run Park recreation and forest preservation area encompasses approximately 700 acres on the Virginia side of the Potomac River, east of I-495. The area contains a unique combination of flora and fauna, as well as riverbanks, flood terraces, upland forest, and streams. The area also provides visitor amenities such as picnic tables, restrooms, water fountains, and trails.

George Washington Memorial Parkway is also an historic district that was listed in the NRHP on June 2, 1995. It is historically significant under Criterion B for its association with the life of George Washington and Criterion C for its embodiment of the distinctive characteristics of a parkway. The boundary of the

historic district encompasses the full length and breadth of the parkway in Virginia and Washington, DC. The boundary is congruent with the original right-of-way determined by the Bureau of Public Roads (predecessor of FHWA) and maintained by the NPS in Virginia, and Washington, DC. Attributes that contribute to the significance of the parkway include bridges, culverts, landscape architectural elements, and natural topographic features. The interchange with I-495 does not contribute to the significance of the parkway.

Portions of George Washington Memorial Parkway were funded in part by the Capper-Cramton Act of 1930. However, as George Washington Memorial Parkway is currently under federal jurisdiction, NCPC's role is advisory.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 12.2 acres of George Washington Memorial Parkway to accommodate access for construction vehicles and materials to build the new American Legion Bridge and remove the existing structure; the construction, operation, and future maintenance of new direct access ramps to the managed lanes on I-495; and the installation, operation, and future maintenance of electrical conduit and signage to inform the traveling public of toll rates and operation of the facility (**Figure 2-4**). The area of Section 4(f) use is concentrated at two locations: in the quadrant southeast of the American Legion Bridge and along a small strip of land north of the westbound lanes of George Washington Memorial Parkway from west of the bridges at Dead Run to where the parkway approaches the existing interchange with I-495. Temporary lane closures during construction are also possible.

The large area within George Washington Memorial Parkway southeast of the American Legion Bridge is needed to construct a temporary switchback road that will be used to maneuver construction vehicles and materials up and down the steep grade along the bank of the Potomac River. To erect the new bridge, construction cranes will be placed in each of the four quadrants adjacent to the existing crossing. Construction barges in the river will reduce the need for additional impacts on land. Access to the construction area within George Washington Memorial Parkway will be from a temporary access road built within existing VDOT right-of-way.

The proposed Section 4(f) use would result in changes to the recreational characteristics of George Washington Memorial Parkway through the alteration of designed landscape features, including the removal of trees, and placement of toll signage. The proposed direct access ramps would largely be within existing disturbed VDOT right-of-way. Tree removal would be concentrated in the area along the Potomac River where the temporary switchback road would be constructed. Tree removal along the parkway itself would be minimal. The landscape of George Washington Memorial Parkway, including trees, is a defining recreational characteristic of the Parkway. The removal of trees would largely be necessary to accommodate access for construction vehicles and materials to erect the new American Legion Bridge and remove the existing bridge. The installation of dynamic and static signage would involve minimal impact to the significant designed landscape along the historic transportation facility.

Where it passes beneath the American Legion Bridge, access to the Potomac National Heritage Scenic Trail would be restricted for the duration of construction. The temporary closure of the trail would be for the safety of trail users as construction equipment would be operating in the area. Although subject to

change, a preliminary estimate of the duration of construction at this location is between four and five years. At the conclusion of this time period, the trail will be restored and reopened to the public.

There would be no use of Turkey Run Park under the Proposed Action.

Section 106 consultation has resulted in a finding of adverse effect. Mitigation for the use of George Washington Memorial Parkway would be consistent with stipulations identified in the Section 106 Programmatic Agreement and be coordinated with the NPS, VDHR and Section 106 consulting parties.

The impacts to George Washington Memorial Parkway require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.2**).

C. Applied Minimization

In addition to the general minimization efforts described in Section 4, MDOT SHA has been able to further reduce impacts to George Washington Memorial Parkway. No stormwater facilities would be placed within the boundaries George Washington Memorial Parkway. In response to NPS concerns about proposed direct access to the managed lanes from George Washington Memorial Parkway, MDOT SHA completed a traffic analysis to determine impacts on I-495 and the NPS parkway. Results showed that direct access was needed to meet the Study's Purpose and Need. At NPS's request, MDOT SHA provided a supplemental analysis of options including providing slip ramps on the American Legion Bridge and George Washington Memorial Parkway for outbound access only. Further, MDOT SHA developed five different interchange options to minimize visual impacts to George Washington Memorial Parkway. The interchange option of nested ramps was chosen with the result of substantially reducing potentially significant visual impacts to the George Washington Memorial Parkway by removing flyover ramps proposed in previous iterations of the interchange design. Extensive coordination with VDOT and NPS has also resulted in developing a plan that would limit the number, variety, design, and location of signs within George Washington Memorial Parkway. To reduce impacts to Section 4(f) properties on the shores of the Potomac River, MDOT SHA also proposes the use of barges to facilitate removal of the existing bridge and construction of the new bridge.

As a result of these minimization efforts and on-going coordination with the OWJ, MDOT SHA has been able to reduce impacts to George Washington Memorial Parkway from 17.6 acres on June 5, 2019 to the 12.5 acres in this Draft Section 4(f) Evaluation. The effort to minimize and mitigate impacts will continue through ongoing and future coordination with NPS staff.

2.1.2 Chesapeake and Ohio Canal National Historic Park

Type of Section 4(f) Property: Historic Site and Public Park

Officials with Jurisdiction: ACHP, MHT, NPS

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

The Chesapeake and Ohio Canal National Historic Park (C&O Canal NHP, **Figure 2-5**) is an NRHP-listed historic district and publicly-owned park and recreation area encompassing 19,575 acres. The C&O Canal NHP stretches along the Potomac River from Rock Creek at Georgetown in Washington, DC, to

Cumberland, Maryland, for 184.5 miles. Construction on the C&O Canal began in 1828 and concluded in 1850. It served as a major transportation corridor operating as a conduit for coal, lumber, and agricultural products to propel western development and satisfy demands from eastern US markets until 1924. The C&O Canal became a unit of the NPS as a national monument in 1961 and then established as a national historical park in 1971. The purpose of the C&O Canal NHP is to preserve and interpret the 19th century transportation canal and its associated scenic, natural, and cultural resources; and to provide opportunities for education and appropriate outdoor recreation. The C&O Canal NHP is listed on the NRHP and contains more than 1,300 historic structures, including one of the largest collections of 19th century canal features and buildings in the national park system. The C&O Canal NHP is administered by NPS. Property records provided by NPS indicate the portions of C&O Canal NHP that would experience an impact from the Study were acquired in part by funds from the Capper-Cramton Act of 1930. However, according to NCPC, as the C&O Canal NHP is under federal management NCPC's role is advisory.

The C&O Canal was listed in the NRHP on October 15, 1966, prior to becoming a national historical park. A supplementary listing under the name "Chesapeake and Ohio Canal National Historical Park" was added to the NRHP on February 3, 2015. The C&O Canal NHP is listed in the NRHP under Criteria A, C, and D. In addition to 455 contributing resources previously listed in the NRHP, the supplemental listing added 796 contributing resources comprising 106 buildings, 175 sites, 483 structures, and 32 objects. The supplemental listing contains the extensive list of contributing resources throughout the historic district, summarized here elements of the physical infrastructure such as the canal, canal towpath, bridges, canal locks, lock houses, and archaeological resources.

B. Potential Section 4(f) Use

A letter permit issued to MDOT SHA by the NPS on March 7, 1961 grants permission for the "operation and maintenance of a highway," for much of the I-495 mainline and the interchange with Clara Barton Parkway, including the C&O Canal (**Appendix B**). Therefore, the permit area is not Section 4(f) parkland as it is already in a transportation use. However, because the park is also a significant historic site, any impact from the Proposed Action within the NPS permit area would still qualify as a Section 4(f) use. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 15.4 acres of the C&O Canal *historic site*. Historic boundaries are not defined, necessarily, by legal property boundaries and can encompass areas within transportation use without impacting its historical significance or protection under Section 4(f). Under the terms of the NPS letter permit, portions of the *public park* are in an existing transportation use. Therefore, the total Section 4(f) *public park* use is reduced to 7.8 acres due to the area in existing transportation use under the NPS letter permit.

The impacts to C&O Canal accommodate access for construction vehicles and materials to build the new American Legion Bridge and remove the existing structure; the construction and maintenance of the realigned ramp from I-495 northbound to Clara Barton Parkway; the construction of a trail connection between a multi-use path on the east side of the new American Legion Bridge and the C&O Canal towpath; the realignment of Rock Run; and the construction and maintenance of linear stormwater management features beneath the shoulders of I-495 mainline, south of the towpath (**Figure 2-5**). The latter features are within an area currently in a transportation use.

The area of Section 4(f) use is concentrated along the northbound and southbound lanes of the existing I-495 alignment and to the south of the C&O Canal towpath both west and east of the highway. In order to move construction vehicles and materials to and from the base of the American Legion Bridge, temporary bridge crossings would be built across the canal and towpath. The locations of these crossings as well as the access points on Clara Barton Parkway have been coordinated with NPS. Two bridges and access roads are necessary to provide safe movement of construction equipment to, from and around the construction site. Having two construction roads will also shorten the duration of construction. The temporary access roads and temporary bridges would require the removal of trees, grading land, and placing surface treatment to support the movement of heavy equipment. These activities would require the temporary closure of the canal towpath for the construction and removal of the grade separated crossings. These temporary crossings would be in place during construction of the new American Legion Bridge, which is anticipated to last between four and five years. At the conclusion of construction, the towpath will be restored.

On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on C&O Canal. Mitigation for the use of C&O Canal would be consistent with stipulations identified in the Section 106 Programmatic Agreement and be coordinated with the NPS, MHT and Section 106 consulting parties. The impacts to C&O Canal require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.1** and **Section 5.1.2**).

C. Applied Minimization

In addition to the minimization efforts described in Section 4, MDOT SHA has been able to further reduce impacts to C&O Canal. MDOT SHA evaluated multiple preliminary alignments for replacing the American Legion Bridge including total avoidance options and minimization options such as constructing a double-decker bridge and utilizing top-down construction methods. Owing to the age of the existing bridge, replacement is warranted. Any solution involving augmenting travel lanes on the existing structure would be temporary and require MDOT SHA to impact NPS lands twice – first for widening and then again for replacement. Upon coordination with NPS, MDOT SHA determined the on-alignment replacement of the bridge would result in fewer permanent impacts to C&O Canal. In order to minimize impacts to C&O Canal, MDOT SHA will use construction barges in the Potomac River. Construction cranes will be placed at the four quadrants of the existing bridge and multiple temporary access roads will be constructed in order to minimize impacts to Section 4(f) property. MDOT SHA has coordinated with NPS on the number and location of these temporary access roadways. MDOT SHA has also adjusted the proposed LOD to avoid impacts to historic archaeological deposits east of I-495.

As a result of these minimization efforts and on-going coordination with the OWJ, impacts to C&O NHP have changed from 15.1 acres on June 5, 2019 to the 15.4 acres in this Draft Section 4(f) Evaluation. This increase is owing to changes to the LOD related to requests from NPS to shift impacts and providing additional area construct the bridge. The effort to minimize and mitigate impacts will continue through ongoing and future coordination with NPS staff.

2.1.3 Clara Barton Parkway

Type of Section 4(f) Property: Historic Site and Public Park

Officials with Jurisdiction: ACHP, MHT, NPS

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

The Clara Barton Parkway (**Figure 2-5**) is an administrative unit of George Washington Memorial Parkway in Maryland. Clara Barton Parkway extends 6.6 miles along the northern shore of the Potomac River between the Naval Surface Warfare Center at Carderock and the Washington, DC border with Maryland. The historic boundary in Maryland comprises 96.2 acres. This information is sourced from the NRHP nomination prepared by NPS employee Jere L. Krakow in November 1993. The historic boundary was then mapped on MHT Medusa. Clara Barton Parkway is under the jurisdiction of NPS and was designed for recreational driving, to link sites that commemorate important episodes in American history, and to preserve habitat for local wildlife.

The Clara Barton Parkway is also an historic site and was listed in the NRHP on June 2, 1995. It is historically significant under Criterion B for its association with the life of George Washington and Clara Barton, persons significant in our past, and Criterion C for its embodiment of the distinctive characteristics of a parkway. The historic boundary encompasses the full length and breadth of the parkway – 5.5 miles in Maryland. Though Clara Barton Parkway has a separate historic boundary in Maryland, it is part of the larger George Washington Memorial Parkway Historic District. The boundary is coterminous with the original right-of-way determined by the Bureau of Public Roads (a predecessor to FHWA) and maintained by the NPS. Elements that contribute to the significance of the parkway include eight bridges that carry the roadway and two pedestrian bridges that span the parkway, the stone clad culverts, and 0.44 miles of barrier walls and miscellaneous structures. The I-495 bridges and interchange complex do not contribute to the historical significance of the parkway.

Property records provided by NPS indicate the portions of Clara Barton Parkway that would experience an impact from the Study were acquired in part by funds from the Capper-Cramton Act of 1930. According to NCPC, as Clara Barton Parkway is under federal management, NCPC's role is advisory.

A letter permit issued to MDOT SHA by the NPS on March 7, 1961 authorizes the "operation and maintenance of a highway," for much of I-495 mainline and the interchange with Clara Barton Parkway at this location (**Appendix B**). As such, the subject permit area is not Section 4(f) parkland. However, because the parkway is an historic site impacts from the Proposed Action within the permit area may still qualify as a Section 4(f) use.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 1.8 acres of the Clara Barton Parkway. The NPS letter permit reduces the use of Section 4(f) parkland to 0.1 acres. The parkland impacts are entirely within the impacts to the historic site.

The impacts to Clara Barton Parkway consist of construction vehicle and material access beneath the grade-separated crossing with I-495 to accommodate the bridge replacement; the construction of a

temporary access road to transport vehicles and materials to the American Legion Bridge construction site; and the construction, maintenance, and operation of a linear stormwater management feature that extends from the area currently maintained by MDOT SHA in a transportation use to an area within Clara Barton Parkway (**Figure 2-5**). The relocation of the I-495 interchange ramps is also required. However, this work is within the area permitted by NPS to MDOT SHA and takes place at or within the existing I-495 interchange, which does not contribute to the significance of the historical site.

The area of Section 4(f) use is concentrated in three locations: extending approximately 1,000 linear feet along the north side of Clara Barton Parkway east of the I-495 bridge; and two construction vehicle access locations to the American Legion Bridge. The linear impact north of Clara Barton Parkway would consist of tree removal, grading, and the installation of a stormwater management facility.

Both construction vehicle access locations are south of the parkway. One is approximately 1,000 feet west of the I-495 bridge. The other is approximately 450 feet east of the bridge. These locations were coordinated with NPS. Having two construction access locations will shorten the duration of construction and provide safe movement of equipment and materials to and from the construction site. Impacts associated with the construction vehicle access consist of tree removal, land grading, and placing surface treatment to support the movement of equipment and materials. Construction access would be required for the duration of construction of the new American Legion Bridge which is anticipated to last between four and five years.

On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on the Clara Barton Parkway. Mitigation for the use of Clara Barton Parkway would be consistent with stipulations identified in the Section 106 Programmatic Agreement and be coordinated with the NPS, MHT and Section 106 consulting parties. The impacts to Clara Barton Parkway require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.1** and **Section 5.1.2**).

C. Applied Minimization

In addition to the minimization efforts described in Section 4, MDOT SHA has been able to further reduce impacts to Clara Barton Parkway. Upon direction from NPS, MDOT SHA worked to eliminate the placement of stormwater management facilities on NPS lands, including Clara Barton Parkway. However, the existing drainage pattern and topography of the landscape along I-495 through Clara Barton Parkway and C&O Canal NHP present significant challenges. The low point on NPS lands is near where Rock Run drains into the Potomac River. Removing all stormwater from NPS property would require a much longer bridge that would also result in significant additional use of Section 4(f) property at C&O Canal NHP and Clara Barton Parkway. Much of the stormwater can be treated in facilities within the NPS permit area granted to MDOT SHA. Additional stormwater would be treated in vaults beneath the shoulders of the widened I-495. However, a linear stormwater feature would be required along the north side of Clara Barton Parkway. Scuppers would also be placed to drain stormwater from the surface of the bridge. MDOT SHA will plan their location to avoid drainage onto NPS property as much as possible.

- As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Clara Barton Parkway have remained unchanged since June 5, 2019. The effort to minimize and mitigate impacts will continue through ongoing and future coordination with NPS staff.

Figure 2-4: Section 4(f) Property (Map 1 of 35)

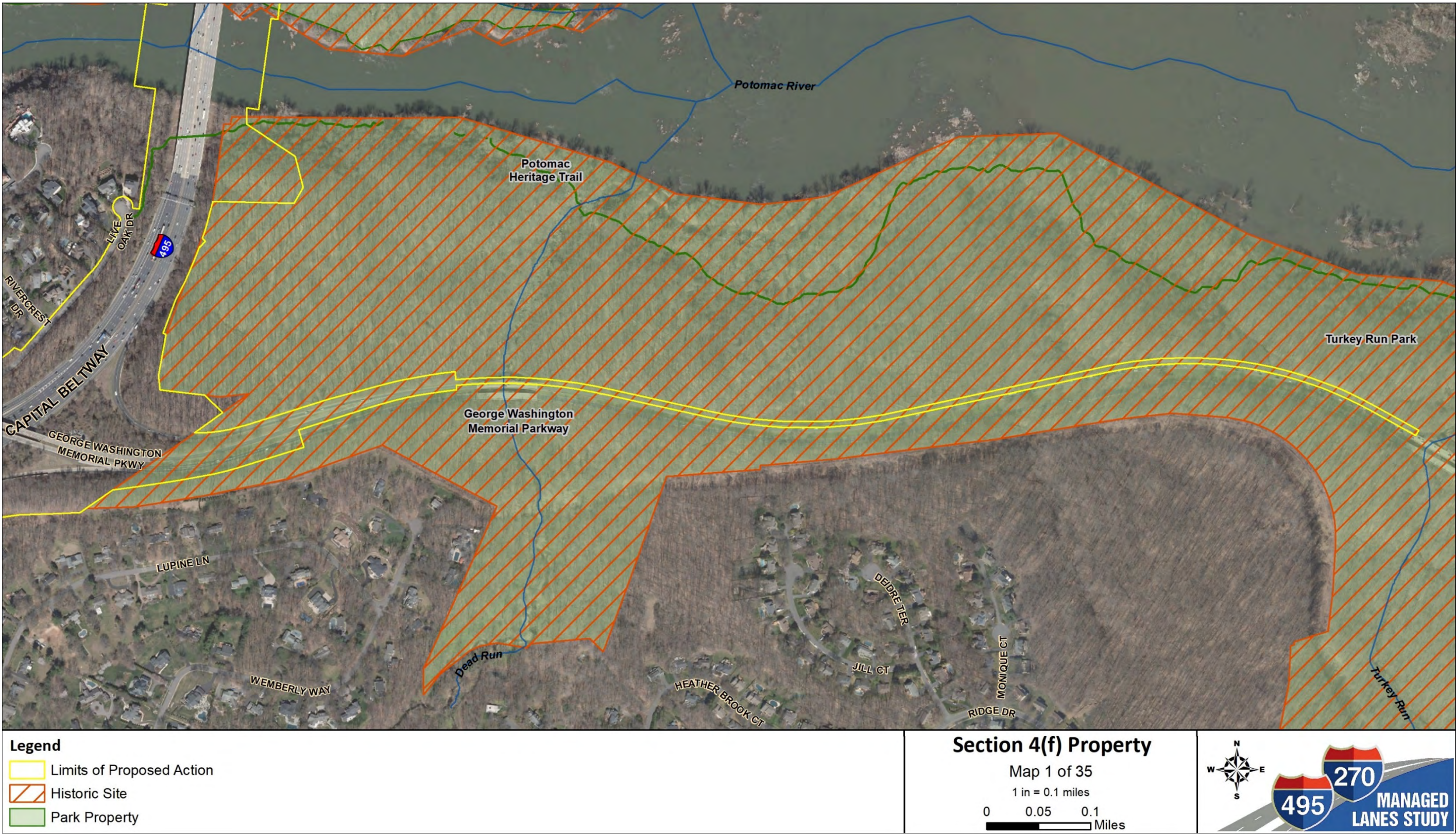
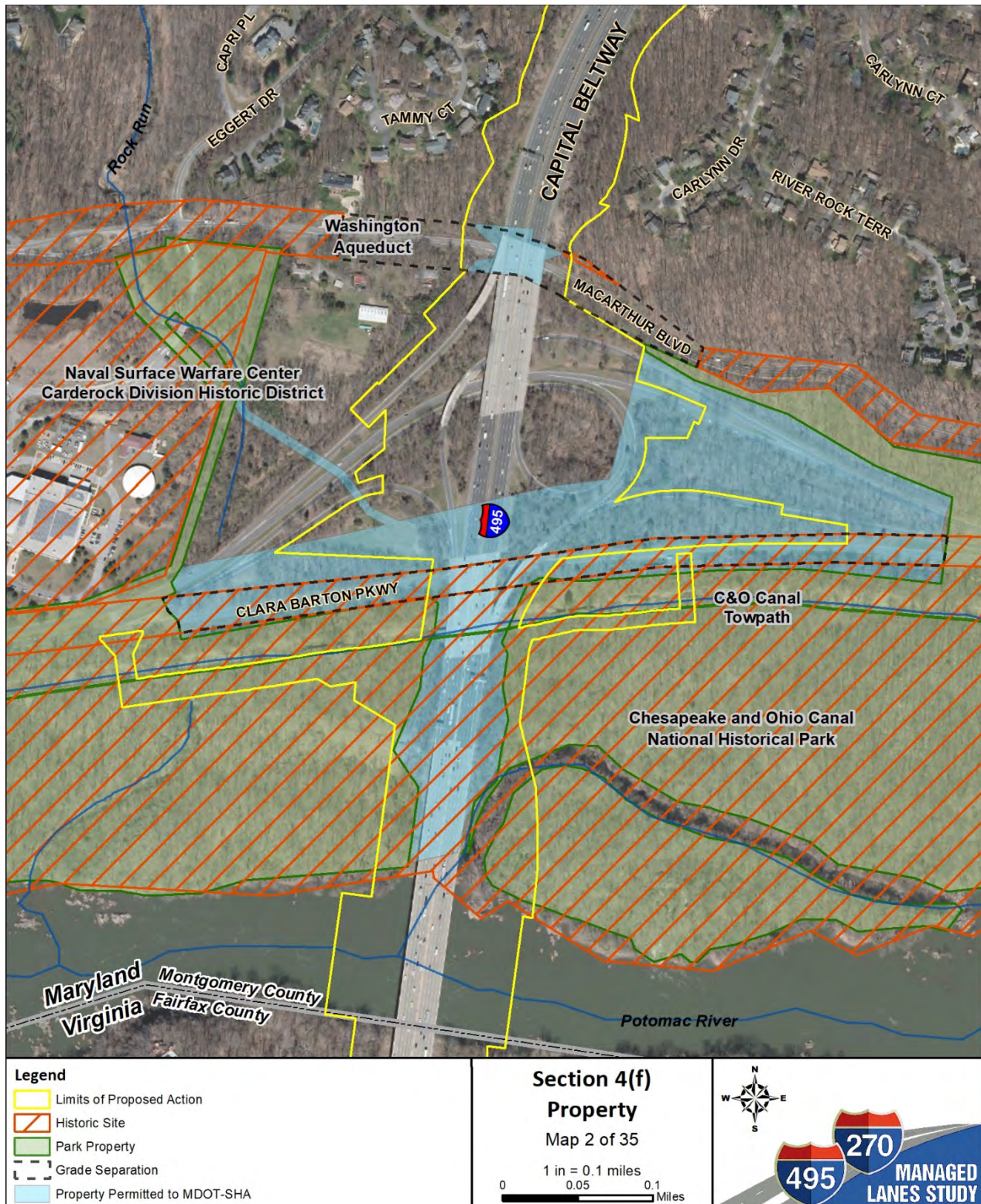


Figure 2-5: Section 4(f) Property (Map 2 of 35)



2.1.4 Moses Hall Cemetery (Pending)

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: ACHP, MHT

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

More formally known as the Morningstar Tabernacle No. 88 Moses Hall and Cemetery, Moses Hall Cemetery is an African American cemetery situated south of I-495, bounded to the east by Seven Locks Road and to the south by the Evergreen residential neighborhood (**Figure 2-6**). The boundary of the 1.5 acre historic site comprises three separate tax parcels. At the time of publication, identification of Moses Hall Cemetery as a Section 4(f) historic site was pending a formal NRHP eligibility determination and concurrence from MHT. The property was identified as potentially significant by consulting parties participating in Section 106 consultation for the Study. At the request of M-NCPPC and community groups, MDOT SHA has conducted additional research and coordinated with community groups, including descendent family members of those buried in the Moses Hall Cemetery.

As a result of this work and the developing understanding of the historical significance of Moses Hall Cemetery, MDOT SHA has chosen to identify the property as a Section 4(f) historic site prior to receiving concurrence from MHT. Moses Hall Cemetery appears to be significant under Criterion A for its association with the African American community in Cabin John in the late nineteenth century. The significant, above-ground elements of Moses Hall Cemetery may be the foundation of Moses Hall and the gravestones marking known burials.

The Morningstar Tabernacle No. 88 Moses Cemetery is typical of what has been termed an “upland South cemetery,” generally characterized by an unplanned design, frugal grave markers, and small size. The remains of Moses Hall are also present, consisting of a partial fieldstone and concrete block foundation, rectangular in plan, approximately 15 feet wide by 30 feet long. Morningstar Tabernacle No. 88 was a local chapter of a fraternal organization created after the Civil War to provide financial support and security to African Americans. Such organizations were common in the late nineteenth century, when segregation and discrimination excluded African Americans from traditional means of wealth-building. Morningstar Tabernacle No. 88, formed in the 1880s to serve the African American community in Cabin John, established a meeting hall and adjoining cemetery (the Moses Hall and Cemetery) along Seven Locks Road. Here, the community could gather to discuss business, attend social events, care for the sick, and find a community-based resting place for the deceased.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.3 acre of Moses Hall Cemetery. The actions that would result in the use of Moses Hall Cemetery would be to widen I-495 to accommodate the managed lanes system and direct access interchange at Cabin John Parkway. The area of Section 4(f) use extends approximately 600 linear feet along the northern edge of Moses Hall Cemetery where the property is bound by existing MDOT SHA right-of-way. Activities in the area of Section 4(f) use would consist of clear cutting, grading, roadway widening, landscape plantings, and access for construction equipment. Due to the sensitive nature of both marked and unmarked human remains, this 4(f) property

will be a priority to further evaluate through both engineering design and historic research (archival and oral history), including potential non-intrusive and intrusive archaeological fieldwork to avoid and minimize the 0.3 acres of impact as currently designed. All work related to this property will comply with the Maryland State Burial Law (State of Maryland Criminal Code Section 10-402).

C. Applied Minimization

At the time of publication, MHT has not yet concurred on the NRHP eligibility of Moses Hall Cemetery or Section 106 effects from the Managed Lanes Study. In advance of an eligibility determination and an adverse effect determination, MDOT SHA will develop a Location Specific Avoidance Option to avoid impacts to Moses Hall Cemetery. The Section 106 PA will document how adverse effects will be addressed, mitigation commitments, and procedures for both marked and unmarked Human Remains in compliance with state and federal regulations. The Section 4(f) use of Moses Hall Cemetery will be evaluated in the Final Section 4(f) Evaluation.

2.1.5 Cabin John Stream Valley Park, Unit 2 (M-NCPPC)

Type of Section 4(f) Property: Public Park

Officials with Jurisdiction: M-NCPPC Montgomery County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Cabin John Stream Valley Park, Unit 2 (**Figure 2-6** and **Figure 2-7**) is one of six units that comprise M-NCPPC Montgomery County Cabin John Stream Valley Park, a publicly-owned park and recreation area. Cabin John Stream Valley Park, Unit 2 extends north-south across I-495 from south of River Road to along Cabin John Parkway, where it abuts Unit 1 of the park. The entirety of Cabin John Stream Valley Park encompasses 520 acres across six units; of which Unit 2 comprises approximately 105.0 acres. Cabin John Stream Valley Park features portions of the natural-surface Cabin John Trail that runs north-south and connects the stream valley park's Potomac Area to Cabin John Parkway. The park also features undeveloped wooded area that provides a protective buffer along Cabin John Creek. This park is under jurisdiction of M-NCPPC, Montgomery County. Tax Parcels 10-00428584, 10-0085717, and 10-00857428 within Unit 2 were acquired in 1962 using funding from the Capper-Cramton Act of 1930.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 1.1 acres of Cabin John Stream Valley Park, Unit 2 to accommodate widening I-495, realigning the interchange with Cabin John Parkway, and providing northbound managed lane access to River Road (**Figure 2-6**). Unit 2 of the park is divided by I-495, where it passes over Seven Locks Road and Cabin John Parkway. South of I-495, Cabin John Stream Valley Park, Unit 2 would experience an impact from highway widening and constructability access owing to the replacement of the bridges across Seven Locks Road and Cabin John Parkway.

Additional impacts to the park are anticipated in the southwest quadrant of interchange of I-495 with River Road. Impacts less than 0.1 acre are from improvements to and augmentation of a drainage pipe and culvert, both of which are existing features. The proposed work consists of a work area for a construction pit where an augmentation pipe would be installed.

FHWA intends to make a *de minimis* impact determination for Unit 2 of Cabin John Stream Valley Park if M-NCPPC, Montgomery County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

To minimize the Section 4(f) use of Cabin John Stream Valley Park Unit 2, the proposed typical section of I-495 was reduced along this property by utilizing a closed section with a retaining wall along I-495. This process is more fully described in **Section 4.2**. No surface stormwater management facilities would be constructed adjacent to the park. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Cabin John Stream Valley Park, Unit 2 have changed from 1.0 acre on June 5, 2019 to 1.1 acre in this Draft Section 4(f) Evaluation. This change is owing to a extending a culvert outfall along MD 190 for stabilization. The effort to minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.1.6 Burning Tree Club

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: MHT

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Burning Tree Club (**Figure 2-7**) is a privately-owned, historic golf course in the northeast quadrant of the interchange of I-495 and River Road. The 221-acre club includes a Tudor Revival clubhouse and 18-hole golf course built in 1922 and 1923. Burning Tree Club is eligible for the NRHP under Criteria A and C. Burning Tree Club is significant under Criterion A as an exclusive, male-only social institution devoted to the pastime of golf, and an example of the type of recreational organization that flourished during the 1920s. Burning Tree Club is also eligible under Criterion C as a good example of a 1920s private golf club. The significant physical characteristics of the golf course are the Tudor-Revival clubhouse and the setting of the latter within the designed landscape.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.8 acre of Burning Tree Club to accommodate widening I-495; the augmentation of an existing culvert carrying Thomas Branch beneath I-495; and the realignment of Thomas Branch along the east side of I-495 (**Figure 2-7**). The area of Section 4(f) use is concentrated along a narrow strip of land that extends approximately 1200 linear feet along the western edge of Burning Tree Club where it is bound by existing MDOT SHA right-of-way. Activities in the area of Section 4(f) use would consist of tree removal, grading, constructing a stable stream bed, and landscape plantings. Noise modeling at eleven different locations on the golf course indicate an increase in noise,

but not to a degree that meets the feasible and reasonable criteria for noise mitigation. More information about noise mitigation can be found in the *Noise Analysis Technical Report* attached to the DEIS as **Appendix J**. No noise barrier is proposed along the property. The proposed impacts would not affect game play or the layout of the golf course. No elements greater than 50 years of age or that contribute to the significance of the historic Burning Tree Club would experience an impact.

On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on Burning Tree Club. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. As such, the impact to Burning Tree Club under the Proposed Action would constitute a minor use. FHWA intends to make a *de minimis* impact determination for Burning Tree Club.

C. Applied Minimization

Consistent with the minimization efforts described in Section 4, MDOT SHA has been able to reduce impacts to Burning Tree Club by eliminating stormwater management facilities from within the historic boundary of the property. A retaining wall would be constructed at the edge of pavement along the historic property.

As a result of these minimization efforts and on-going coordination with the OWJ, impacts to Burning Tree have changed from 0.6 acres on June 5, 2019 to the 0.8 acres in this Draft Section 4(f) Evaluation. This increase is owing to changes to the LOD at the I-495 interchange with River Road. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with MHT.

2.1.7 Fleming Local Park

Type of Section 4(f) Property: Historic Site and Public Park

Officials with Jurisdiction: MHT, M-NCPPC Montgomery County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Fleming Local Park (**Figure 2-8**) is a publicly-owned park and recreation area at 9929 Fleming Avenue in Bethesda. It is adjacent to the I-495 outer loop between MD 187 and the East Spur of I-270. This 24-acre park features two softball fields, two tennis courts, two basketball courts, a playground, and picnic shelter. This park is under the jurisdiction of M-NCPPC, Montgomery County and was acquired in 1967 with POS funds.

The eastern portion of Fleming Local Park additionally contributes to the significance of the Grosvenor Estate, determined eligible for the NRHP on September 11, 2000. Grosvenor Estate is significant under Criterion A as a representative example of a twentieth century suburban estate. It is further significant under Criterion C as an example of Tudor Revival architecture. Significant elements of the property include the architectural detailing of the house, the garage, the location and design of the driveway, and sweeping rear lawn. The design of the main drive and rear lawn have been compromised by suburban infill development within the last 10 years.

As an historic property, Fleming Local Park is under the jurisdiction of MHT. The Section 4(f) use of Grosvenor Estate is discussed in **Section 2.1.8**.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.1 acre of Fleming Local Park to relocate the overpass carrying the Bethesda Trolley Trail across I-495 and provide construction access at two locations to augment existing stormwater pipes beneath I-495 and the I-270 east spur. These actions would involve tree removal, grading, and maneuvering of construction vehicles and materials. The area of Section 4(f) use is divided into three locations: a triangular area at the southwestern corner of the park; a small rectangular area approximately 850 feet west of the I-495/I-270 east spur split; and a small rectangular area in the southeast corner of the park along the I-270 east spur, approximately 75 feet north of the split (**Figure 2-8**). The former impact is approximately 0.1 acre and is outside the historic boundary of Grosvenor Estate. No recreational facilities would experience an impact from the proposed use of Section 4(f) *park* property. The latter impacts are within the historic boundary and total less than 0.1 acre. The proposed impacts would not affect elements greater than 50 years of age or that contribute to the significance of Grosvenor Estate.

FHWA intends to make a *de minimis* impact determination for Fleming Local Park if MHT and M-NCPPC concur that the proposed action, after measures to mitigate harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments. On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on Grosvenor Estate, including the portions of Fleming Local Park within the historic boundary. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. For *de minimis* impacts to parks, the public must also be given the opportunity to comment beyond that in the Section 106 process.

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Fleming Local Park by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-495 are proposed along Fleming Local Park. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495. No surface stormwater management facilities would be constructed adjacent to the park and historic site.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Fleming Local Park have remained unchanged since June 5, 2019. The effort to minimize and mitigate impacts will continue through ongoing and future coordination with MHT and M-NCPPC staff.

Figure 2-6: Section 4(f) Property (Map 3 of 35)

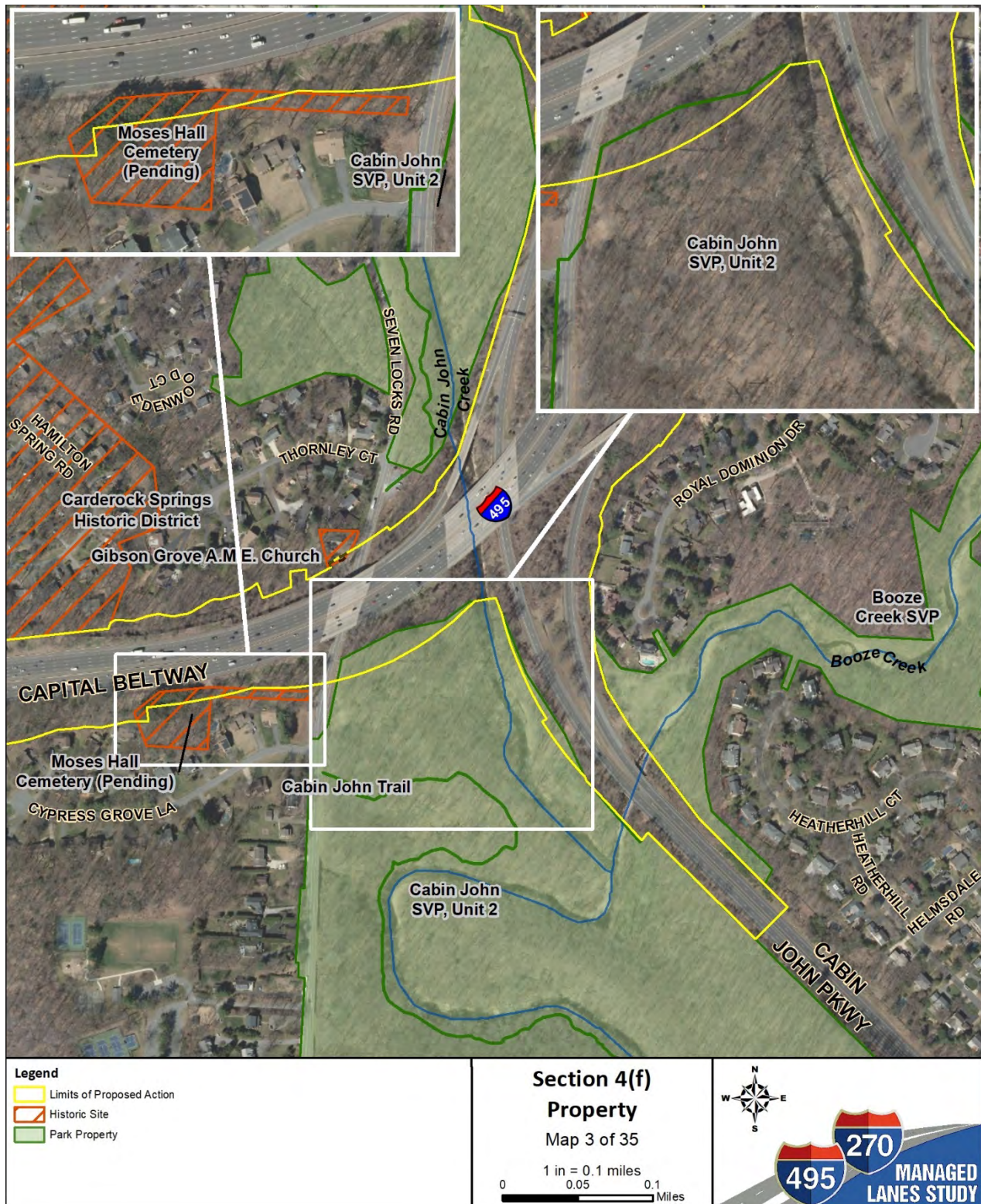


Figure 2-7: Section 4(f) Property (Map 4 of 35)

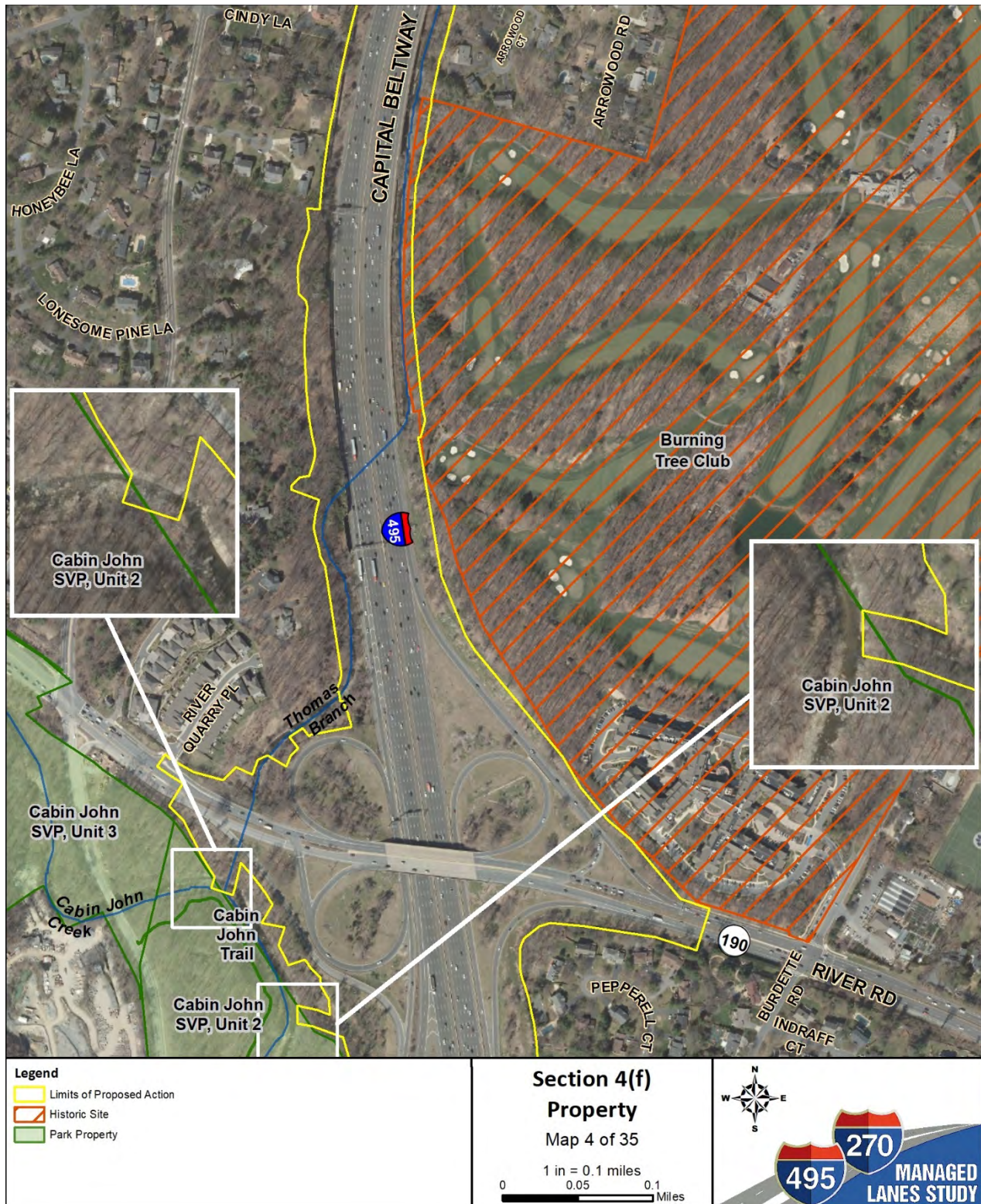


Figure 2-8: Section 4(f) Property (Map 5 of 35)



2.1.8 Grosvenor Estate (Wild Acres)

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: MHT

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Grosvenor Estate (Wild Acres, **Figure 2-8**) is an NRHP-eligible historic site at 10100 Laureate Way in Bethesda. It is immediately west of the I-270 east spur, north of the I-495 split. The historic boundary encompasses 34.7 acres and includes all land remaining from its association with Gilbert Grosvenor and the property's period of significance from 1928-1966. The historic boundary includes the eastern portion of Fleming Local Park, the Section 4(f) use of which is described in **Section 2.1.7**. Grosvenor Estate was determined eligible for the NRHP on September 11, 2000. It is significant under Criterion A as a representative example of a twentieth century suburban estate. Grosvenor Estate is also significant under Criterion C, as an excellent example of Tudor Revival architecture. Significant elements of the property include the architectural detailing of the house, the garage, location and design of the driveway, and sweeping rear lawn. The design of the main drive and the rear lawn have been compromised by suburban infill development within the last 10 years.

B. Potential Section 4(f) Use

The Proposed Action would result in a use of 0.1 acre of Section 4(f) use of Grosvenor Estate, except for Alternative 10 which would result in 0.2 acre, to accommodate mainline widening along I-270; and provide constructability access to augment an existing stormwater pipe beneath I-270 (**Figure 2-8**). These actions would involve tree removal, grading, and maneuvering of construction vehicles and materials. The area of Section 4(f) use is at two locations: a small rectangular area in the southeast corner of the historic boundary along the I-270 east spur, approximately 75 feet north of the split and a narrow linear area that extends approximately 600 feet along I-270 at the northeast corner of the historic boundary. The area of Grosvenor Estate and Fleming Local Park that would experience a Section 4(f) use contains no standing structures greater than 50 years of age or elements that contribute to the significance of the historic site.

On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on Grosvenor Estate, including the portions of Fleming Local Park within the historic boundary. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. Because Fleming Local Park is also a public park, there is the additional requirement for M-NCPPC Montgomery County to concur that the Proposed Action, after measures to mitigate and minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. For *de minimis* impacts to parks, the public must also be given the opportunity to comment. FHWA intends to make a finding of *de minimis* impact to Fleming Local Park.

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Grosvenor Estate by eliminating linear stormwater management facilities along the southern edge of the historic boundary. A retaining wall would be constructed at the edge of pavement in that location.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Grosvenor Estate have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with MHT.

2.1.9 Rock Creek Stream Valley Park, Unit 3

Type of Section 4(f) Property: Historic Site and Public Park

Officials with Jurisdiction: MHT and M-NCPPC Montgomery County

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Rock Creek Stream Valley Park Unit 3 (**Figure 2-8, Figure 2-9 and Figure 2-10**) is 1 of 15 units that comprise Montgomery County's Rock Creek Stream Valley Park, a publicly-owned park and recreation area. Rock Creek Stream Valley Park, Unit 3 follows the course of Rock Creek from the MARC railroad tracks in Kensington southwest to the I-495/I-270 split and then southeast along the northside of I-495 to Cedar Lane. Rock Creek Stream Valley Park encompasses approximately 3,960 acres; of which Unit 3 comprises 326.6 acres. Rock Creek Stream Valley Park features portions of the Rock Creek Trail that runs north-south and connects the portion of Rock Creek Regional Park north of Rockville to Washington, DC. The stream valley park provides a riparian buffer for the environmentally sensitive Rock Creek. Recreational amenities within the park include bicycling, picnic areas, playgrounds, and hiking trails. The Rock Creek Stream Valley Park was established using funds from the Capper-Cramton Act of 1930. The portions of Unit 3 through which I-495 runs were acquired in 1939 and 1942.

Rock Creek Stream Valley Park Unit 3 is also an historic site eligible for the NRHP under Criterion A for the significant association with early twentieth century environmental protection and regional planning efforts in Metropolitan Washington. As an historic site in Maryland, the official with jurisdiction is MHT. The period of significance for the park units extends from 1931 to 1970, marking the beginning of the construction of Beach Drive and the year in which the park was substantially completed. Elements that contribute to the significance of Rock Creek Stream Valley Park Unit 3 consists of the of the bridges within the park that cross Rock Creek and retain integrity; the natural landscape that remains intact and continues to be preserved per the park's original intention; Beach Drive, which adheres to the 1954 design by the Olmsted Brothers company; and the Rock Creek Hiker-Biker Trail, an original component of the park plan that is generally consistent with routes established in 1929 and 1954 park plans.

The Maryland Inventory of Historic Properties form specifically references the impact of I-495 on Rock Creek Park. "Construction of the beltway did impact some sections of the park, but the road was designed to limit disturbance as much as possible by placing the roadway at the edges of the park boundary. Thus, most of the natural and recreational areas of the park were retained and continue to contribute to the significance of the park."² The Capital Beltway does not contribute to the significance of Rock Creek Stream Valley Park Unit 3.

² Diehlman, Nicole. "Rock Creek Park Stream Valley Park Units 2 and 3." Maryland Inventory of Historic Properties M: 36-87 (Crownsville, MD: Maryland Historic Trust, 1996), 15.

B. Potential Section 4(f) Use

The portion of I-495 through Rock Creek Stream Valley Park is owned by M-NCPPC. The agency granted a perpetual easement (L 3199, F 506 in land records of Montgomery County) to MDOT SHA on March 24, 1964 for “all and every highway purpose.” A variety of conditions were attached to the transfer of land, including an agreement between M-NCPPC and MDOT SHA that the Capital Beltway through the easement area shall have a maximum of six lanes, existing area roadways shall not be relocated, and any additional widening of I-495 shall be constructed in the median. During the late 1980s, MDOT SHA widened I-495 toward the median resulting in the current configuration of four lanes in each direction. Copies of these easements are in Appendix B. Any impact from the Proposed Action within this easement area would not qualify as a Section 4(f) use as it is currently in a transportation use. Potential Section 4(f) Use

The Proposed Action would result in the Section 4(f) use of 3.3 acres (2.5 acres under Alternative 9M) of Rock Creek Stream Valley Park, Unit 3. The actions that would result in the use of Rock Creek Stream Valley Park, Unit 3 would be to realign the off-ramp from the I-495 outer loop to northbound MD 355 and to repair and improve, or replace existing storm drain outfalls and stream conveyance pipes (**Figure 2-8, Figure 2-9, and Figure 2-10**).

MDOT SHA has identified the need for a small, linear stormwater management facility east of the ramp from the outer loop of I-495 to northbound MD 355. This facility would require ground disturbance and the removal of trees from within this area of Unit 3 of Rock Creek Stream Valley Park. The repair and improvement, replacement, or augmentation of existing storm drain and stream conveyance pipes that traverse I-495 would require impacts to small, rectangular areas of Section 4(f) property. Impacts associated with repairing the existing outfalls would be considered an overall benefit to the currently degraded outfall system in the park. Actions in these areas will include the removal of vegetation and ground disturbance. No recreational facilities would experience an impact from the proposed use of Section 4(f) property.

On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on Rock Creek Stream Valley Park, Unit 3. Any mitigation for the Section 4(f) use of the historic site would be consistent with stipulations identified in the Section 106 Programmatic Agreement and be coordinated with the NPS, MHT and Section 106 consulting parties. The impacts to Rock Creek Stream Valley Park, Unit 3 require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.3**).

C. Applied Minimization

In addition to the minimization efforts described in Section 4, MDOT SHA has been able to further reduce impacts to Rock Creek Stream Valley Park, Unit 3. On June 12, 2019 MDOT SHA held a field review meeting at Rock Creek Park with representatives of the U.S. Army Corps of Engineers (USACE), Maryland Department of the Environment (MDE), Maryland Department of Natural Resources (MDNR) and M-NCPPC. The purpose of the meeting was to review an area along the mainstem of Rock Creek where stream realignment was under consideration as part of the Proposed Action. The agencies requested that MDOT SHA identify options that would avoid relocating Rock Creek.

A follow up meeting with the agencies was held at the MDOT SHA P3 office on August 8, 2019. MDOT SHA presented three design options for the proposed widening within Rock Creek Stream Valley Park, Unit 3.

MDOT SHA recommended implementing into the preliminary design the option that would result in the least impact to a variety of environmental features within Unit 3 of the stream valley park. The option selected for incorporation into the preliminary design involves shifting the alignment of the widened I-495 through Rock Creek Park west of Cedar Lane. Rather than widening about the centerline, the highway will be widened to the inner loop side of the existing roadway. This alignment shift will avoid any permanent realignment of Rock Creek and allow the existing riparian buffer between Rock Creek and I-495 to remain in place. No linear stormwater management facilities will be placed along this segment of I-495. Subterranean stormwater vaults will be placed beneath the variable width 10-12' shoulders. This design would require the replacement of the bridge carrying I-495 over Cedar Lane. However, the bridge replacement would be conducted within existing MDOT SHA right-of-way.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Rock Creek Stream Valley Park, Unit 3 have been reduced from 4.9 acres (4.6 acres under Alternative 9M) on June 5, 2019 to 3.3 acres (2.5 acres under Alternative 9M) in this Draft Section 4(f) Evaluation. The effort to minimize and mitigate impacts will continue through ongoing and future coordination with MHT and M-NCPPC staff.

2.1.10 Locust Hill Neighborhood Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Montgomery County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Locust Hill Neighborhood Park (**Figure 2-9**) is a publicly-owned park and recreation area at 9621 Bellevue Drive in Bethesda. It is adjacent to the I-495 inner loop, nestled within two sections of the Locust Hill Estates residential neighborhood. The five-acre park features walking trails and an undeveloped wooded area. The park was originally acquired in 1939 as part of Rock Creek Park using funds from the Capper-Cramton Act. This park is under the jurisdiction of M-NCPPC Montgomery County.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.3 acre (0.2 acre under Alternative 9M) of Locust Hill Neighborhood Park to accommodate widening along I-495; improvements and augmentation to an existing culvert beneath I-495; and providing access for construction vehicles and materials. The area of Section 4(f) use is concentrated at three locations: a narrow area that extends approximately 150 feet at the western end of the park adjacent to the I-495 inner loop; a narrow area that extends approximately 100 feet at the eastern end of the park adjacent to the I-495 inner loop; and a small area at the center of the park and adjacent to the inner loop (**Figure 2-9**). Activities in the area of Section 4(f) use would consist of tree removal, grading, improvements to the existing stormwater culvert and access for construction vehicles and materials. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Locust Hill Neighborhood Park if M-NCPPC, Montgomery County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

The narrowest typical section has been applied where improvements to I-495 are proposed along Locust Hill Neighborhood Park. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495. No surface stormwater management facilities would be constructed adjacent to the park. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Locust Hill Neighborhood Park have been reduced from 0.3 acre under Alternative 9M on June 5, 2019 to 0.2 acres under Alternative 9M in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

Figure 2-9: Section 4(f) Property (Map 6 of 35)

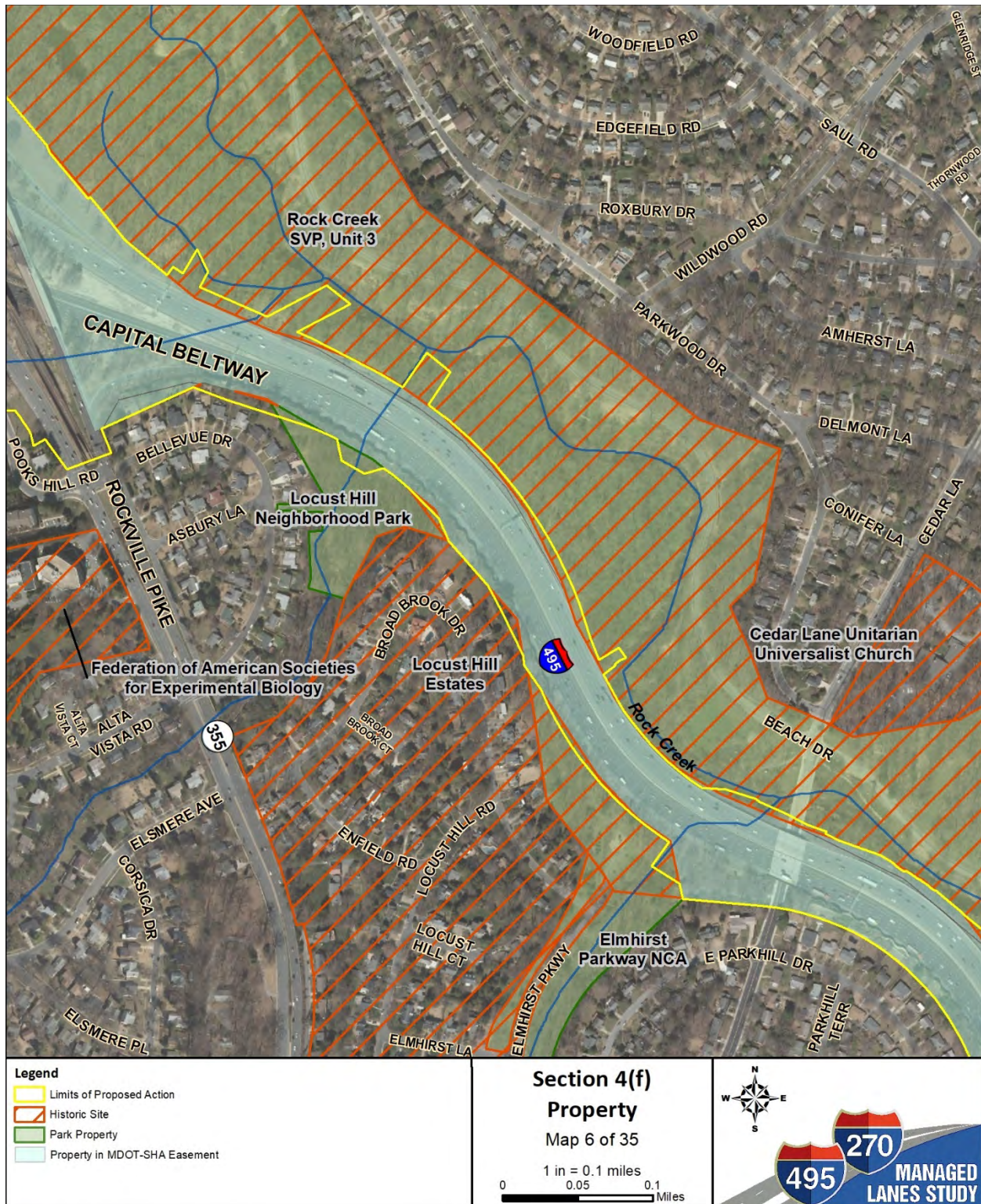


Figure 2-10: Section 4(f) Property (Map 7 of 35)



2.1.11 Rock Creek Stream Valley Park, Unit 2

Type of Section 4(f) Property: Historic Site and Public Park

Officials with Jurisdiction: MHT and M-NCPPC Montgomery County

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Rock Creek Stream Valley Park, Unit 2 (**Figure 2-10, Figure 2-11, Figure 2-12, and Figure 2-13**) is 1 of 15 that comprise Montgomery County's Rock Creek Stream Valley Park, a publicly-owned park and recreation area. Rock Creek Stream Valley Park, Unit 2 extends from Piney Branch Road to East West Highway (MD 410). Rock Creek Stream Valley Park encompasses 3,960 acres; of which Unit 2 comprises approximately 277 acres. Rock Creek Stream Valley Park features portions of the Rock Creek Trail that runs north-south and connects the portion of Rock Creek Regional Park north of Rockville to Washington, DC. The stream valley park additionally provides a riparian buffer for the environmentally sensitive Rock Creek. Recreational amenities within the park include bicycling, picnic areas, playgrounds, and hiking trails. The park was acquired using funds from the Capper-Cramton Act of 1930. The area where I-495 passes through Unit 2 of the park were acquired in 1933 and 1934.

Rock Creek Stream Valley Park Unit 2 is also an historic site eligible for the NRHP under Criterion A for the significant association with early twentieth century environmental protection and regional planning efforts in Metropolitan Washington. As an historic site in Maryland, the official with jurisdiction is MHT. The period of significance for the park units extends from 1931 to 1970, marking the beginning of the construction of Beach Drive and the year in which the park was substantially completed. Elements that contribute to the significance of Rock Creek Stream Valley Park Unit 2 consists of the bridges within the park that cross Rock Creek and retain integrity; the natural landscape that remains intact and continues to be preserved per the park's original intention; Beach Drive and Jones Mill Road, which adhere to the 1954 design by the Olmsted Brothers; and the Rock Creek Hiker-Biker Trail, an original component of the park plan that is generally consistent with routes established in 1929 and 1954 park plans.

The Maryland Inventory of Historic Properties form specifically references the impact of I-495 on Rock Creek Park. "Construction of the beltway did impact some sections of the park, but the road was designed to limit disturbance as much as possible by placing the roadway at the edges of the park boundary. Thus, most of the natural and recreational areas of the park were retained and continue to contribute to the significance of the park."³ The Capital Beltway does not contribute to the significance of Rock Creek Stream Valley Park Unit 2.

The portion of I-495 through Rock Creek Stream Valley Park is owned by M-NCPPC. The agency granted a perpetual easement (L 3199, F 506 in land records of Montgomery County) to MDOT SHA on March 24, 1964 for "all and every highway purpose." A variety of conditions were attached to the transfer of land, including an agreement between M-NCPPC and MDOT SHA that the Capital Beltway through the easement area shall have a maximum of six lanes, existing area roadways shall not be relocated, and any additional widening of I-495 shall be constructed in the median. During the late 1980s, MDOT SHA

³ Diehlman, Nicole. "Rock Creek Park Stream Valley Park Units 2 and 3." Maryland Inventory of Historic Properties M: 36-87 (Crownsville, MD: Maryland Historic Trust, 1996), 15.

widened I-495 toward the median resulting in the current configuration of four lanes in each direction. Copies of these easements are in **Appendix B**. Any impact from the Proposed Action within this easement area would not qualify as a Section 4(f) use as it is currently in a transportation use.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.4 acre (0.2 acre under Alternative 9M) of Rock Creek Stream Valley Park, Unit 2 to accommodate widening I-495 and adding a direct access interchange at MD 185 (**Figure 2-10, Figure 2-11, Figure 2-12, and Figure 2-13**). This would result in the permanent incorporation of portions of Rock Creek Stream Valley Park, Unit 2 into the transportation facility. The area of Section 4(f) use is concentrated along the I-495 outer loop, southwest of Jones Mill Road. The portion of the park that would experience a Section 4(f) use consists of the wooded area between the Rock Creek stream bank and I-495. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. Access to the Rock Creek Trail, which runs along the north side of I-495 through the corridor, would be maintained during construction with limited interruption.

On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on Rock Creek Stream Valley Park, Unit 2. Any mitigation for the Section 4(f) use of the historic site would be consistent with stipulations identified in the Section 106 Programmatic Agreement and be coordinated with the NPS, MHT and Section 106 consulting parties. The impacts to Rock Creek Stream Valley Park, Unit 2 require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.4**).

C. Applied Minimization

In addition to the minimization efforts described in Section 4, MDOT SHA has been able to further reduce impacts to Rock Creek Stream Valley Park, Unit 2. On June 12, 2019 MDOT SHA held a field review meeting at Rock Creek Park with representatives of the USACE, MDE, MDNR and M-NCPPC. The purpose of the meeting was to review an area along the mainstem of Rock Creek where stream realignment was under consideration as part of the Proposed Action. The agencies asked MDOT SHA to identify options that would avoid relocating Rock Creek.

A follow up meeting with the agencies was held August 8, 2019. MDOT SHA presented three design options at the location within Unit 2 of Rock Creek Park. MDOT SHA recommended incorporating into the preliminary design the option that would result in the least impact to a variety of environmental features within Unit 2 of the stream valley park, including Rock Creek, wetlands, and forest resources.

The option incorporated into the preliminary design involves reducing the off-ramp capacity from the I-495 outer loop to MD 185 from two lanes to one. A proposed slip ramp allowing traffic to merge from the managed lanes to GP lanes was removed from the preliminary design. These changes sufficiently narrowed the LOD to reduce the Section 4(f) use of Rock Creek Stream Valley Park, Unit 2 while avoiding impacts to Rock Creek and associated wetlands. A retaining wall needed to support the highway would be constructed from the existing roadway. This option may require the replacement of the I-495 bridge over Jones Mill Road and Rock Creek. Access to the Rock Creek Trail, which passes beneath this bridge, would be maintained through the duration of construction, with limited interruptions. No linear stormwater management facilities will be placed along the segment of I-495 that passes through Unit 2 of the stream valley park. Subsurface stormwater vaults would be placed beneath the variable width 10-12' shoulders.

In order to improve existing drainage and culvert outfalls, the LOD would still extend into Rock Creek Park at two locations along this segment.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Rock Creek Stream Valley Park, Unit 2 have been reduced from 9.6 acres (9.5 acres under Alternative 9M) on June 5, 2019 to 0.4 acre (0.2 acre under Alternative 9M) in this Draft Section 4(f) Evaluation. The effort to minimize and mitigate impacts will continue through ongoing and future coordination with MHT and M-NCPPC.

2.1.12 National Park Seminary Historic District/ Forest Glen

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: ACHP, MHT

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

The National Park Seminary Historic District/ Forest Glen (**Figure 2-13**) on Linden Lane in Forest Glen encompasses a wide variety of eclectic and fanciful historic buildings and structures as well as wooded and variable terrain within the 23-acre boundary. Situated between the Connecticut Avenue and Georgia Avenue interchanges on I-495, the Forest Glenn Inn was originally built in 1890. In 1894, it reopened as a finishing school for girls with contributing buildings erected between 1894 and 1915. The district is composed of eclectic houses built in different architectural styles ranging from Japanese Pagoda to Spanish Mission. The National Park Seminary Historic District was listed in the NRHP on September 14, 1972 for its significance as a twentieth century architectural folly and its landscape architecture as well as for its association with education. Although the property is named “National Park Historic District” it is technically a historic property because the boundary is confined to one property containing multiple buildings. Elements that contribute to the significance of the historic site include the 22 standing structures, surrounding wooded landscape, stone retaining walls, statuary, numerous walkways, and rustic footbridges.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 1.2 acres of National Park Seminary Historic District/ Forest Glen to accommodate the replacement and realignment of two bridges across I-495: Linden Lane and the CSX railroad (**Figure 2-13**). The realignments and bridge replacements would result in the permanent incorporation of portions of National Park Seminary Historic District/ Forest Glen into the transportation facility. The area of Section 4(f) use is concentrated at two locations: the northwestern and northeastern corners of the historic site boundary. The bridge carrying Linden Lane would be constructed directly east of the existing alignment. Its length would be extended to accommodate the added width of the managed lanes on I-495. The Y-split of Linden Lane and Newcastle Avenue would also shift slightly into the boundary of the historic site. The realignment would result in the removal of trees and grading, as well as the construction and maintenance of the relocated Linden Lane and bridge over I-495 at the northwestern corner of the historic site.

The CSX railroad and bridge would be realigned to the west of the existing alignment. This decision was made because an alignment to the east of the existing bridge would result in residential relocations and impacts within the Capitol View Park Historic District. The realignment of the CSX railroad over I-495 to the west would result in the removal of trees and grading, as well as the construction and maintenance of the relocated CSX railroad and bridge at the northeastern corner of the historic site.

The landscape of National Park Seminary Historic District/Forest Glen is a defining characteristic of the historic site. On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on National Park Seminary Historic District/Forest Glen. Any mitigation for the Section 4(f) use of the historic site would be consistent with stipulations identified in the Section 106 Programmatic Agreement and be coordinated with the NPS, MHT and Section 106 consulting parties. The impacts to National Park Seminary Historic District/Forest Glen require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.4** and **Section 5.1.5**).

C. Applied Minimization

In addition to the minimization efforts described in Section 4, MDOT SHA has been able to further reduce impacts to National Park Seminary Historic District/Forest Glen. MDOT SHA was able to locate the realigned CSX railroad as close as possible to the existing alignment in order to reduce the Section 4(f) use of National Park Seminary Historic District/Forest Glen. A retaining wall needed to support I-495 would be constructed from the shoulder of I-495, eliminating the need for construction access from within the historic site. No linear stormwater management facilities would be placed along the I-495 inner loop. Subsurface stormwater vaults would be placed beneath the variable width 10-12' shoulders. In order to improve an existing outfall of an unnamed tributary to Forest Glen Creek and culvert outfall, the LOD would still extend into the historic boundary directly west of the realigned CSX railroad.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to National Park Seminary/ Forest Glen have been reduced from 1.3 acres on June 5, 2019 to 1.2 acres in this Draft Section 4(f) Evaluation. The effort to minimize and mitigate impacts will continue through ongoing and future coordination with MHT.

2.1.13 Metropolitan Branch, Baltimore and Ohio Railroad

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: ACHP, MHT

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

The Metropolitan Branch, Baltimore and Ohio Railroad (**Figure 2-13**) was determined eligible for the NRHP under Criteria A and C on September 11, 2000. This Section 4(f) historic site is a linear rail line that extends from Union Station in Washington, DC through Montgomery County to Point-of-Rocks in Frederick County. The boundary of the historic site consists of 405.7 acres. The railroad is significant under Criterion A for its association with the transportation industry as well as the agricultural and residential development of Montgomery County. It is also significant under Criterion C for its extant station buildings and engineering structures.

Small Structure 15046X0 is a small, masonry arched culvert situated north of I-495 and east of Capitol View Avenue (MD 192). It contributes to the significance of the Metropolitan Branch, Baltimore and Ohio Railroad. The small structure carries the modern CSX railroad (historical name: the Metropolitan Branch, Baltimore and Ohio Railroad) across a branch of Rock Creek. The culvert has been altered with a concrete culvert beneath MD 192. The small structure is significant under Criteria A and C.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 8.8 acres of Metropolitan Branch, Baltimore and Ohio Railroad, including 0.3 acre of Small Structure 15046X0. This Section 4(f) use would accommodate realigning the railroad crossing to the west and replacing the existing bridge across I-495. The area of Section 4(f) use consists of approximately 3,500 linear feet of railroad, which extends approximately 1,800 feet south of I-495 and 1700 feet north (**Figure 2-13**). Activities in the area of Section 4(f) use consist of providing construction access for vehicles and materials, removing the existing rail and track bed, and constructing a new alignment. The railroad would be realigned in a manner that allows continued operation during construction of both I-495 and the active CSX railroad. The portion of the historic site that would experience an impact consists of the rails, rail prism, and the bridge across I-495. The outfall of the Small Structure 15046X0 is within the LOD of the Study. However, MDOT SHA is committed to avoiding any physical impact to the historic small structure.

On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on Metropolitan Branch, Baltimore and Ohio Railroad. Mitigation for the Section 4(f) use of Metropolitan Branch, Baltimore and Ohio Railroad historic site would be consistent with stipulations identified in the Section 106 Programmatic Agreement and be coordinated with the NPS, MHT and Section 106 consulting parties. The impacts to Metropolitan Branch, Baltimore and Ohio Railroad require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis **Section 5.1.4**.

Section 106 consultation with MHT is ongoing. MDOT SHA has identified new information indicating the segment of Metropolitan Branch, Baltimore and Ohio Railroad within the project area is modified and does not contribute to the significance of the historic property. MDOT SHA will submit a revised effect determination of no adverse effect on Metropolitan Branch, Baltimore and Ohio Railroad. Should MHT concur that the portion of Metropolitan Branch, Baltimore and Ohio Railroad within the project area is non-contributing there would be no Section 4(f) use of the property. The results of ongoing coordination and consultation will be documented in the Final Section 4(f) Evaluation.

C. Applied Minimization

Owing to the nature of the railroad as a transportation facility and Section 4(f) property, the minimization efforts described in Section 4 do not readily apply at this location. However, MDOT SHA has been able to further reduce impacts to the Metropolitan Branch, Baltimore and Ohio Railroad. While it was not possible to avoid a Section 4(f) use of National Park Seminary Historic District/Forest Glen, Metropolitan Branch, Baltimore and Ohio Railroad, or Capitol View Park Historic District, the realigned CSX railroad was located as close as possible to the existing alignment in order to reduce the Section 4(f) use of National Park Seminary Historic District/Forest Glen. This would benefit Metropolitan Branch, Baltimore and Ohio Railroad by avoiding the removal of Small Structure 15046X0.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Metropolitan Branch, Baltimore and Ohio Railroad have changed only slightly since June 5, 2019, increasing less than 0.1 acre. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with MHT staff.

2.1.14 Forest Glen Historic District

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: MHT

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

The Forest Glen Historic District (**Figure 2-13**) is an NRHP-eligible historic district situated north of I-495 between the Connecticut Avenue and Georgia Avenue interchanges. The boundary of the historic district encompasses 9.3 acres containing a variety of residential architectural styles common during the second half of the nineteenth century. On April 17, 2001 the Forest Glen Historic District was determined eligible for the NRHP under Criteria A and C. Under Criterion A, the district is eligible as an excellent example of early suburban development that resulted from the construction of the Metropolitan Branch of the Baltimore & Ohio Railroad in the 1873. It is a representative early residential community illustrating the history of suburban growth in Montgomery County. Under Criterion C, the district is eligible for its collection of exemplary residential architecture. Elements that contribute to the significance of the historic site are the outstanding examples of Queen Anne, Stick-style, and Gothic Revival architecture and the setting which consists of curvilinear streets, mature trees, and landscape elements greater than fifty years of age.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.2 acre (0.1 acre under Alt 9M) of the Forest Glen Historic District to accommodate widening I-495, removing the existing noise barrier, and erecting a new noise barrier (**Figure 2-13**). The area of Section 4(f) use is concentrated along the southern edge of two properties that contribute to the significance of the historic district: 2418 and 2420 Forest Glen Road. Activities in this area would consist of tree removal, grading, paving, removing the existing noise wall and constructing a new noise wall. The elements of these properties that contribute to the significance of the historic district are the residential dwellings and topographical and landscape features associated with the development of the subdivision. Aerial photographs indicate the area within the historic district that would experience an impact consists of trees planted after the construction of the existing noise wall circa 1982. No standing structures greater than fifty years of age or landscape elements that contribute to the significance of the historic district would experience an impact.

Section 106 consultation has resulted in a finding of no adverse effect. As such, the impact to Forest Glen Historic District under the Proposed Action would constitute a minor use. FHWA intends to issue a finding of *de minimis* impact Forest Glen Historic District.

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Forest Glen Historic District by eliminating linear stormwater management facilities along the southern edge of the historic boundary. A retaining wall would be constructed at the edge of pavement in that location.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Forest Glen Historic District have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with MHT staff.

2.1.15 Forest Glen Neighborhood Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Montgomery County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Forest Glen Neighborhood Park (**Figure 2-13**) is a publicly-owned park and recreation area at 2323 Coleridge Drive in Silver Spring. It is adjacent to the I-495 outer loop and east of MD 192. This 3.7-acre park features two basketball courts, a playground area and a small parking lot. The park is under the jurisdiction of M-NCPPC Montgomery County and was acquired in 1969.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.3 acre (0.2 acre under Alternative 9M) of Forest Glen Neighborhood to accommodate widening on I-495, providing access for construction vehicles and materials; and removing and replacing the existing noise wall (**Figure 2-13**). The area of Section 4(f) use is a narrow linear area across the southern end of the park. This area is planted with trees. A basketball court in close proximity to the existing noise barrier would not experience a permanent impact. Activities within the area of Section 4(f) use would consist of tree removal, grading, removing the existing noise barrier and constructing a replacement; and access for construction equipment and materials. No recreational facilities would experience an impact from the proposed use of Section 4(f) property.

FHWA intends to make a *de minimis* impact determination for Forest Glen Neighborhood Park if M-NCPPC, Montgomery County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Forest Glen Neighborhood Park by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-495 are proposed along the park. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495. At the conclusion of construction and subject to additional coordination with M-NCPPC, new trees would be planted on the park side of the noise barrier. No surface stormwater management facilities would be constructed adjacent to the park.



As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Forest Glen Neighborhood Park have increased from 0.2 acre under Alternative 9M on June 5, 2019 to 0.3 acres under Alternative 9M in this Draft Section 4(f) Evaluation. The effort to minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

Figure 2-11: Section 4(f) Property (Map 8 of 35)



Figure 2-12: Section 4(f) Property (Map 9 of 35)

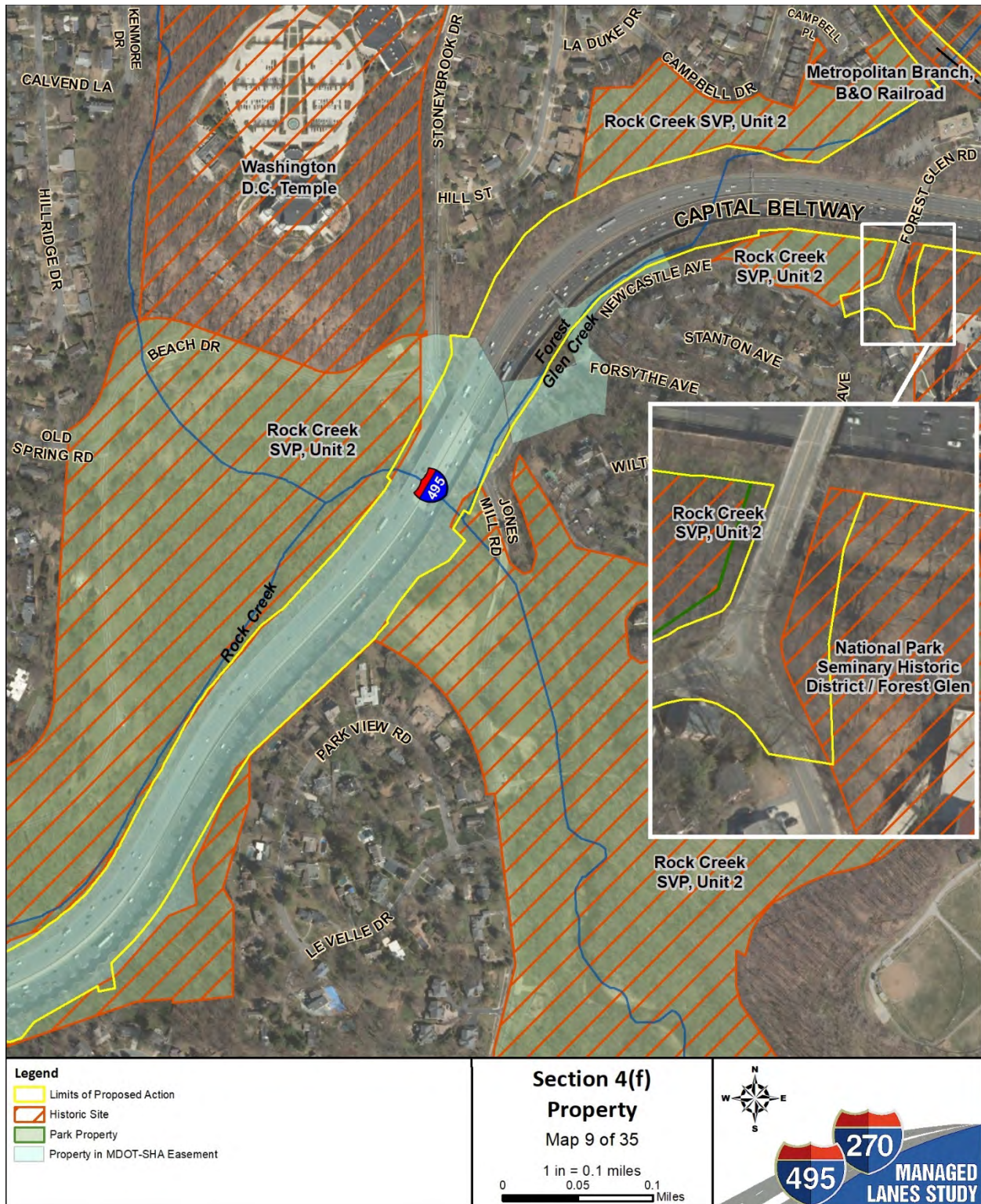
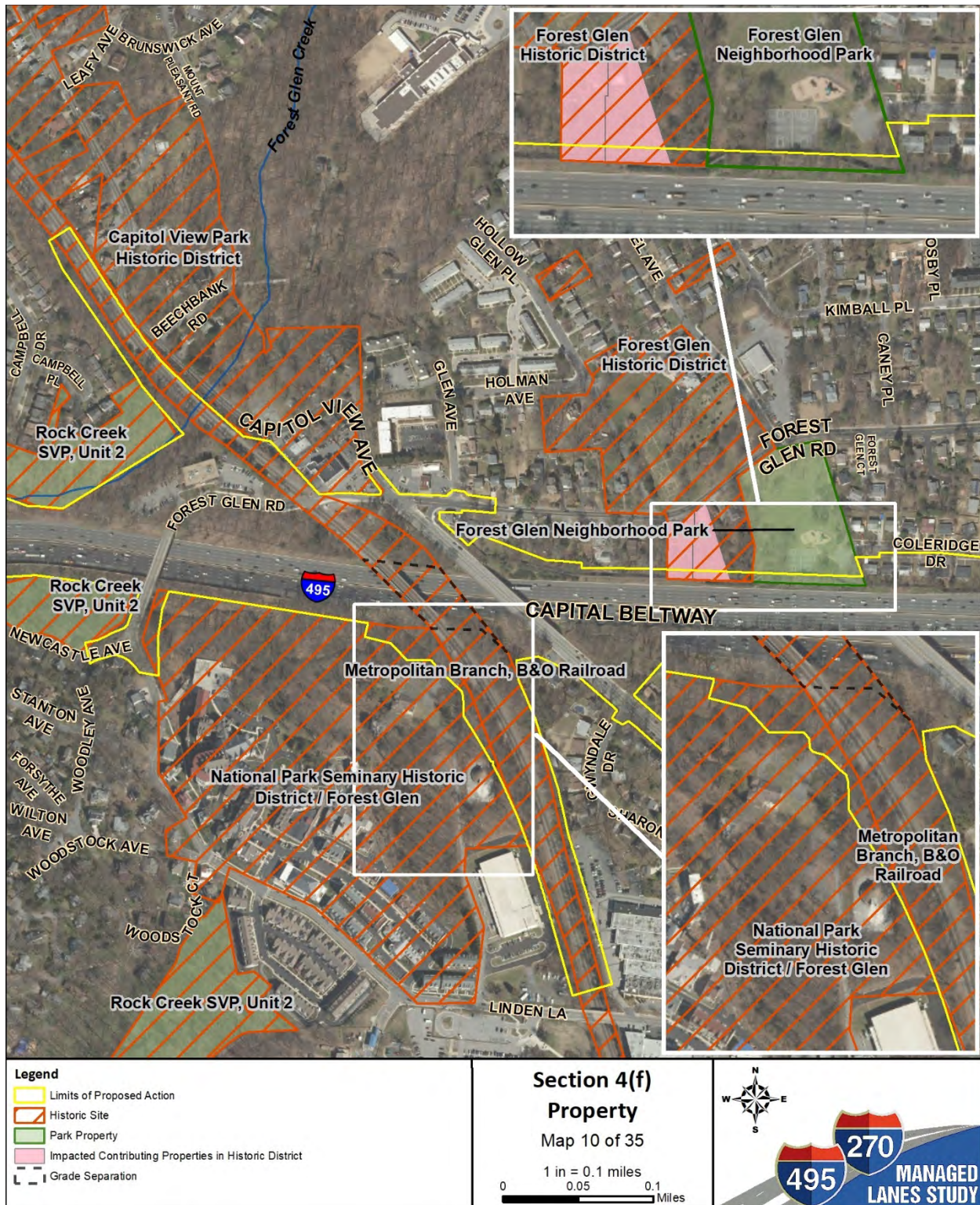


Figure 2-13: Section 4(f) Property (Map 10 of 35)



2.1.16 Calvary Evangelical Lutheran Church

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: MHT

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

The Calvary Lutheran Evangelical Church (**Figure 2-14**) at 9545 Georgia Avenue in Silver Spring, Maryland was determined eligible for the NRHP under Criterion C on June 7, 2013. It is an excellent example of ecclesiastical architecture from the middle of the twentieth century. The property is near the southeast quadrant of the I-495 Exit 31B where northbound Georgia Avenue enters the I-495 inner loop. The historic site is a complex of five attached buildings erected over the course of three building campaigns extending from 1948 until 1962. Elements that contribute to the significance of the historic site are the physical buildings, built in a variety of styles that range from Gothic Revival to Modern. The landscaping, driveways and parking areas do not contribute to the historic significance of this property.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of less than 0.1 acre of the Calvary Evangelical Lutheran Church property to accommodate realigning the onramp from northbound Georgia Ave to the I-495 inner loop (**Figure 2-14**). The area of Section 4(f) use is concentrated along a narrow frontage strip and sidewalk that extends approximately 150 feet along northbound Georgia Ave. Activities in the area of Section 4(f) use would consist of clearing, grading, paving, and access for construction vehicles and materials. The ramp would be relocated approximately 30 feet to the south to accommodate widening on I-495 and a new interchange configuration. No standing structures or features that contribute to the historical significance of the Calvary Evangelical Lutheran Church property would experience a use.

On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on Calvary Evangelical Lutheran Church. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. As such, the impact to the historic church property under the Proposed Action would constitute a minor use. FHWA intends to make a finding of *de minimis* impact to Calvary Evangelical Lutheran Church.

C. Applied Minimization

Consistent with the minimization efforts described in Section 4 MDOT SHA was able to reduce impacts to Calvary Evangelical Lutheran Church by eliminating linear stormwater management facilities along the western edge of the historic boundary. Additionally, MDOT SHA worked to realign the ramp to the north of the property in such a manner to avoid impacts within the historic boundary.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Calvary Evangelical Lutheran Church have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with MHT staff.

2.1.17 Sligo Creek Parkway

Type of Section 4(f) Property: Historic Site and Public Park

Officials with Jurisdiction: ACHP, MHT, M-NCPPC Montgomery County

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Sligo Creek Parkway (**Figure 2-14**) is a NRHP-eligible historic district and publicly-owned park that extends between University Boulevard (MD 193) near Silver Spring to New Hampshire Avenue (MD 650) in Takoma Park. For the purposes of this evaluation, Sligo Creek Parkway consists of Sligo Golf Course and Units 3 and 4 of Sligo Creek Stream Valley Park. The parkway is composed of an approximately 300-foot right-of-way and extends approximately five miles. It comprises 543 acres and is the longest parkway under the jurisdiction of M-NCPPC, Montgomery County. Other important features include pedestrian trails, playgrounds, picnic areas, native and ornamental plantings, and Sligo Golf Course. The golf course is a nine-hole, public facility situated adjacent to the I-495 inner loop and occupying 71.9 acres. Although owned by M-NCPPC, Montgomery County, the golf course is operated through a lease agreement with the Montgomery County Revenue Authority, a private management company.

Sligo Creek Stream Valley Park, Unit 3 is one of the six units that comprise Montgomery County's Sligo Creek Stream Valley Park, a publicly-owned park, to protect the environmentally sensitive Sligo Creek stream valley. Unit 3 of Sligo Creek Stream Valley Park extends between the I-495 inner loop and Colesville Road (US 29). The entirety of Sligo Creek Stream Valley Park encompasses approximately 530 acres of which unit 3 comprises approximately 73.5 acres. Park amenities include open space, playgrounds, and ballfields. The Sligo Creek Trail is an element within Sligo Creek Stream Valley Park. This hard surface trail is eight feet wide and extends 10.2 miles north to south and passes beneath I-495 adjacent to Sligo Creek Parkway. It is the most heavily used facility in the stream valley park. Features of the trail include restrooms, drinking fountains, and accessible parking.

The park is under the jurisdiction of M-NCPPC and was acquired over time beginning in 1930 using funding from the Capper-Cramton Act of 1930.

The portion of I-495 through Sligo Creek Stream Valley Park is owned by M-NCPPC Montgomery County. The agency granted a perpetual easement (L 2696, F 11 in land records of Montgomery County) to MDOT SHA on November 25, 1959 "in perpetuity for highway purposes over all lands..."⁴ A copy of this easement is enclosed in the **Appendix B**. MDOT SHA possesses additional slope easements beyond the perpetual easement that provide for drainage and allow for the construction of new drainage structures and highway widening.

Sligo Creek Parkway was determined eligible for the NRHP on October 12, 2000 and again on June 22, 2005 under Criterion A for its association with trends associated with social history, recreation, transportation, and conservation during the first half of the twentieth century. Sligo Creek Parkway is also significant under Criterion C as a good example of its type and period of construction. Elements of the Parkway that contribute to its historic significance consist of the undivided two-lane road, metal foot

⁴ Liber 2696, Folio 11. Land Records of Montgomery County. www.mdlandrec.net. Accessed Multiple Times.

bridges, stone bridges, stone retaining walls, reinforced timber guardrails, and stream valley views. As an historic site, Sligo Creek Parkway is under jurisdiction of MHT.

The portion of the parkway that would experience a use as a result of the Proposed Action was acquired in 1934 using funding from the Capper-Cramton Act. Sligo Golf Course was acquired in 1946.

B. Potential Section 4(f) Use

The Proposed Action would result in the Section 4(f) use of 4.1 acres (3.3 acres under Alternative 9M) of the Sligo Creek Parkway *historic site* to accommodate widening along I-495; augmenting an existing culvert beneath I-495 and the construction and maintenance of a stormwater management facility (**Figure 2-14**). Owing to the presence of the transportation easement, portions of the *public park* are in an existing transportation use. The easement reduces the use of Section 4(f) parkland to 3.2 acres (2.3 acres under Alternative 9M). The area of Section 4(f) use is concentrated at three locations: a narrow area extending approximately 1,400 linear feet along the I-495 outer loop; a narrow area extending approximately 2,300 feet along the I-495 inner loop; and an oblong shape at the northeast corner of the golf course. Activities in the area of Section 4(f) consist of tree removal; grading; bridge replacement; movement of construction vehicles and materials; and the construction and operation of a stormwater management facility. The area of impact along the I-495 inner loop would require the relocation of two tee boxes parallel to their current distance from the hole in order to maintain play at the golf course. The stormwater management facility on the Sligo Golf Course is necessary at this location owing to limited available space for the treatment of stormwater along this portion of I-495. The proposed facility is located in the northeast corner of the golf course, in an out-of-bounds location that will not affect game play of the recreational function of the golf course.

A proposed construction staging area on the north side of the outer loop and northwest of Sligo Creek Trail is within MDOT SHA's existing easement, outside the historic boundary, and would not result in a Section 4(f) use. Access to Sligo Creek Trail would be temporarily restricted during the bridge replacement at that location and would be coordinated with M-NCPPC Montgomery County.

On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on Sligo Creek Parkway. Any mitigation for the Section 4(f) use of the historic site would be consistent with stipulations identified in the Section 106 Programmatic Agreement in consultation with MHT and consulting parties. The impacts to Sligo Creek Parkway require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.6**).

C. Applied Minimization

In addition to the minimization efforts described in Section 4, MDOT SHA has been able to further reduce impacts to Sligo Creek Parkway. No linear stormwater management facilities will be placed along the roadside. A retaining wall would be constructed at the edge of pavement along Sligo Creek Parkway. In an effort to avoid the potential relocation of the Margaret Schweinhaut Senior Center, the centerline and proposed widening of I-495 has been slightly shifted to the south. This shift results in impacts to Sligo Golf Course that would involve relocating two tee boxes. While the shift under Alternative 9M would result in less Section 4(f) use than the other alternatives, it is likely the tee boxes will still need to be relocated. However, this alteration would only temporarily affect game play and not the recreational function of the golf course.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Sligo Creek Parkway *historic site* have changed from 5.0 acres (4.1 acres under Alternative 9M) on June 5, 2019 to 4.1 acres (3.3 acres under Alternative 9M) in this Draft Section 4(f) Evaluation. This decrease is owing to removing stormwater management facilities and constructing a retaining wall at the edge of the pavement. The effort to minimize and mitigate impacts will continue through ongoing and future coordination with ACHP, MHT, and M-NCPPC staff.

2.1.18 South Four Corners Neighborhood Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Montgomery County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

South Four Corners Neighborhood Park (**Figure 2-14**) is a publicly-owned park and recreation area at 900 Forest Glen Road in Silver Spring. This 2.0-acre park features a playground, park benches, and open space. The park is the easternmost recreational facility in a string of parks that include Sligo Creek Parkway, Argyle Local Park, and Margaret Schweinhaut Senior Center. The park was acquired in 1946 and is under the jurisdiction of M-NCPPC.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.1 acre (< 0.1 acre under Alternative 9M) from South Four Corners Neighborhood Park to accommodate widening along I-495; replacing the existing noise wall; and augmenting an existing stormwater culvert beneath I-495 resulting in the permanent incorporation of portions of South Four Corners Neighborhood Park into the transportation facility (**Figure 2-14**). The area of Section 4(f) use consists of a rectangular area at the existing culvert outlet in the southwest corner of the park and a narrow strip that extends approximately 300 feet along the southern edge of the park. Activities within this area consist of tree removal, grading, removing the existing noise barrier and constructing a replacement, and access for construction vehicles and materials. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The proposed impacts would not adversely affect the activities, features, or attributes that qualify the park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Forest Glen Neighborhood Park if M-NCPPC, Montgomery County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to South Four Corners Neighborhood Park by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-495 are proposed along the park. This entails constructing a closed section with a retaining wall along the edge of

pavement on I-495. No surface stormwater management facilities would be constructed adjacent to the park.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to South Four Corners Neighborhood Park have remain unchanged since June 5. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.1.19 Montgomery Blair High School Athletic Fields

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: Montgomery County Public Schools, M-NCPPC Montgomery County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Montgomery Blair High School Athletic Fields (**Figure 2-15**) are a publicly-owned recreation area at 51 University Boulevard in Silver Spring. The fields primarily serve as recreation for the high school student body but are also open for use by the public. The 30-acre recreation facility features two combination football and soccer fields, multiple tennis and basketball courts, a baseball/softball field, fitness trail, and playground. The recreation area is under jurisdiction of the Montgomery County Public Schools and opened in 1998. A lease agreement with M-NCPPC, Montgomery County signed October 8, 2019 outlines the use and maintenance of Montgomery Blair High School Athletic Fields between the two agencies. As a result of this agreement, M-NCPPC is also an official with jurisdiction for the park.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 1.4 acres (1.1 acres under Alternative 9M) of Montgomery Blair High School Athletic Fields to accommodate widening along I-495; realignment of the offramp from the I-495 outer loop to US 29; replacing the existing noise barrier; constructing a new noise barrier; and providing access for construction vehicles and equipment (**Figure 2-15**). The area of Section 4(f) use is concentrated at two locations: a narrow strip along the southern edge of the recreation area, where it borders the I-495 outer loop; and a narrow area northwest of the high school track along US 29. Activities in the area of Section 4(f) use consist of tree removal; grading; paving; removing the existing noise wall; constructing a new noise wall; and access for construction vehicles and materials. The portion of the athletic fields that would experience a use is vegetated open space that provides a visual buffer between Montgomery Blair High School Athletic Fields and I-495. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The proposed impacts would not adversely affect the activities, features, or attributes that qualify the park for protection under Section 4(f).

The impact to the property under the Proposed Action would constitute a minor use. FHWA intends to make a *de minimis* impact determination for Montgomery Blair High School Athletic Fields if the Montgomery County Public Schools Board of Education and M-NCPPC concur that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and, if public comments do not identify new issues.

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Montgomery Blair High School Athletic Fields by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-495 are proposed along the recreation area. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495. No surface stormwater management facilities would be constructed adjacent to the park.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Montgomery Blair High School Athletic Fields have changed from 1.1 acres under Alternative 9M on June 5, 2019 to the 1.2 acres in this Draft Section 4(f) Evaluation. This increase is owing to changes in the LOD at the interchange of I-495 and US 29. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with Montgomery County Public Schools and M-NCPPC staff.

2.1.20 Blair Local Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Montgomery County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Blair Local Park (**Figure 2-15**), also known as Montgomery Blair Ball fields, is a publicly-owned park and recreation area associated with and adjoining Montgomery Blair High School at 51 University Boulevard in Silver Spring, north of I-495. The 10.2-acre park features a baseball field, softball field, and football field and provides recreational opportunities for students at the high school as well as the public. Parking is available onsite. The park is under jurisdiction of M-NCPPC Montgomery County and was acquired in 1994 with POS funds.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.4 acre (0.3 acre under Alternative 9M) of Blair Local Park to accommodate widening along I-495; replacing the existing noise barrier; constructing a new noise barrier; and providing access for construction vehicles and equipment (**Figure 2-15**). The area of Section 4(f) use is concentrated along a narrow strip planted with trees along the southern edge of the park, where it borders the I-495 outer loop. Activities in the area of Section 4(f) use consist of tree removal; grading; paving; removing the existing noise wall; constructing a new noise wall; and access for construction vehicles and materials. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. No activities, features or attributes that qualify the park for protection under Section 4(f) would experience an impact or adverse effect.

The impact to the property under the Proposed Action would constitute a minor use. FHWA intends to make a *de minimis* impact determination for Blair Local Park if M-NCPPC Montgomery County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection.

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Blair Local Park by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-495 are proposed along the recreation area. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495. No surface stormwater management facilities would be constructed in or adjacent to the park.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Blair Local Park have changed from 0.2 acres under Alternative 9M on June 5, 2019 to 0.3 acre under Alternative 9M) in this Draft Section 4(f) Evaluation. The difference in impacts from Alternative 9M is related to changes in the location and design of the stormwater management facilities situated southeast of the park. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.1.21 Indian Spring Club Estates and Indian Spring Country Club

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: ACHP, MHT

Type of Section 4(f) Approval: Individual Evaluation

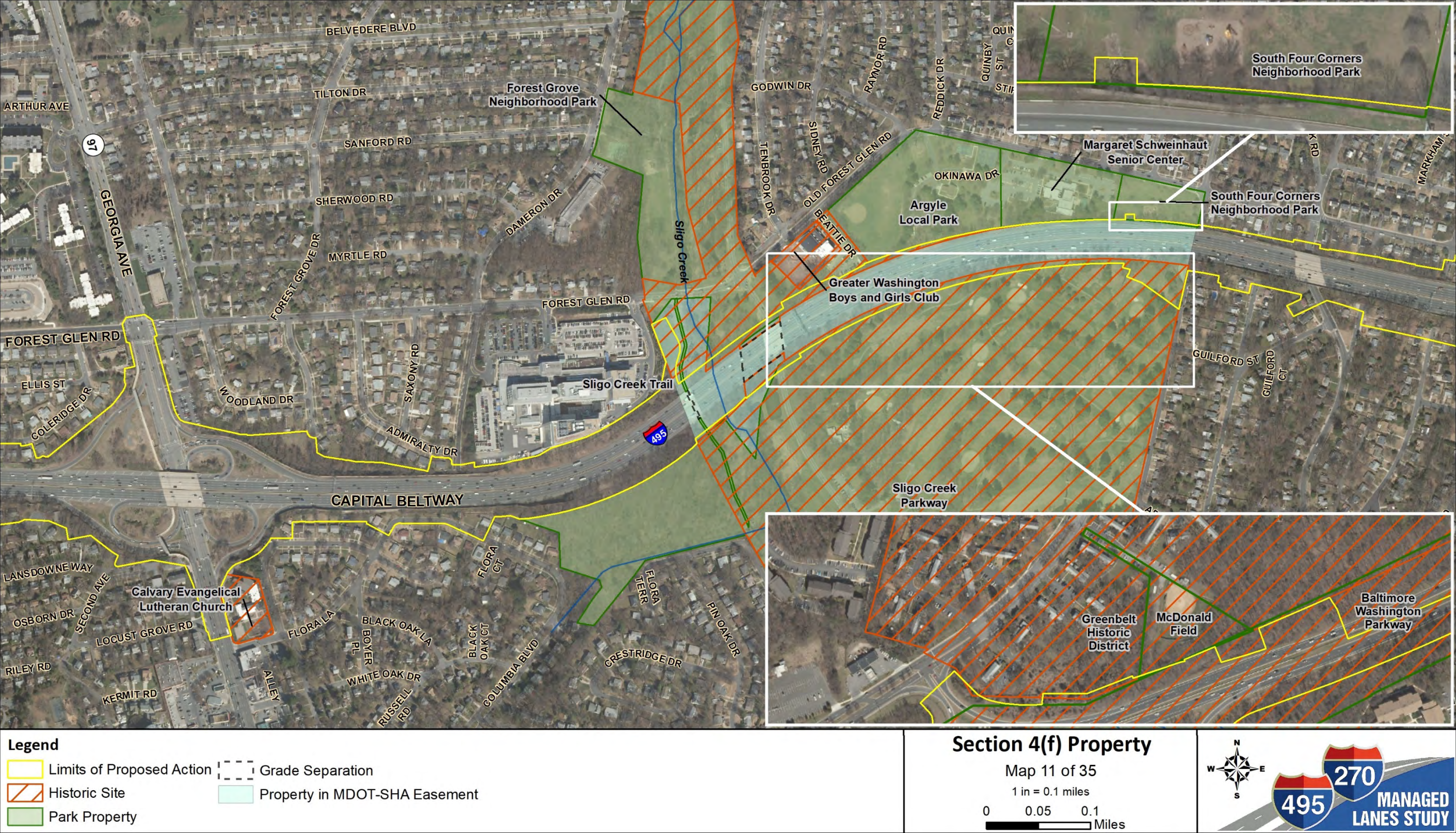
A. Description of Section 4(f) Property

The Indian Spring Club Estates and Indian Spring Country Club (**Figure 2-15**) is an NRHP-eligible historic district situated south of I-495 between Colesville Road and Indian Spring Terrace Local Park. The boundary of the historic district encompasses approximately 51 acres and maintains a significant association with suburban community planning and development by Jewish developers in the Silver Spring area. Under Criterion C, the district is eligible for its collection of exemplary pre-World War II middle class residential architecture. Elements that contribute to the significance of the historic site are the outstanding examples of residential architecture featuring Tudor Revival and Colonial Revival details as well as the Hastings Conservation Area public park.

B. Potential Section 4(f) Use

The Proposed Action would result in the Section 4(f) use of 1.2 acres (1.1 acres under Alternative 9M) of Indian Spring Club Estates and Indian Spring Country Club to accommodate widening I-495; relocating the on-ramp from northbound US 29 to the I-495 inner loop; and access for construction vehicles and materials (**Figure 2-15**). The area of Section 4(f) use extends approximately 750 feet along the south side of the existing ramp and I-495. Activities in the area of Section 4(f) use would consist of tree removal, grading, and realigning the ramp from northbound US 29 to the I-495 inner loop. Under the Proposed Action, the Section 4(f) use would impact one property that contributes to the significance of the historic district: Silver Spring YMCA at 9800 Hastings Drive. The impact would involve relocating the indoor and outdoor swimming pools.

Figure 2-14: Section 4(f) Property (Map 11 of 35)



On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on Indian Spring Club Estates and Indian Spring Country Club. Any mitigation for the Section 4(f) use of the historic site would be consistent with stipulations identified in the Section 106 Programmatic Agreement and be coordinated with the NPS, MHT and Section 106 consulting parties. The impacts to Indian Spring Club Estates and Indian Spring Country Club require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.7**).

C. Applied Mitigation

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Indian Spring Club Estates and Indian Spring Country Club by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-495 are proposed along the park. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Indian Spring Club Estates and Indian Spring Country Club have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with ACHP and MHT staff.

2.1.22 Indian Springs Terrace Local Park

Type of Section 4(f) Property: Public Park

Officials with Jurisdiction: M-NCPPC Montgomery County

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

This 11-acre publicly-owned park and recreation area at 9717 Lawndale Drive in Silver Spring features a playground, activity building, soccer field, basketball court, baseball/softball field, and tennis court. The park is under the jurisdiction of M-NCPPC and was acquired in 1971.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 1.4 acres (1.2 acres under Alternative 9M) of Indian Spring Terrace Local Park (**Figure 2-15**) to accommodate widening along I-495; replacing the existing noise barrier; constructing a new noise barrier; augmenting an existing storm drain outfall; constructing, operating, and maintaining a stormwater management facility; and providing access for construction vehicles and equipment. The area of Section 4(f) use is concentrated at two locations: a narrow strip planted with trees that extends approximately 1,300 feet along the northern edge of the park, where it borders the I-495 inner loop and a one acre, irregularly shaped area near the beginning of the ramp from the inner loop to southbound University Boulevard. Activities within the area of Section 4(f) use would consist of tree removal, grading, a work area for a construction pit where the augmentation pipe would be installed; construction, operation and future maintenance of a stormwater management facility; and access for construction vehicles and materials. The stormwater management facility is required at this location owing to the limited available space for the treatment of stormwater on this portion of I-495.

There is potential for the relocation of the noise barrier to directly impact a basketball court on park property. Coordination with M-NCPPC, Montgomery County is ongoing. Portions of the park would be permanently incorporated into the transportation facility. The impacts to Indian Springs Terrace Local Park require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.7**).

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Indian Springs Terrace Local Park by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-495 are proposed along the park. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Indian Springs Terrace Local Park have been reduced from 2.3 acres (2.1 acres under Alternative 9M) to 1.4 acres (1.2 acres under Alternative 9M) in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

Figure 2-15: Section 4(f) Property (Map 12 of 35)



2.1.23 Northwest Branch Stream Valley Park, Unit 3

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Montgomery County

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Northwest Branch Stream Valley Park Unit 3 (**Figure 2-16**) is one of seven units that comprise Northwest Branch Stream Valley Park, a publicly-owned park and recreation area. Northwest Branch Stream Valley Park Unit 3 extends along the Northwest Branch Anacostia River between Columbia Pike (US 29) and New Hampshire Avenue (MD 650), encompassing 144 acres of the total 327-acre Northwest Branch Stream Valley Park. A feature of Northwest Branch Stream Valley Park is the natural surface Rachel Carson Greenway Trail, which comprises a portion of the larger Northwest Branch Trail. The trail system runs north-south, extending from Randolph Road to the Montgomery/Prince George's County border. The park is an undeveloped wooded area that serves as a protective buffer along the Northwest Branch of the Anacostia River. The park was acquired in 1953 using funding from the Capper-Cramton Act of 1930 and is under the jurisdiction of M-NCPPC Montgomery County. Additional lands have been acquired using POS funds.

The two parallel bridges on I-495 are situated approximately 100 feet above the Northwest Branch Stream Valley Park. The area directly beneath the western half of the bridges is owned by MDOT SHA. The area beneath the eastern portion of the bridges is in an easement granted to MDOT SHA by M-NCPPC. The latter agency granted a perpetual easement (Liber 3098, Folios 574-578 in land records of Montgomery County) to MDOT SHA on May 15, 1963 for "normal highway purposes." A copy of this easement is in **Appendix B**. Any impacts from the Proposed Action within these areas would not qualify as an impact to Section 4(f) property. As this area is already in a transportation use, Section 4(f) would not apply (23 CFR 774.11 and 23 CFR 774.17).

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 3.2 acres of Northwest Branch Stream Valley Park, Unit 3 to accommodate replacing the bridge across Northwest Branch Anacostia River; augmenting two existing storm drains; and providing access for construction vehicles and equipment (**Figure 2-16**). There is no difference in the size of impacts among the Build Alternatives owing to the large area needed to construct the new bridge and remove the existing structure. The area of Section 4(f) use is concentrated in two areas: two small rectangular areas in the northwest quadrant of the bridge crossing at the location of existing storm drain outfalls, north of the I-495 outer loop; and a large rectangular area south of the inner loop. Activities in the former areas consist of tree removal; grading; improvements to and augmentation of two extant storm drains; and access for construction vehicles and equipment. The outfalls at these locations would be modified to meet current design standards. Activities in the latter area consist of tree removal; grading; construction staging; and access for construction vehicles and equipment. It should be noted that replacement of the current bridges across Northwest Branch Anacostia River would be needed in the near future as the existing bridges reach the end of their 60+ year life span.

The bridges across Northwest Branch Stream Valley Park would be replaced in a manner that allows the passage of vehicle traffic through the duration of construction. In order to remove the existing bridges, they will be demolished in pieces and dropped by crane onto trucks which will transport pieces for removal along the existing highway. Access for construction vehicles would be via a temporary switchback road approximately 50 feet in width. Access to the highway, however, would be from a temporary construction road built within the existing MDOT SHA right-of-way. For safety and efficiency, constructability requires a temporary access road from the I-495 inner loop to the site through the western portion of the park. A temporary crossing of Northwest Branch is required. A second temporary road to exit the construction site would be built to the east. Vehicles returning to the I-495 inner loop would do so from within the existing highway right-of-way. For the safety of trail users, the portion of the Northwest Branch Trail beneath I-495 would be closed through the duration of construction. At the conclusion of construction, affected locations within the park would be restored and reopened. Many of these actions are described as temporary in nature, because no transfer of ownership is anticipated. However, MDOT SHA recognizes that temporary occupancies of parkland can result in permanent impacts. For the purposes of this Draft Section 4(f) Evaluation, all impacts are considered permanent.

Coordination with M-NCPPC, Montgomery County is ongoing. The impacts to Unit 3 of Northwest Branch Stream Valley Park require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.8**).

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Unit 3 of Northwest Branch Stream Valley Park by eliminating linear stormwater management facilities along the edge of the park boundary where they would result in impacts. The narrowest typical section has been applied where improvements to I-495 are proposed. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495.

Additionally, MDOT SHA explored several possibilities for replacing the I-495 bridges across Unit 3 of Northwest Branch Stream Valley Park. Consideration was given to placing construction cranes in each of the four quadrants of the bridges, but this was determined to be more impactful to parkland and high quality wetlands north of the bridges. Another possibility examined was placing two cranes at the western or eastern ends of the bridges. However, this arrangement would not provide enough room to turn equipment around due to the size of the construction vehicles. This would create a constrained area for construction, which would present a safety issue.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Northwest Branch Stream Valley Park have changed from 3.0 acres on June 5, 2019 to 3.2 acres in this Draft Section 4(f) Evaluation. The increase in Section 4(f) use is related to enlarging the work areas needed to augment existing storm drains. The locations of these changes have been coordinated with M-NCPPC. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.1.24 Cherry Hill Road Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Prince George's County

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Cherry Hill Road Park (**Figure 2-18** and **Figure 2-19**) is a publicly-owned park and recreation area at 9201 and 9301 Cherry Hill Road in College Park. Cherry Hill Road Park is adjacent to the I-495 inner loop, west of the Baltimore Avenue (US 1) interchange. Amenities in the 42.1-acre park include two tennis courts, community garden plots, two picnic areas, a natural surface trail and a pavilion. This park is under the jurisdiction of M-NCPPC, Prince George's County and was acquired from the United States Government in 1980. The quitclaim deed transferring ownership of the property to M-NCPPC contains a variety of stipulations limiting the activities that can take place on the park property. Stipulation 7 reverts a 100-foot wide strip along the north side of the park to the federal government in the event MDOT SHA determines it is necessary to widen I-495. Coordination with M-NCPPC is ongoing.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 1.8 acres of Cherry Hill Road Park to accommodate widening along I-495; constructing, operating, maintaining stormwater management facilities; augmenting the existing culvert conveying Little Paint Branch beneath I-495; and providing access for construction vehicles and materials (**Figure 2-18** and **Figure 2-19**). The area of Section 4(f) use is concentrated at four different locations: a narrow area planted with trees along the east side of Cherry Hill Road, at the western end of the park; two rectangular areas currently planted with trees along I-495 that comprise approximately one acre, north of the community garden; a narrow linear area planted with trees along the northern end of the park where it bounds the I-495 inner loop; and a small rectangular area at the existing culvert for Little Paint Branch.

Activities in the area of Section 4(f) use consist of grading; tree removal; constructing, operating, and maintaining stormwater management facilities; improvements to the existing culvert for Little Paint Branch; and access for construction vehicles and materials. While no recreational activities would be disrupted, the Proposed Action would affect natural areas of the park by causing substantial tree loss. The stormwater management facilities are required at this location owing to the limited available space for the treatment of stormwater on this portion of I-495. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. Even so, the impacts would result in the permanent incorporation of portions of Cherry Hill Road Park into the transportation facility. Coordination with M-NCPPC, Prince George's County is ongoing. The impacts to Cherry Hill Road Park require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.9**).

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Cherry Hill Road Park by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-495 are proposed. This entails constructing a closed section and retaining wall along the edge of pavement on I-495.

Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

In an additional effort to further reduce impacts to Cherry Hill Road Park, asymmetrical roadway widening toward the I-495 outer loop was studied and included in the proposed engineering design. The end result limits the area of widening along the inner loop and associated impacts to the park. The greatest impact of this minimization is at the northeastern corner of the park, adjacent to the US 1 interchange.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Cherry Hill Road Park have changed from 2.0 acres on June 5, 2019 to the 1.8 acres in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.1.25 Beltsville Agricultural Research Center (BARC)

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: MHT

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

The Beltsville Agricultural Research Center (BARC, **Figure 2-17** through **Figure 2-20**) is an NRHP-eligible historic district, situated north of I-495 between the I-95 and US 1 interchanges. BARC was determined eligible for the NRHP on October 16, 1998. Owned by the United States Department of Agriculture (USDA), the facility was established in Beltsville in 1910 and significantly expanded in the 1930s and 1940s. The historic boundary of the property encompasses 6,582 acres. BARC is significant under Criterion A for the history and development of the agricultural research facility and its association with New Deal policies and programs, including the Civilian Conservation Corps. BARC is also eligible under Criterion C for the architectural merits of its collection of research clusters and for the design contributions of landscape architect A.D. Taylor. Elements that contribute to the significance of the historic site include cultivated fields and hundreds of buildings and structures such as barns, greenhouses, laboratories, dwellings and office buildings.

This portion of I-495 is constructed on land owned by the federal government and administered by the USDA. The quarter mile east of the ramp from the I-95 park and ride lot to the I-495 outer loop and half mile east of the Cherry Hill Road overpass are on easements granted by the USDA to MDOT SHA on October 4, 1971 (L 4053, F 130 of the Land Records of Prince George's County) in response to an Act of Congress approved October 15, 1966. A copy of this easement is in **Appendix B**. Any impact from the Proposed Action within this easement area would not qualify as a Section 4(f) impact, as the land is already in a transportation use (23 CFR 774.11 and 23 CFR 774.17). Coordination with the USDA would include the preparation of a new easement that would document any additional use required as part of the Proposed Action and clarify both MDOT SHA's permitted use and property ownership.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.5 acre of BARC to accommodate access for construction vehicles and materials at the I-95 interchange; the augmentation of existing culverts beneath I-495; and the removal and replacement of the Cherry Hill Road bridge across I-495 (**Figure 2-17, Figure 2-18, Figure 2-19, and Figure 2-20**). The area of Section 4(f) use is concentrated at three locations: a rectilinear area east of the existing ramp from the I-95 park-and-ride to the I-495 outer loop; the northeast quadrant of the bridge carrying Cherry Hill Road over I-495; and a small rectangular area north of the I-495 outer loop approximately 2,000 feet west of the interchange with US 1. Activities in the area of Section 4(f) use would consist of tree removal, grading, and access for construction vehicles and materials. No standing structures or agricultural activities that contribute to the significance of BARC would experience an impact.

On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on BARC within the historic boundary. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. As such, the impact to BARC under the Proposed Action would constitute a minor use. FHWA intends to make a finding of *de minimis* impact to BARC.

C. Applied Minimization

Consistent with the minimization efforts described in Section 4 MDOT SHA was able to reduce impacts to BARC by eliminating above-ground stormwater management facilities along the I-495 where they would result in impacts to the historic district.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to BARC have remained been reduced from 2.5 acres on June 5, 2019 to the 0.5 acre in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with MHT staff.

Figure 2-16: Section 4(f) Property (Map 13 of 35)

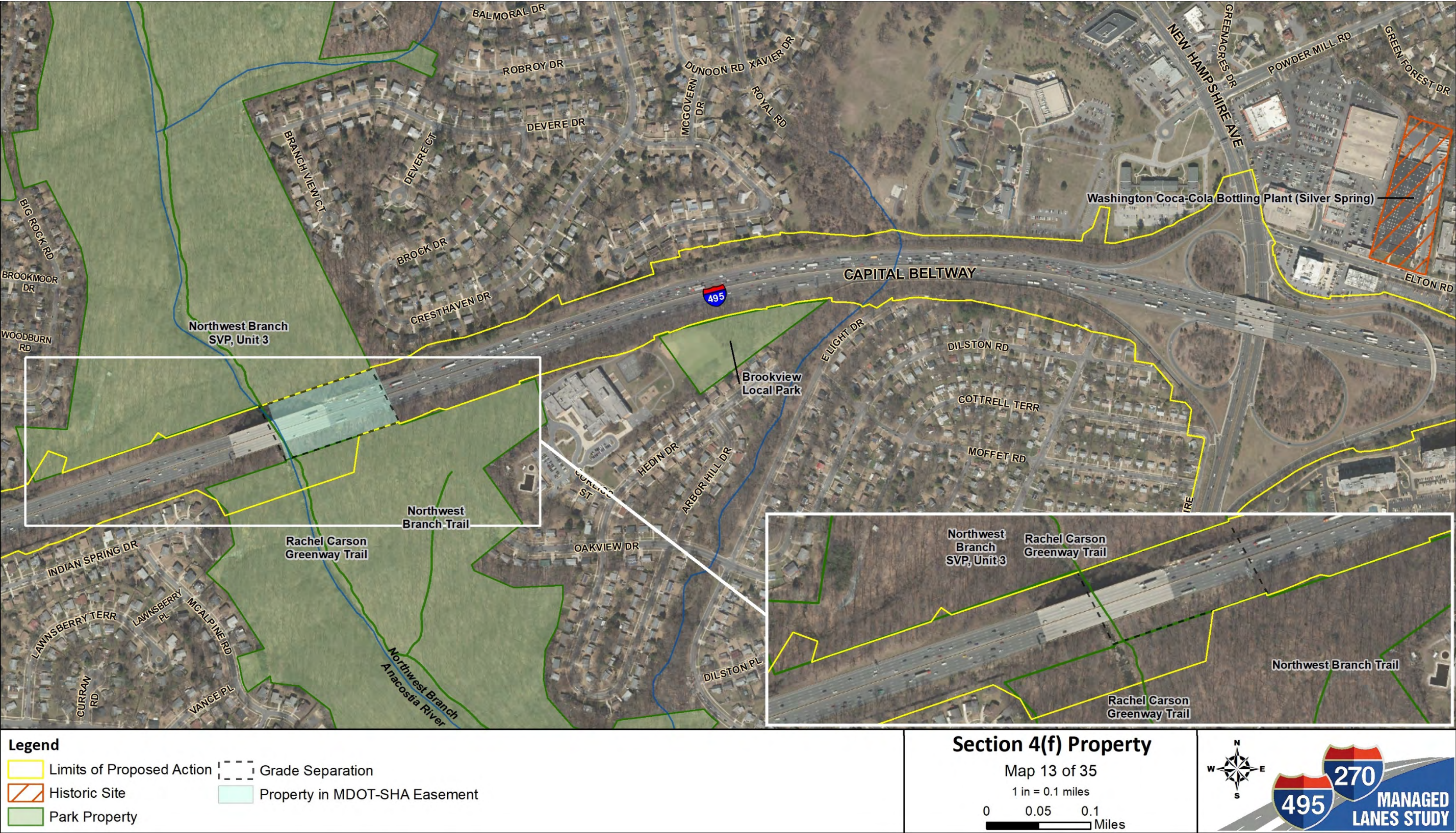


Figure 2-17: Section 4(f) Property (Map 14 of 35)

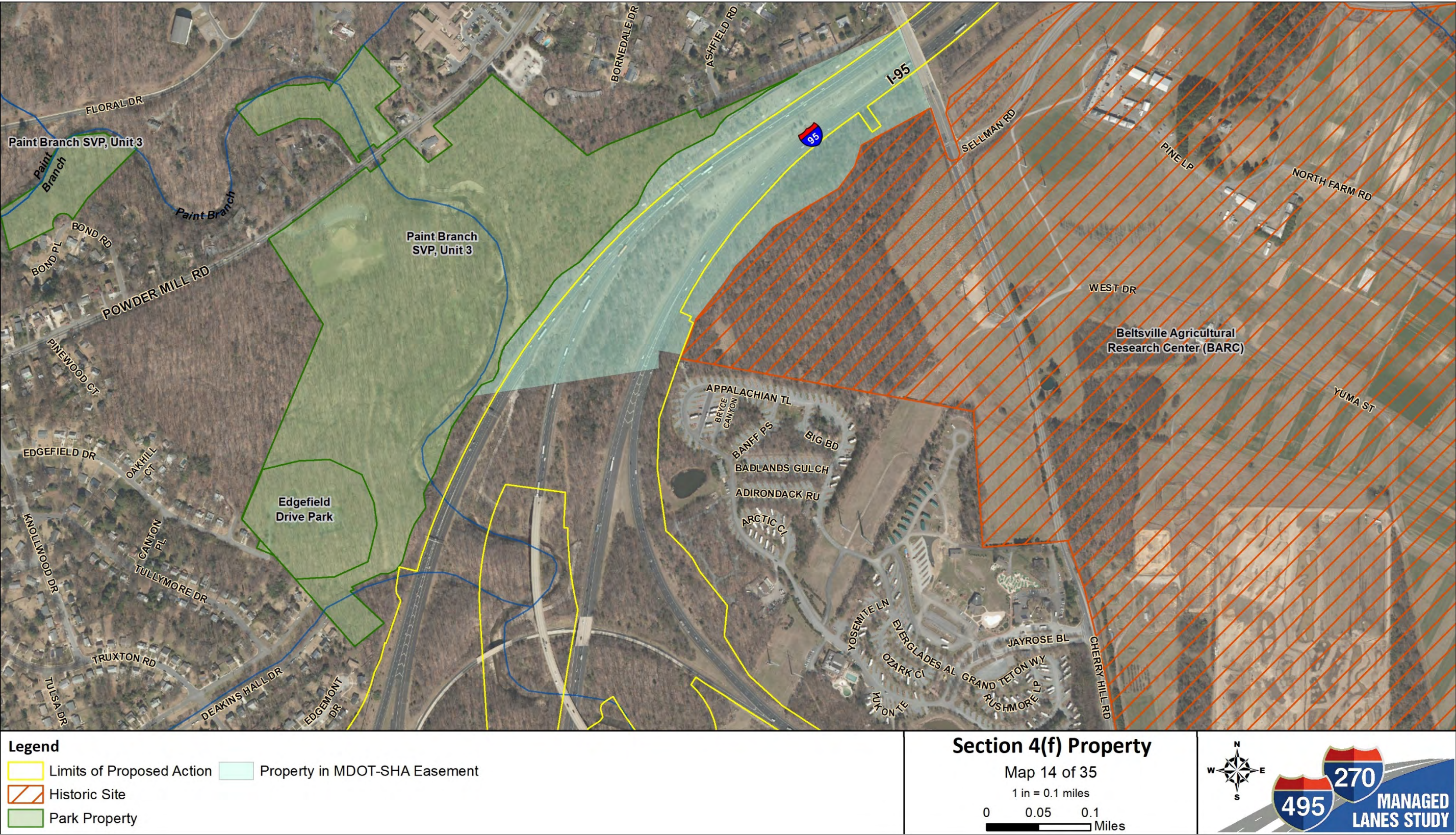


Figure 2-18: Section 4(f) Property (Map 15 of 35)

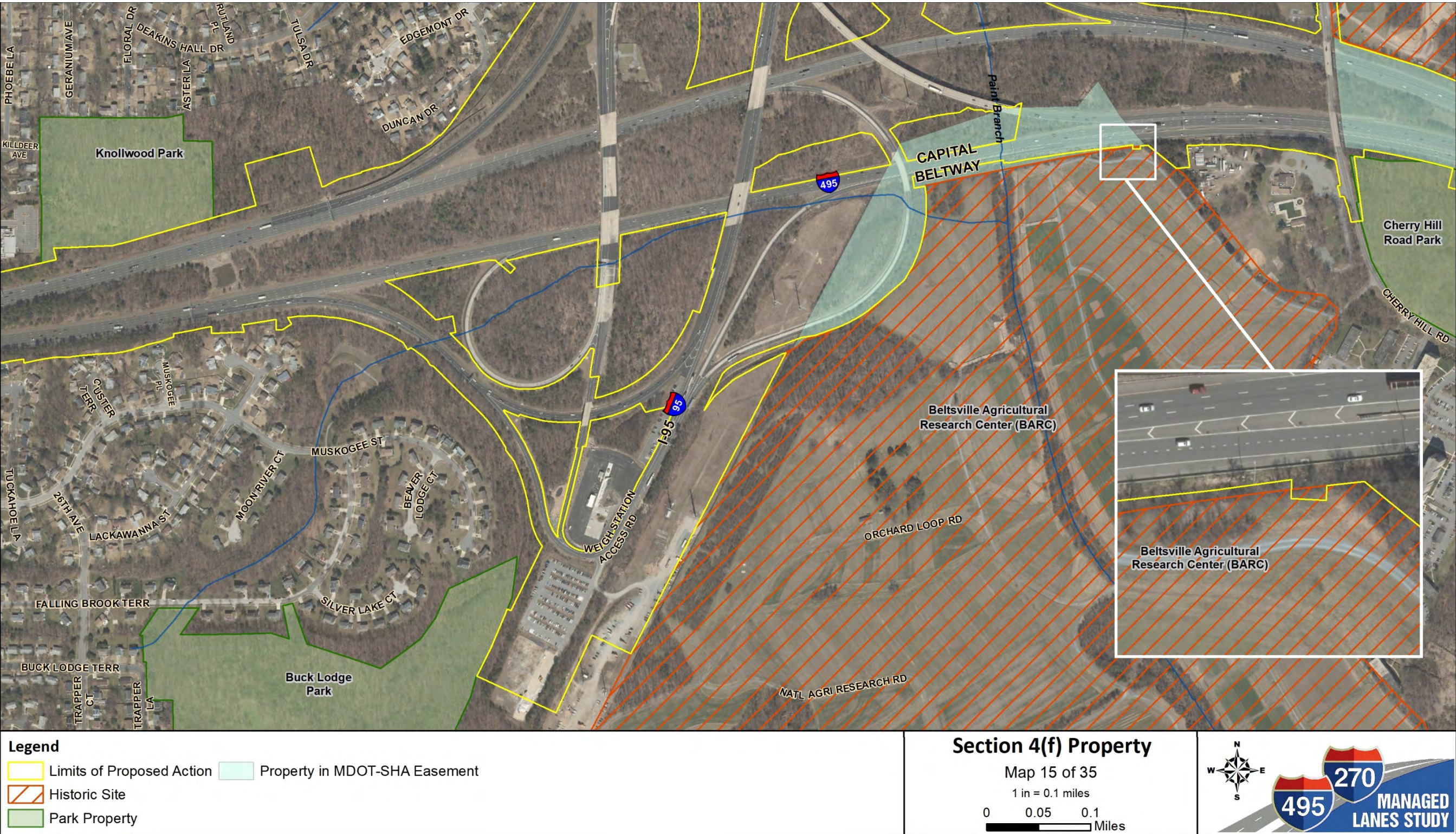


Figure 2-19: Section 4(f) Property (Map 16 of 35)

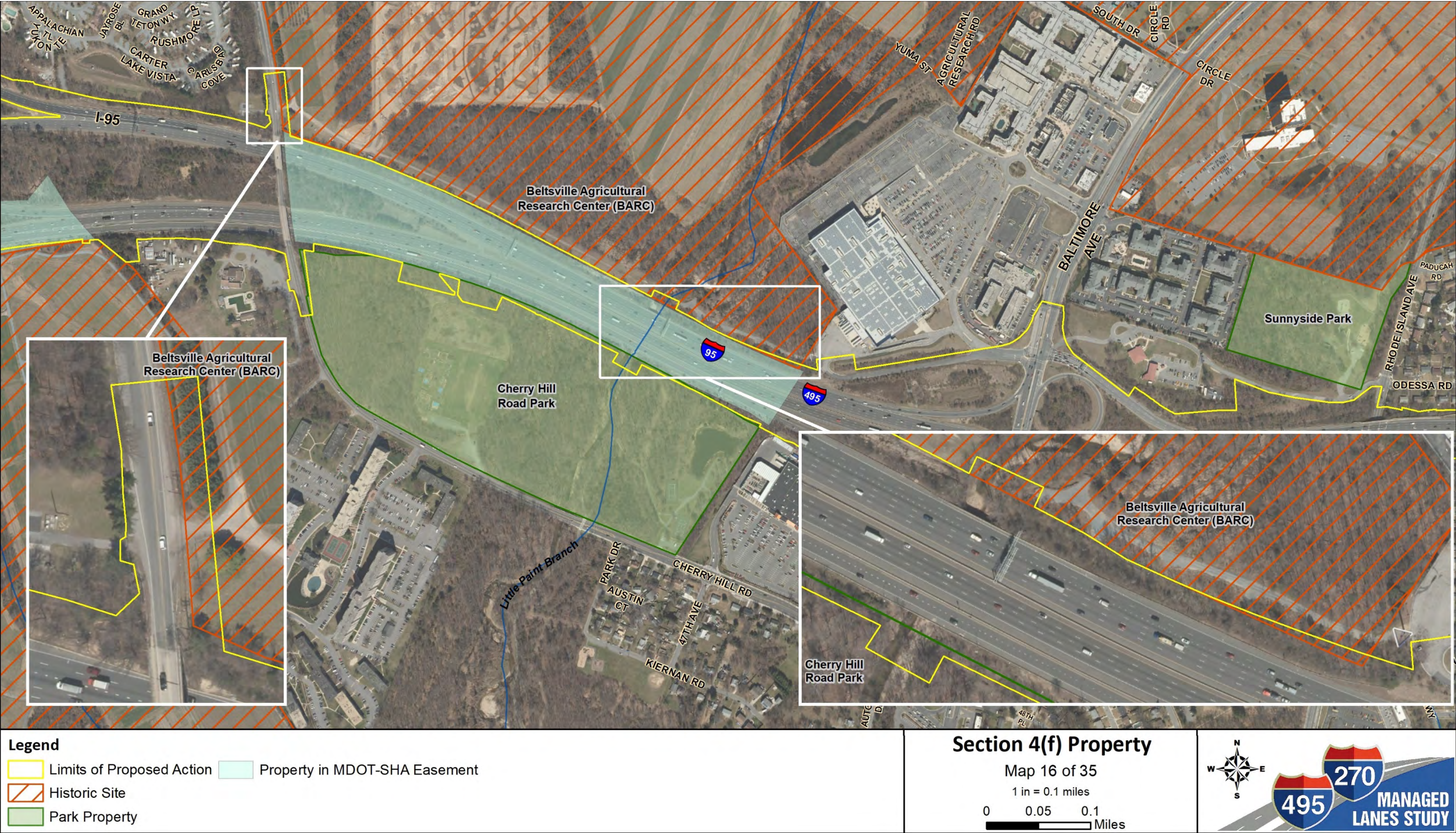


Figure 2-20: Section 4(f) Property (Map 17 of 35)

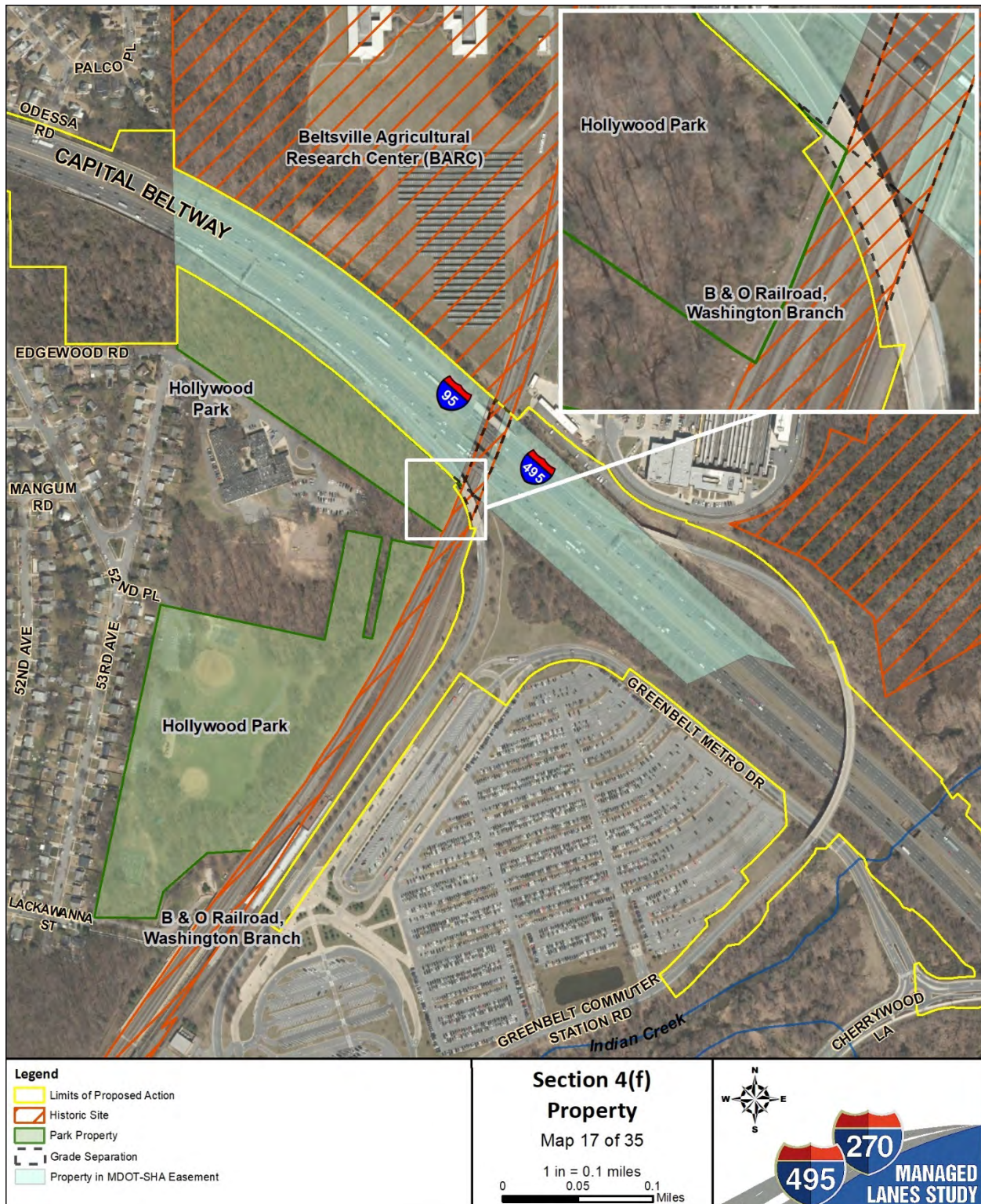
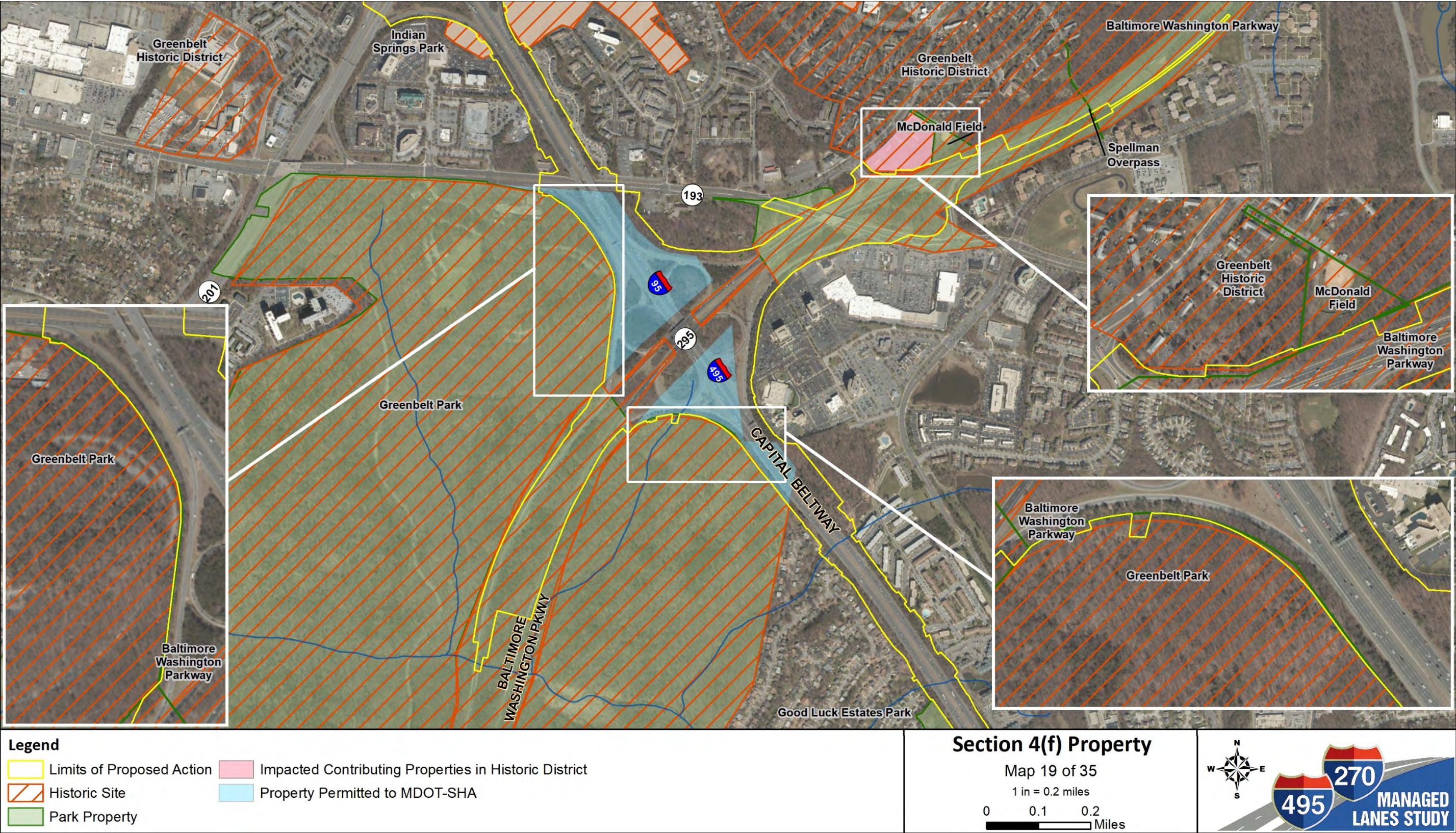


Figure 2-21: Section 4(f) Property (Map 18 of 35)



Figure 2-22: Section 4(f) Property (Map 19 of 35)



2.1.26 Hollywood Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Prince George's County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Hollywood Park (**Figure 2-20**) is a publicly-owned park and recreation area at 9699 53rd Avenue in College Park, Maryland. The park is composed of several tax parcels adjacent to the Washington Metropolitan Area Transit Authority's Greenbelt Metro Station. This 22.3-acre neighborhood park features full and half basketball courts, two tennis courts, two softball fields, a picnic shelter and playground. This park is under the jurisdiction of M-NCPPC, Prince George's County and was acquired in 1957 and expanded in 1958 and 1976 using POS funds.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of less than 0.1 acre of Hollywood Park to accommodate the realignment of the entrance to the Greenbelt Metro Station and provide access to construction vehicles and materials (**Figure 2-20**). The area of Section 4(f) use is a small, rectangular area at the northeastern corner of the park, just east of the MARC railroad right-of-way. Portions of the area may already be in a transportation use beneath the current alignment of the ramp from the I-495 inner loop to the Greenbelt Metro Station (23 CFR 774.11 and 23 CFR 774.17). Activities within the area of Section 4(f) use would consist of removing the existing roadway and bridge; and access for construction vehicles and materials. The proposed realignment would move the ramp further away from Hollywood Park. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

The impact to the property under the Proposed Action would constitute a minor use. FHWA intends to make a *de minimis* impact determination for Hollywood Park if M-NCPPC, Prince George's County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection.

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Hollywood Park by eliminating linear stormwater management facilities where they would result in impacts to the park.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Hollywood Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.1.27 Greenbelt Historic District

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: MHT, NPS

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Greenbelt Historic District (**Figure 2-21** and **Figure 2-22**) is an NRHP-listed historic district and a National Historic Landmark situated northwest of I-495 interchange with the Baltimore Washington Parkway. This historic district consists of the City of Greenbelt inclusive of Buddy Attick Lake Park, and three discontinuous parcels to the west of the historic district proper that are separated by the surrounding road network: Greenbelt Junior High School, Greenbelt City Cemetery, and Indian Springs Park. The historic district encompasses 789.1 acres. Greenbelt Historic District was listed in the NRHP on November 25, 1980 as one of three planned “green” communities founded by the federal government under the New Deal. The historic district was additionally registered as a National Historic Landmark on February 18, 1997. As an historic site and National Historic Landmark, Greenbelt Historic District is under the jurisdiction of MHT and NPS. The town is historically significant for its association with the academic attempt to use planning and architecture to solve the social and economic problems confronting the nation during the Great Depression. Elements that contribute to the significance of the historic site include the residential apartment units, condominiums, row houses, and detached houses set within the landscaped “green belt.”

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.3 acre of the Greenbelt Historic District to accommodate augmenting existing drainage outfalls; realigning the interchange of Baltimore Washington Parkway with Southway and Greenbelt Road; and construction, operation, and future maintenance of stormwater management facilities (**Figure 2-21** and **Figure 2-22**). There are two areas of Section 4(f) use: a rectangular area adjacent to the inner loop and outer loop at the southeastern end of the interchange with Kenilworth Ave; and two small areas north and east of the exit from MD 295 south to Southway. Activities in the areas of Section 4(f) use would consist of tree removal, grading, installation of a stormwater augmentation pipe, and access for construction vehicles and materials. The use would require the acquisition of right-of-way from three properties that contribute to the significance of the historic district: Indian Springs Park, Buddy Attick Lake Park, and the residential apartments at 7-9-11 Southway. The impact to Indian Springs Park and Buddy Attick Lake Park consists of a trenching pit related to the installation of the stormwater augmentation pipe beneath I-495. The impacts to 7-9-11 Southway are related to the large-scale reconfiguration of the I-495 interchange with the Baltimore Washington Parkway. Providing direct access at the interchange requires the addition and realignment of ramps throughout the larger interchange. These alterations include replacing the bridge carrying Greenbelt Road over Baltimore Washington Parkway to accommodate the ramp from southbound MD 295 to the I-495 outer loop. This latter alteration requires a minor realignment of the partial interchange between the Baltimore Washington Parkway and Southway/Greenbelt Road. The areas of the contributing properties that would experience an impact contains no standing structures greater than fifty years of age or landscape elements that contribute to the significance of the historic district.

On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on Greenbelt Historic District, including Buddy Attick Lake Park and Indian Springs Park, which are within the boundary of and contribute to the significance of the historic district. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. FHWA intends to issue a finding of *de minimis* impact to Greenbelt Historic District if the City of Greenbelt Department of Recreation and Parks concurs the Proposed Action, after measures to mitigate and minimize harm are employed, would not adversely affect the activities, features, or attributes that make Indian Springs Park and Buddy Attick Lake Park eligible for Section 4(f) protection. For instances of *de minimis* impacts to parks, the public must also be given the opportunity to comment.

C. Applied Minimization

Consistent with the minimization efforts described in Section 4, MDOT SHA was able to reduce impacts to Greenbelt Historic District by eliminating linear stormwater management facilities along the edge of the historic boundary. No surface stormwater management facilities would be constructed adjacent to the historic site. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A retaining wall would be constructed at the edge of pavement. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Greenbelt Historic District have been reduced from 0.5 acre on June 5, 2019 to 0.3 acre in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with MHT and NPS staff.

2.1.28 Buddy Attick Lake Park

Type of Section 4(f) Property: Public Park and Historic Site

Officials with Jurisdiction: City of Greenbelt Dept. of Recreation and Parks, MHT, NPS

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Buddy Attick Lake Park (**Figure 2-21** and **Figure 2-22**) is a publicly-owned park and recreation area at 555 Crescent Road in Greenbelt. The park also contributes to the significance of the Greenbelt Historic District. This 85.3-acre park is in the northeast quadrant of the I-495 and Kenilworth Avenue interchange. Park amenities include a walking track, hiking and biking trail, basketball courts, a playground, as well as picnic areas with shelters, tables, and grills. Canoeing, kayaking, and licensed fishing are permitted. As a public park and recreation area, the park is under jurisdiction of the City of Greenbelt Department of Recreation and Parks. Originally constructed in 1935 as Greenbelt Lake Park by the federal government, the park predates the construction of the residential portions of Greenbelt. Ownership of the park was transferred to the City of Greenbelt in 1953. Originally 62 acres in size, the park was enlarged in 1970 and again in 1987. In correspondence dated May 1, 2020, the City of Greenbelt confirmed Buddy Attick Lake Park is a significant park property for the purposes of Section 4(f).

Elements of Buddy Attick Lake Park – originally known as Greenbelt Lake – that contribute to the significance of the historic district include the lake, the lake shore, and the recreational activities that take place there. MHT is the official with jurisdiction over historic properties in Maryland. The historic district was additionally registered as a National Historic Landmark on February 18, 1997. As a National Historic Landmark, Buddy Attick Lake Park is under the jurisdiction of MHT and NPS. The Section 4(f) use of Greenbelt Historic District is discussed in **Section 2.1.27**.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.1 acre of Buddy Attick Lake Park to accommodate widening of I-495, utility relocation, and augmentation of existing storm drain outfall locations (**Figure 2-21** and **Figure 2-22**). The portion of the park that would experience a Section 4(f) use is vegetated open space that provides a buffer between I-495 and the recreational areas of Buddy Attick Lake Park. The impact to the property under the Proposed Action would constitute a minor use of the recreational facility. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f). Similarly, no elements greater than fifty years of age or that contribute to the significance of the historic district would experience a use.

On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on Greenbelt Historic District, including Buddy Attick Lake Park and Indian Springs Park, which are within the boundary of and contribute to the significance of the historic district. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. FHWA intends to make a *de minimis* impact determination for Buddy Attick Lake Park if the City of Greenbelt Department of Recreation and Parks concurs that the Proposed Action, after measures to mitigate and minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and if public comments do not identify new issues.

C. Applied Minimization

MDOT SHA was able to reduce impacts to Buddy Attick Lake Park by eliminating linear stormwater management facilities along the edge of the park and historic boundary. A retaining wall would be constructed at the edge of pavement, where possible.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Buddy Attick Lake Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with City of Greenbelt Department of Recreation and Parks, MHT, and NPS staff.

2.1.29 Indian Springs Park (City of Greenbelt)

Type of Section 4(f) Property: Public Park and Historic Site

Officials with Jurisdiction: City of Greenbelt Dept. of Recreation and Parks, MHT, NPS

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Indian Springs Park (**Figure 2-21** and **Figure 2-22**) is a publicly-owned recreation area situated northeast of the office building at 7855 Walker Drive. The 3-acre public park abuts the onramp from Kenilworth

Avenue (MD 201) to the I-495 inner loop. The park features a picnic table and an unpaved path that leads to a springhead set into a hillside surrounded by trees. The springhead is set within a masonry wall that features three voids that collect and distribute the water source. Originally part of Greenbelt Lake (now Buddy Attick Lake Park), the Indian Springs Park parcel was separated by the construction of I-495. The park can only be accessed via foot from the privately-owned parking area associated with the office property at 7855 Walker Drive. The park is under the jurisdiction of the City of Greenbelt. In correspondence dated May 1, 2020, the City of Greenbelt confirmed Indian Springs Park is a significant park property for the purposes of Section 4(f).

Indian Springs Park additionally contains the Walker Family Cemetery, outside the limits of the Study, and contributes to the significance of the Greenbelt Historic District, which was listed in the NRHP on November 25, 1980. The historic district was additionally registered as a National Historic Landmark on February 18, 1997. As a National Historic Landmark, Indian Springs Park is under the jurisdiction of MHT and NPS. The Section 4(f) use of Greenbelt Historic District is discussed in **Section 2.1.27**.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.1 acre of Indian Springs Park to accommodate the realignment of the onramp from northbound Kenilworth Avenue to the I-495 inner loop at the MD 193 interchange (**Figure 2-21** and **Figure 2-22**). The area of the park and historic site that would experience a Section 4(f) use is concentrated along the ramp from northbound Kenilworth Ave to the I-495 inner loop. The activities within the area of 4(f) use include augmenting an existing drainage pipe and access for construction vehicles and equipment. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on Greenbelt Historic District, including Buddy Attick Lake Park and Indian Springs Park, which are within the boundary of and contribute to the significance of the historic district. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. FHWA intends to make a *de minimis* impact determination for Indian Springs Park if the City of Greenbelt Department of Recreation and Parks concurs that the Proposed Action, after measures to mitigate and minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and, if public comments do not identify new issues.

C. Applied Minimization

MDOT SHA was able to reduce impacts to Indian Springs Park by eliminating linear stormwater management facilities along the edge of the park and historic boundary. A retaining wall would be constructed at the edge of pavement where possible.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Indian Springs Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with City of Greenbelt Department of Recreation and Parks, MHT, and NPS staff.

2.1.30 Greenbelt Park

Type of Section 4(f) Property: Public Park and Historic Site

Officials with Jurisdiction: ACHP, MHT, NPS

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Greenbelt Park (**Figure 2-22**), is a publicly-owned park and recreation area that abuts the inner loop of I-495 in Greenbelt. The park is situated between Kenilworth Avenue (MD 201) and Good Luck Road with a street address of 6565 Greenbelt Road. The 1,174-acre park is under the jurisdiction of NPS. Greenbelt Park was established by Congress on August 3, 1950, through Public Law 81-643 in association with the creation of the Baltimore-Washington Parkway, which traverses the park.

The park features a 174-site campground, 9 miles of trails, and three picnic areas. In some ways, Greenbelt Park is a “backyard” national park unit, as many locals come to camp, hike, picnic, and run. Greenbelt also attracts visitors from across the country and around the world who are drawn by the recreational opportunities, natural beauty, and the campground that is open all year. The land that is now Greenbelt Park was originally intended to be a future extension of the town of Greenbelt, but was eventually preserved as a park for the community and region. In the 1930s, the town of Greenbelt, Maryland, became the first government-sponsored, planned community in the United States. Built on “garden city” principles, which emphasized self-contained, complete communities with ample green space, it was part of a larger plan for several such communities as part of President Roosevelt’s New Deal.

The NPS submitted written correspondence to MHT indicating it considers Greenbelt Park potentially significant under Criteria A, C, and D. According to NPS Greenbelt Park is locally significant under Criterion A for its association with the Mission 66 program and for fulfilling the National Capital Region’s goal of providing a variety of recreational opportunities for Washington, DC’s urban population. NPS considers Greenbelt Park potentially significant under Criterion C as an example of the landscape design characteristics of the Mission 66 program. It is the only park in the region where the landscape, roads, campsites, comfort stations, and buildings were constructed during the NPS Mission 66 program. Elements that contribute to the significance of Greenbelt Park consist of the design, location, and materials of the ranger station, recreational buildings and facilities, and the location and design of the roads and trails including the use of retaining walls to reduce the height and extent of cut-and-fill slopes and the use of vegetation to blend ditches and shoulders into the adjacent landscape. MHT has not commented on the NPS eligibility determination.

The I-495 interchange with the Baltimore Washington Parkway, including portions of Greenbelt Park, is on land owned by the federal government and administered by NPS. MDOT SHA right-of-way plats reference a July 23, 1956 Act of Congress and an NPS letter permit issued October 4, 1962. Although the Act of Congress has not been located, a copy of the plats and NPS Land Record No. 593 dated May 13, 1968 identifying the extent of MDOT SHA’s permitted use is in **Appendix B**. A note on a drawing included in the NPS file indicates the “Area Occupied By Capital Beltway is Under Permit to State of Maryland.”⁵ As

⁵ Baltimore-Washington Parkway Reservation No. 688. National Park Service National Capital Region Land Record No. 593. May 13, 1968. Files of National Park Service.

this area is already in a transportation use, Section 4(f) would not apply (23 CFR 774.11 and 23 CFR 774.17). Future coordination with NPS would include the preparation of a highway deed easement that documents any additional use required as part of the Proposed Action and clarifies both property ownership and MDOT SHA's permitted use.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.6 acre of Greenbelt Park. The historic boundary of Greenbelt Park is both smaller than and excludes some discontinuous parcels identified by NPS as part of the park. The difference in the boundaries reduces the Section 4(f) use of Greenbelt Park as an historic site to 0.3 acre. The Section 4(f) use would accommodate widening along I-495; the realignment of the ramp from eastbound Greenbelt Road to southbound Baltimore Washington Parkway; augmentation and repair of an existing storm drain outfall; and access for construction vehicles and materials ([Figure 2-22](#)). The area of Section 4(f) use is at three locations: a narrow strip approximately 1,600 feet in length along the southern side of the ramp from eastbound Greenbelt Road to the southbound Baltimore Washington Parkway; and two small rectangular areas south of the ramp from northbound Baltimore Washington Parkway to the I-495 inner loop. Activities in the areas of Section 4(f) use would consist of tree removal, grading, installation of augmentation pipes, construction of a retaining wall, and access for construction equipment and materials. A portion of the Perimeter Trail may need to be relocated near the ramps from Greenbelt Road to the southbound Baltimore Washington Parkway. The Proposed Action would adversely affect the activities, features, or attributes of the public park and recreation area.

On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on Greenbelt Park. Significant for its recreational history, the park would experience some diminishment of setting due to the visibility and proximity of an enlarged interchange at the Baltimore Washington Parkway. Any mitigation for the Section 4(f) use of the historic site would be consistent with stipulations identified in the Section 106 Programmatic Agreement in consultation with NPS, MHT and Section 106 consulting parties. The impacts to Greenbelt Park require avoidance alternatives evaluation ([Section 3.1](#)) and least overall harm analysis ([Section 5.1.10](#)).

C. Applied Minimization

Consistent with the minimization efforts described in [Section 4](#), MDOT SHA was able to reduce impacts to Greenbelt Park by eliminating above-ground stormwater management facilities along I-495 where they would result in impacts to the park and historic site. After coordination with NPS, MDOT SHA eliminated two flyover ramps from the proposed design in the southwest quadrant and developed a number of different LOD at the I-495 interchange with Baltimore Washington Parkway that would accommodate different interchange configurations. These interchange options would result in similar physical impacts to Greenbelt Park, but have different visual impacts that could potentially reduce adverse visual impacts identified under Section 106. Coordination with NPS is ongoing. NPS will provide MDOT SHA with input on the design of the interchange. Additionally, MDOT SHA will work with NPS on the number, location, and type of signage on NPS property.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Greenbelt Park have changed from 0.7 acre on June 5, 2019 to the 0.6 acre in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with ACHP, MHT, and NPS staff.

2.1.31 Baltimore Washington Parkway

Type of Section 4(f) Property: Public Park and Historic Site

Officials with Jurisdiction: ACHP, MHT, NPS

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Opened in 1954, the Baltimore Washington Parkway (**Figure 2-22**) is a 29-mile scenic highway that connects Baltimore, Maryland with Washington, DC. The federally-owned and NPS-administered portion of the parkway extends from Washington, DC to MD 175 in Anne Arundel County. As a park facility, the Baltimore Washington Parkway is under jurisdiction of NPS. The Baltimore Washington Parkway encompasses 1,353 acres. Within an irregular right-of-way ranging from 400 to 800 feet wide, the terrain is generally forested with gentle hills and modest vistas. Portions of the Baltimore Washington Parkway were acquired with funds from the federal side of the LWCF.

The Baltimore Washington Parkway was listed in the NRHP on May 9, 1991 and achieves state and local significance in the areas of transportation and landscape architecture. It is associated with urban development of the National Capital as the federal center; is a late period example of this type of roadway; and is the only fully-developed parkway of its kind in Maryland. Features that contribute to the historical significance of the Baltimore Washington Parkway include culverts, bridges, landscape-architectural elements, as well as natural topographical features. The existing I-495 interchange with the Baltimore Washington Parkway was constructed in 1962 and does not contribute to the historical significance of the parkway. As an historic property, the Baltimore Washington Parkway is under jurisdiction of MHT.

The existing I-495 interchange with the Baltimore Washington Parkway is on land administered by NPS with a letter permit for the use of MDOT SHA. MDOT SHA right-of-way plats reference a July 23, 1956 Act of Congress and an NPS Permit issued October 4, 1962. Although the Act of Congress has not been located, a copy of the plats and NPS Land Record No. 593 dated May 13, 1968 identifying the extent of MDOT SHA's permitted use is in the **Appendix B**. A note on a drawing included in the NPS file indicates the "Area Occupied By Capital Beltway is Under Permit to State of Maryland."

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 69.3 acres of the Baltimore Washington Parkway historic site. Under the terms of the NPS letter permit, portions of the parkway are in an existing transportation use (23 CFR 774.11 and 23 CFR 774.17) maintained by MDOT SHA. Although this has no effect on the historical significance, the permit reduces the Section 4(f) park use of Baltimore Washington Parkway to 62.1 acres. The Section 4(f) use would accommodate reconfiguring the existing interchange of I-495 and Baltimore Washington Parkway; constructing direct access ramps to and from the managed lanes and the Baltimore Washington Parkway; replacing the existing bridges carrying the Parkway over I-495; constructing, operating, and maintaining stormwater management facilities; constructing a noise wall; and providing access for construction vehicles and materials. The area of Section 4(f) use is concentrated in two areas: a linear area along the Baltimore Washington Parkway that extends approximately 3,800 feet of the interchange with I-495; and a linear area along Baltimore Washington Parkway that extends approximately 3,000 feet south of the interchange with I-495. Activities in the areas

of Section 4(f) use would consist of grading, tree removal, and landscape plantings; realigning the existing parkway to accommodate direct access ramps to and from the managed lanes; realigning the interchange with Southway and Greenbelt Road; replacing the bridge carrying Greenbelt Road over Baltimore Washington Parkway; constructing, operating, and maintaining stormwater management facilities; updating and installing signage; and access for construction equipment and materials. The Proposed Action would adversely affect the activities, features, or attributes of the historic site, public park and recreation area.

The existing bridges carrying the Baltimore Washington Parkway over I-495 and Baltimore Washington Parkway Interchange with I-495 would also be replaced and reconfigured, respectively. However, these actions will be within the existing interchange which does not contribute to the historic significance of the Parkway and is within the existing area permitted by NPS for highway use. These actions would not result in a Section 4(f) use of the Baltimore Washington Parkway.

On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on Baltimore Washington Parkway.. Any mitigation for the Section 4(f) use of the historic site would be consistent with stipulations identified in the Section 106 Programmatic Agreement and in consultation with NPS, MHT and Section 106 consulting parties. The impacts to Baltimore Washington Parkway require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.10**).

C. Applied Minimization

Minimization of physical impacts at Greenbelt Park was achieved by placing a retaining wall along the relocated ramp from the I-495 inner loop to southbound Baltimore Washington Parkway. In response to NPS comments about not providing direct access to the parkway, MDOT SHA completed a traffic analysis to determine traffic impacts on I-495 and the Baltimore Washington Parkway without direct access. Results showed that direct access was needed to meet the Study's Purpose and Need. NPS requested additional traffic analyses and safety information, which MDOT SHA provided. After determining direct access was needed, MDOT SHA further evaluated options to minimize impacts to the parkway. After coordination with NPS, MDOT SHA eliminated two flyover ramps in the southwest quadrant from the proposed design and developed six different direct access options at the I-495 and Baltimore Washington Parkway interchange. This coordination effort took place to minimize visual and property impacts. These interchange options would result in similar physical impacts to Greenbelt Park, but have different visual impacts that could potentially reduce adverse visual impacts identified under Section 106. In addition, MDOT SHA has developed renderings of two interchange options potentially suitable to NPS while accommodating direct access in support of the Study's Purpose and Need. Coordination with NPS is ongoing and NPS will provide MDOT SHA with input on the design of the interchange. MDOT SHA will also continue coordinating with NPS on the number, location, design, and type of fixed and dynamic signage on NPS property along the parkway.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Baltimore Washington Parkway have changed from 69.9 acres on June 5, 2019 to the 69.3 acres in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with ACHP, MHT, and NPS staff.

2.1.32 McDonald Field

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: City of Greenbelt Dept. of Recreation and Parks

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

McDonald Field (**Figure 2-22**) is a publicly-owned recreation area at 13 Southway Court in Greenbelt. The 2.1-acre park abuts the right-of-way along southbound MD 295. Park amenities include a baseball/softball field, bleachers, and parking areas. Acquired in 1951, the park is under the jurisdiction of the City of Greenbelt. In correspondence dated May 1, 2020, the City of Greenbelt confirmed McDonald Field is a significant park property for the purposes of Section 4(f).

McDonald Field is a recreation feature within the Greenbelt Historic District, which was listed in the NRHP on November 25, 1980 and additionally listed as a National Historic Landmark on February 18, 1997. However, McDonald Field does not contribute to the significance of the historic district or the National Historic Landmark as it was constructed outside the period of significance identified in the nominations of both the historic district (1935-1941) and the National Historic Landmark (1935-1946). MHT concurred on August 12, 2019 that McDonald Field is not eligible for the NRHP and does not contribute to the Greenbelt Historic District. The Section 4(f) use of Greenbelt Historic District is discussed in **2.1.27**.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of less than 0.1 acre of McDonald Field to accommodate the realignment of the southbound off ramp at the Baltimore Washington Parkway interchange with Southway. The area of Section 4(f) use is a narrow triangular area that extends approximately 100 feet along the southwestern end of the park, where it borders the ramp from southbound Baltimore Washington Parkway to Southway. Activities within the area of Section 4(f) use would consist of tree removal, grading, and providing access for construction vehicles and materials. No areas of recreational activity would experience an impact from the Proposed Action. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA would issue a finding of *de minimis* impact if the City of Greenbelt Department of Recreation and Parks concurs that the Proposed Action, after measures to mitigate and minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments

C. Applied Minimization

The narrowest typical section has been applied where improvements to I-495 are proposed along McDonald Field. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495. No surface stormwater management facilities would be constructed adjacent to the park. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to McDonald Field have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with City of Greenbelt Department of Recreation and Parks.

2.1.33 Beckett Field

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: City of New Carrollton

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Beckett Field is a publicly-owned park at 8511 Legation Road in New Carrollton, Prince George's County. The 3.8-acre park abuts the Annapolis Road (MD 450) offramp from southbound I-495. Park amenities include two baseball/softball fields, multi-purpose fields, a basketball court, batting cages, a playground, a picnic area and the Hanco Community Center. The park is under the jurisdiction of the New Carrollton Department of Public Works – Parks and Recreation and was acquired in 1961. The park was enlarged in 1975.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.2 acre of Beckett Field to accommodate a constructing, operating, and maintaining a stormwater management facility on the tax parcel that adjoins to the south. The area of Section 4(f) use would consist of a small rectangular area at the southeastern corner of the park, near the alignment of the ramp from the I-495 inner loop to MD 450 (**Figure 2-23**). Activities in the area include tree removal, grading, and access for construction equipment and materials. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Beckett Field if the New Carrollton Department of Public Works – Parks and Recreation, concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

The narrowest typical section has been applied where improvements to I-495 are proposed along Beckett Field. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495. No surface stormwater management facilities would be constructed adjacent to the park. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Beckett Field have changed from 0.3 acre on June 5, 2019 to the 0.2 acre in this Draft Section

4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with the City of New Carrollton staff.

2.1.34 Carsondale

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: ACHP, MHT

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Carsondale (**Figure 2-24**) is the first planned residential community in Prince George's County that was designed for and advertised to African American veterans and their families. Carsondale serves an important purpose in making housing available to African Americans in Prince George's County. The historic site comprises 35.1 acres east of I-495 and northwest of Martin Luther King Jr. Highway. Carsondale is an historic district eligible for the NRHP under Criterion A for its important role as an African American residential neighborhood. As Carsondale is eligible under Criterion A, planned buildings and developments that still serve their intended historical functions are considered contributing.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.1 acre from Carsondale to accommodate widening along US 50 associated with realigning the interchange of US 50 and I-495 that would require replacing the bridge carrying Whitfield Chapel Road over US 50 (**Figure 2-24**). There are two areas of Section 4(f) use: a narrow linear area that extends approximately 550 feet where the northern edge of the historic district meets US 50; and a narrow strip that extends 150 along the east side of Whitfield Chapel Road. Activities in the area of Section 4(f) use would consist of tree removal, grading, construction of a retaining wall, and access for construction vehicles and materials. The Proposed Action would result in a use of the nine properties listed in **Table 2-4** that contribute to the significance of Carsondale. The portions of the historic district that would experience a Section 4(f) use consist of strips of front yards along Whitfield Chapel Road where the roadway height would be adjusted to meet the elevation of the new bridge across US 50. Backyards of houses on Wallace Street would be impacted by widening on US 50 at the direct access interchange. There are no physical impacts to contributing dwellings, but the LOD encompass minor portions of front or rear yards, including some secondary structures, of nine dwellings that contribute to the district's significance.

Table 2-4: Section 4(f) Use of Contributing Properties in Carsondale

4909 Whitfield Chapel Rd	9010 Wallace Road	9104 Wallace Road
4907 Whitfield Chapel Rd	9016 Wallace Road	9112 Wallace Road
9004 Wallace Road	9018 Wallace Road	9114 Wallace Road

On March 12, 2020, MHT concurred that based on current design information, Section 106 effects on Carsondale cannot be fully determined. MDOT SHA will submit a Section 106 effect determination informing MHT there is now enough information to determine the Study would result in an adverse effect to Carsondale. The multiple minor impacts to contributing resources will result in a cumulative diminishment of the property's integrity of setting and design. The results of this consultation will be

documented in the Final Section 4(f) Evaluation. Section 106 consultation with MHT and ACHP is ongoing. At the time of publication, it is assumed that the Proposed Action would result in an adverse effect. Impacts to Carsondale require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.11**).

C. Applied Minimization

Consistent with the minimization efforts described in Section 4, MDOT SHA was able to reduce impacts to Carsondale by modifying the roadside section and eliminating stormwater management facilities along US 50. A retaining wall would be constructed at the edge of pavement along the boundary of the historic district, resulting in the narrower LOD and the associated reduction in impacts to properties that contribute to the significance of the historic district.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Carsondale have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with ACHP and MHT.

2.1.35 Glenarden Historic District

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: ACHP, MHT

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

The Glenarden Historic District (**Figure 2-25**) was specifically marketed as an African American community in association with completion of the new Washington, Baltimore & Annapolis Electric Railroad in the 1910s. By the 1960s and 1970s, its older housing stock was subject to extensive urban renewal that removed its older core to construct affordable and subsidized semi-detached and attached housing, as well as for improvements to roads, sidewalks, and drainage. The historic site comprises 306 acres at either side of I-495 in the City of Glenarden. The Glenarden Historic District is eligible for the NRHP under Criterion A for its important role as a middle-class African American community in the DC suburbs and the unique use of urban renewal funds for a suburban municipality. As Glenarden is eligible under Criterion A, planned buildings and developments that still serve their planned historical functions, such as the modified community center, are considered contributing. Street patterns, roads, sidewalks, lighting and landscaping vary in construction date, location, size and materials and do not contribute to the significance of the historic site.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.8 acre from the Glenarden Historic District to accommodate widening of I-495; replacing the Glenarden Parkway overpass; constructing, operating, and maintaining stormwater management facilities; and access for construction vehicles and materials (**Figure 2-25**). The area of Section 4(f) use consists of the following:

- An area on a vacant lot at the northern end of the historic district east of the I-495 outer loop;
- A narrow linear area that extends 1,600 feet along the eastern edge of the I-495 outer loop;

- A narrow linear area that extends approximately 3,800 feet along the western edge of the I-495 inner loop;
- Narrow linear areas that extend approximately 1,000 feet along the north and south sides of Glenarden Parkway;
- A narrow linear area that extends approximately 400 feet along the east and west sides of 7th Street and
- A narrow area that extends approximately 100 feet along the west side of the I-495 inner loop.

Activities in the areas of Section 4(f) use consist of grading; tree removal; paving; removing and replacing an existing noise wall along I-495; constructing, operating, and maintaining stormwater management facilities; raising the height of the local roads to match the elevation of the new bridge carrying Glenarden Parkway across I-495; and access for construction vehicles and materials. A stormwater management facility would be constructed on a vacant lot within the historic district that does not contribute to the significance of the historic district. The stormwater management facility is required at this location owing to the limited available space for the treatment of stormwater on this portion of I-495.

The Proposed Action would result in impacts to the 25 properties listed in **Table 2-5** that contribute to the significance of the Glenarden Historic District. The portions of the historic site that would experience a Section 4(f) use consists of strips of front and back yards of properties within the Glenarden Historic District. Secondary outbuildings erected within existing MDOT SHA right-of-way which may date from the period of significance and could potentially be demolished.

Table 2-5: Section 4(f) Use of Contributing Properties in the Glenarden Historic District

8901 Glenarden Parkway	1418 7th Street	1506 7th Street	1526 7th Street
8903 Glenarden Parkway	1420 7th Street	1508 7th Street	1438 8th Street
8932 Glenarden Parkway	1431 7th Street	1516 7th Street	8616 Reichter Street
9001 Glenarden Parkway	1433 7th Street	1520 7th Street	8620 Reichter Street
1501 4th Street	1436 7th Street	1522 7th Street	8706 Reichter Street
1504 5th Street	1504 7th Street	1524 7th Street	8708 Reichter Street
Henry P. Johnson Park			

On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on Glenarden Historic District, including Henry P. Johnson Park which is a contributing property.. Any mitigation for the Section 4(f) use of the historic district would be consistent with stipulations identified in the Section 106 Programmatic Agreement and in consultation with NPS, MHT and Section 106 consulting parties. The impacts to Glenarden Historic District require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.12**).

C. Applied Minimization

Consistent with the minimization efforts described in Section 4, MDOT SHA was able to reduce impacts to Glenarden Historic District by modifying the roadside section along I-495 where it would result in additional impacts to the park and historic district. Linear stormwater management facilities behind the edge of shoulder were eliminated in several areas along the Historic District boundary, resulting in

narrowed LOD and fewer impacts to the Historic District and in select locations, construction of a retaining wall at the edge of pavement is proposed to further minimize the LOD.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Glenarden Historic District have changed from 1.1 acres on June 5, 2019 to the 0.8 acre in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with ACHP and MHT staff.

2.1.36 Henry P. Johnson Park

Type of Section 4(f) Property: Public Park and Historic Site

Official with Jurisdiction: M-NCPPC Prince George's County, ACHP, MHT

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Henry P. Johnson Park (**Figure 2-25**) is a publicly-owned park, and recreation area located at 8710 Reicher Street in Landover. The park is situated between Brightseat Road and the southbound lanes of I-495. This 7.1-acre park features full and half basketball courts, two tennis courts, a multi-purpose field, picnic area with grills, and hard surface trail. This park is under the jurisdiction of M-NCPPC and was acquired in 1969 and 1970 using POS funds.

Henry P. Johnson Park additionally contributes to the significance of the Glenarden Historic District, eligible for the NRHP under Criterion A for its important role as a middle-class African American community in the DC suburbs and the unique use of urban renewal funds for a suburban municipality. As Glenarden is eligible under Criterion A, planned buildings and developments that still serve their planned historical functions, such as the modified community center, are considered contributing. Street patterns, roads, sidewalks, lighting and landscaping vary in construction date, location, size and materials and do not contribute to the significance of the historic site.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of less than 0.1 acre of Henry P. Johnson Park to accommodate widening of I-495 (**Figure 2-25**) and provide access for construction vehicles and materials. The area of Section 4(f) use is a narrow linear area 100 feet in length at the southwestern corner of the park where it adjoins the I-495 inner loop. Activities within the area of Section 4(f) use consist of grading; tree removal; and access for construction vehicles and materials. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. Henry P. Johnson is both a public park and one of the 25 contributing properties in Glenarden Historic District that would experience an impact from the Representative Proposed Action.

On March 12, 2020, MHT concurred that the Managed Lanes Study would have an adverse effect on Glenarden Historic District, including Henry P. Johnson Park which is a contributing property.. Any mitigation for the Section 4(f) use of the historic site and public park would be consistent with stipulations identified in the Section 106 Programmatic Agreement and be coordinated with the NPS, MHT and Section 106 consulting parties. The impacts to Henry P. Johnson Park require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.12**).



C. Applied Minimization

Consistent with the minimization efforts described in Section 4, MDOT SHA was able to reduce impacts to Henry P. Johnson Park by reducing the roadside section along I-495, where it would result in additional impacts to the park and historic district.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Henry P. Johnson Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC, ACHP, and MHT staff.

Figure 2-23: Section 4(f) Property (Map 20 of 35)



Figure 2-24: Section 4(f) Property (Map 21 of 35)

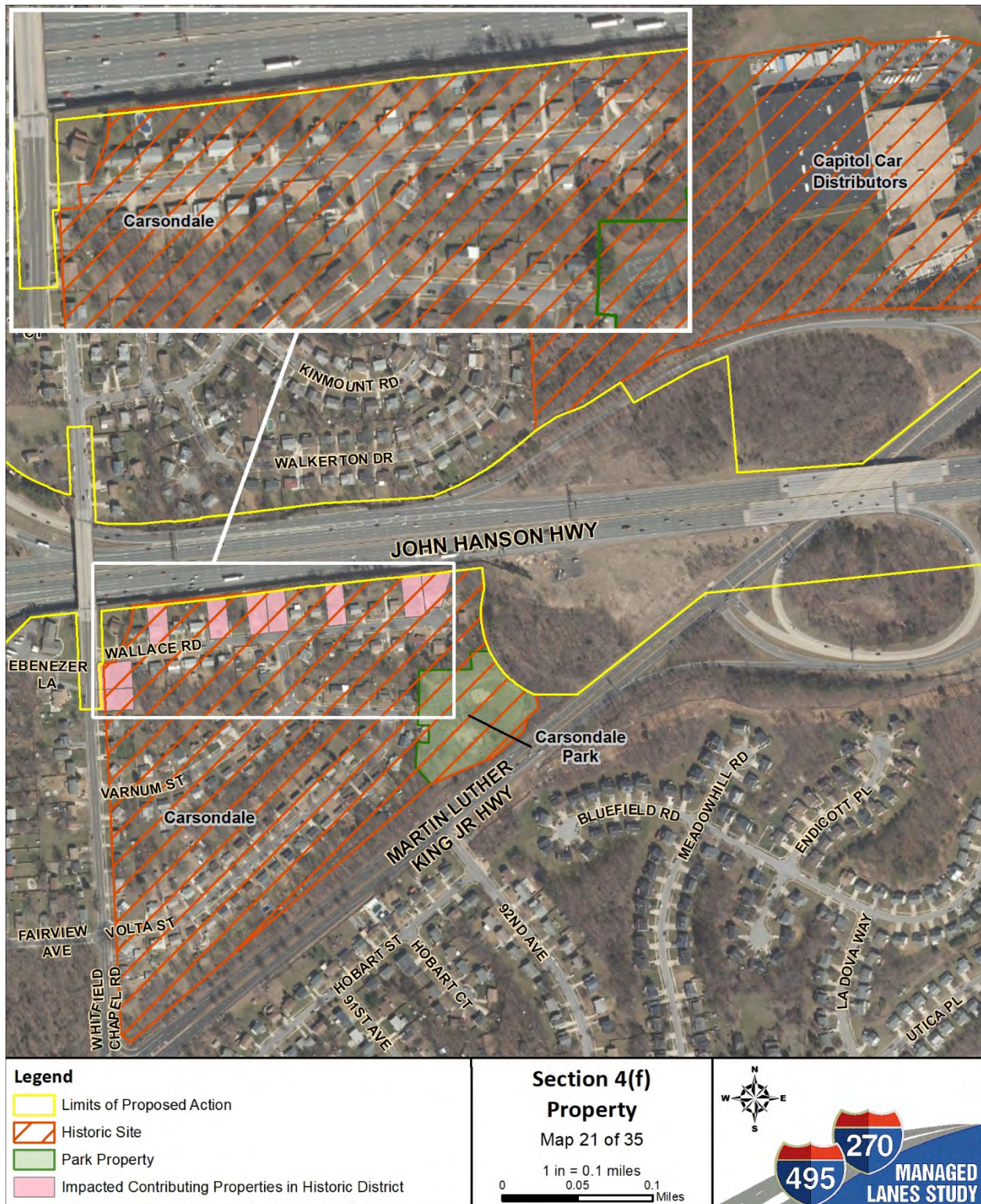
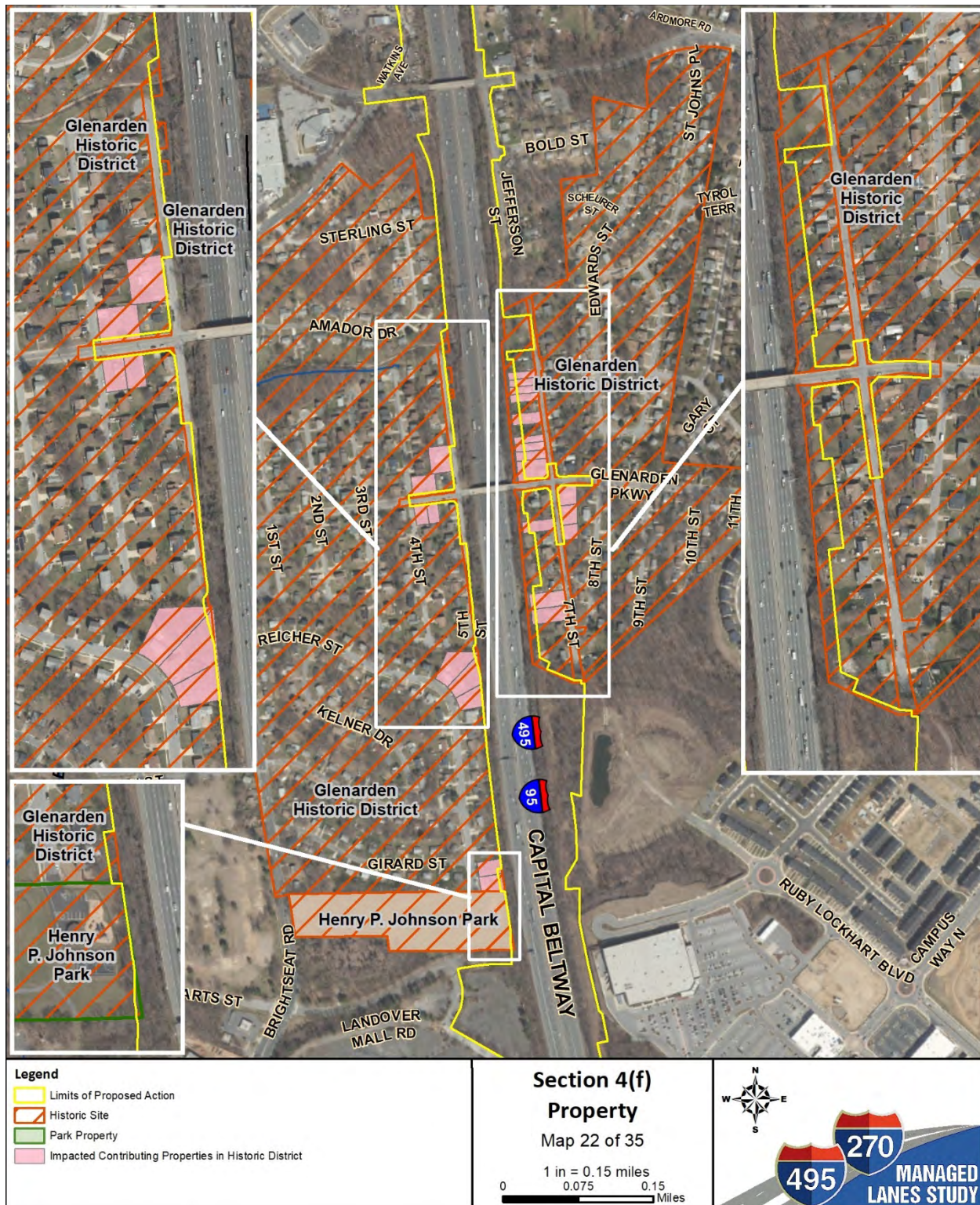


Figure 2-25: Section 4(f) Property (Map 22 of 35)



2.1.37 Southwest Branch Stream Valley Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Prince George's County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Southwest Branch Stream Valley Park (**Figure 2-26**) is a publicly-owned park and recreation area in Upper Marlboro along the Southwest Branch of the Patuxent River between Harry S. Truman Drive and I-495. This 263-acre park is an undeveloped wooded area that provides a protective buffer for the Southwest Branch of the Patuxent River. This park is under the jurisdiction of M-NCPPC, Prince George's County and was originally acquired in 1977 with additional parcels acquired in 1978, 1980, 1982, 1988, 1989, 1990, and 1998 using funding POS funds.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.3 acre of Southwest Branch Stream Valley Park to accommodate improvements and augmentation to an existing culvert beneath I-495; and providing access for construction vehicles and materials (**Figure 2-26**). The area of Section 4(f) use is concentrated at two locations: a narrow, sparsely wooded linear area that extends approximately 600 feet along the ramp from the outer loop to eastbound MD 214 (Central Avenue); and a small rectangular area at an existing storm drain outfall at the western edge of the park, approximately 350 feet south of the previous impact. Activities in the area of Section 4(f) use would consist of tree removal, grading, improvements to and augmentation of an existing storm drain and culvert; and access for construction vehicles and materials. The Section 4(f) use constitutes a minor impact. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Southwest Branch Stream Valley Park if M-NCPPC, Prince George's County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

The narrowest typical section has been applied where improvements to I-495 are proposed along Southwest Branch Stream Valley Park. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495. No surface stormwater management facilities would be constructed adjacent to the park. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Southwest Branch Stream Valley Park have changed from 0.4 acre on June 5, 2019 to the 0.3

acre in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.1.38 Heritage Glen Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Prince George's County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Heritage Glen Park (**Figure 2-27**), also known as Greenwood Manor Park and McCarthy Park, is a publicly-owned park and recreation area at 1309 Southern Springs Lane in Upper Marlboro. The park abuts the northbound onramp from Ritchie Marlboro Road to I-495. Amenities within the 38.2-acre community park consist of an undeveloped wooded area, a small playground, and a picnic area. This park is under the jurisdiction of M-NCPPC and was acquired in 1985 using POS funds.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.5 acre of Heritage Glen Park to accommodate improvements and augmentation to two existing storm drain outfalls beneath the on-ramp from Ritchie Marlboro Road to the I-495 outer loop; and providing access for construction vehicles and materials (**Figure 2-27**). The area of Section 4(f) use is concentrated at two rectangular areas planted with trees at the northern end of the ramp. Activities within the area would consist of tree removal, grading, a work area for a construction pit where the augmentation pipes would be installed; and access for construction vehicles and materials. The Section 4(f) use constitutes a minor impact. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Heritage Glen Park if M-NCPPC, Prince George's County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

The narrowest typical section has been applied where improvements to I-495 are proposed along Heritage Glen Park. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495. No surface stormwater management facilities would be constructed adjacent to the park. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Heritage Glen Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.1.39 Suitland Parkway

Type of Section 4(f) Property: Public Park and Historic Site

Officials with Jurisdiction: ACHP, MHT, NPS

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Suitland Parkway (**Figure 2-28**) is a NRHP-listed historic district and a publicly-owned park and recreation area. The Parkway consists of 9.18 miles of roadway, of which 6.38 miles and approximately 418.9 acres are in Maryland. Suitland Parkway was conceived in 1937 and constructed in 1944 as an entryway to Washington, DC. As a recreation facility, the parkway is under the jurisdiction of NPS. Suitland Parkway is on land owned by the federal government and administered by NPS.

The Parkway was listed in the NRHP on June 2, 1995 under Criteria A and C as one of several parkways leading to the National Capital. Under Criterion A, the Parkway is significant for being a vital component of the regional transportation system that contributes to the historic symbolism and design of the Nation's Capital. Under Criterion C the parkway is significant for its distinctive architectural and landscape design characteristics in support of Criterion A. The bridges carrying I-495 across Suitland Parkway do not contribute to the historic significance of the parkway. According to the historic site's NRHP nomination, Suitland Parkway was not designed as a recreational parkway, rather a parkway with elements to convey a scenic driving experience. Like many of the later parkways built in the National Capital Region, at the time of its nomination it was significant under Criterion Consideration G, for having achieved significance within the last fifty years, thus exemplifying extraordinary significance. As an historic site, Suitland Parkway is under the jurisdiction of MHT.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.3 acre of Suitland Parkway to accommodate widening I-495 at the bridges over Suitland Parkway, erosion and sediment control, adding an auxiliary pipe to augment the culvert conveying Henson Creek beneath I-495, and providing access for construction vehicles and materials. Small stormwater management facilities would be placed in vaults beneath the shoulders within the area currently permitted by NPS to MDOT SHA for transportation use, as shown on **Figure 2-28**, under Special Use Permit No. NCR NACE 6000 1903. The NPS permit, **enclosed in Appendix B**, expires 3/8/2024 and would need to be amended to accommodate the newly proposed activities on NPS property. The stormwater management facilities are required to address a deficit in stormwater quantity treatment in this portion of the Proposed Action. The area of Section 4(f) use is concentrated in small, irregularly shaped areas at the northwest and northeast quadrants of where I-495 passes over Suitland Parkway. Activities in the area of Section 4(f) use would consist of grading, tree removal, landscape plantings, erosion and sediment control, constructing an auxiliary pipe to augment the existing culvert conveying Henson Creek beneath I-495, and access for construction vehicles and materials. The Proposed Action would not adversely affect the activities, features, or attributes of the public park. The impact to the property under the Proposed Action would constitute a minor use of the public park.

No standing structures or features that contribute to the historic significance of Suitland Parkway would experience an impact from the Proposed Action. The existing bridges carrying I-495 over Suitland Parkway

are currently being replaced by MDOT SHA. The bridges currently under construction will be wider in order to accommodate the Proposed Action, but minor impacts are still anticipated. As transfer of property out of federal control may take place – a criterion of an adverse effect under Section 106 36 CFR 800.5(a)(2)(vii) – in the absence of enforceable restrictions to ensure preservation.

On March 12, 2020, MHT concurred that based on current design information, Section 106 effects cannot be fully determined. Further consultation is required to consider and address effects. It is assumed that the Proposed Action would result in an adverse effect. Suitland Parkway warrants an avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.13**). If ongoing coordination with NPS concludes that the proposed actions within the boundaries of Suitland Parkway can be accomplished via a special use permit that would not require the transfer of property ownership, or other legally enforceable conditions can be identified that avoid diminishment and ensure long-term preservation of any contributing features to the historic property, MDOT SHA would coordinate an Section 106 finding of no adverse effect to MHT and NPS and request signatures acknowledging a finding of *de minimis* impact. The results of ongoing coordination and Section 106 consultation will be documented in the Final Section 4(f).

C. Applied Minimization

Consistent with the minimization efforts described in Section 4, MDOT SHA was able to reduce impacts to Suitland Parkway by eliminating above-ground stormwater management facilities along the I-495 where they would result in impacts to the park and historic site.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Suitland Parkway have changed from 3.6 acres on June 5, 2019 to the 0.3 acres in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with ACHP, MHT, and NPS staff.

2.1.40 Douglas E. Patterson Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Prince George's County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Douglas E. Patterson Park (**Figure 2-28**) is a publicly-owned park and recreation area located at 7001 Marianne Drive in Suitland. This park is situated north of the I-495 inner loop and south of Benjamin Foulois Creative and Performing Arts School. This 26.2-acre park features two tennis courts, a lighted basketball court, two lighted half basketball courts, a baseball field, and a multipurpose ball field. Other amenities include a picnic area, comfort station, and playground. This park is under the jurisdiction of M-NCPPC and was acquired in 1963 using POS funds.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.7 acres of Douglas E. Patterson Park to accommodate the construction, operation, and future maintenance of a stormwater management facility; and providing access for construction vehicles and materials (**Figure 2-28**). The impacted area is shaped

like a trapezoid and consists of a stand of trees at the southwestern corner of the park, adjacent to the I-495 inner loop. Activities within the area of Section 4(f) use would consist of tree removal; grading; construction, operation and future maintenance of a stormwater management facility; and access for construction vehicles and materials. The stormwater management facility is required at this location owing to the limited available space for the treatment of stormwater on this portion of I-495. This Section 4(f) use would result in the permanent incorporation of portions of Douglas E. Patterson Park into the transportation facility. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Douglas E. Patterson Park if M-NCPPC, Prince George's County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

The narrowest typical section has been applied where improvements to I-495 are proposed along Douglas E. Patterson Park. This entails constructing a closed section with a retaining wall along the edge of pavement on I-495. No surface stormwater management facilities would be constructed adjacent to the park. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements. Coordination with M-NCPPC has resulted in changing the shape of the stormwater management facility proposed on the park property. At M-NCPPC's request, the western edge of the facility has been moved further from the Morningside neighborhood.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Douglas E. Patterson Park have changed from 1.1 acres on June 5, 2019 to the 0.7 acre in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.1.41 Andrews Manor Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Prince George's County

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Andrews Manor Park (**Figure 2-29**) is a publicly-owned park and recreation area adjacent to the I-495 outer loop on Gunston Lane in Suitland. This 4.1-acre park consists of an undeveloped wooded area. This park is under the jurisdiction of M-NCPPC, Prince George's County and was acquired in 1972. During coordination, M-NCPPC indicated there are currently no plans to develop the park.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 2.6 acres of Andrews Manor Park to accommodate the construction, operation, and future maintenance of a new stormwater management facility and provide access for construction vehicles and materials (**Figure 2-29**). The area of Section 4(f) use is a large irregularly shaped area along the northern portion of the park, where it borders the southern edge of the outer loop of I-495. Activities within the area of Section 4(f) use would consist of tree removal; grading; construction and maintenance of a stormwater management facility; and access or construction vehicles and materials. The stormwater management facility is required at this location owing to the limited available space for the treatment of stormwater on this portion of I-495.

Coordination with M-NCPPC, Prince George's County is ongoing. The impacts to Andrews Manor Park require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.14**).

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Andrews Manor Park by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-495 are proposed. This entails constructing a closed section and retaining wall along the edge of pavement on I-495. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Andrews Manor Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.1.42 Manchester Estates Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Prince George's County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Manchester Estates Park (**Figure 2-29**) is a publicly-owned park and recreation area adjacent to the I-495 outer loop on Gunston Lane in Suitland. This 6.0-acre park consists of an undeveloped wooded area. Under the jurisdiction of M-NCPPC, the park was acquired in 1968 and expanded in 1974. During coordination, M-NCPPC indicated there are currently no plans to develop the park.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.5 acre of Manchester Estates Park to accommodate widening I-495; constructing a direct access interchange between the managed lanes and MD 4; and providing access for construction vehicles and materials (**Figure 2-29**). The Section 4(f) use is concentrated at two locations: a triangular area at the northwest corner of the park, south of the existing ramp from northbound MD 5 to the I-495 outer loop; and a narrow linear area along the northern edge

of the park where it borders the I-495 outer loop. Activities in the area of Section 4(f) use would consist of tree removal, grading, ramp construction; paving; and access for construction vehicles and materials. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

The impact to the property under the Proposed Action would constitute a minor use. FHWA intends to make a *de minimis* impact determination for Manchester Estates Park if M-NCPPC, Prince George's County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection.

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Manchester Estates Park by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-495 are proposed. This entails constructing a closed section and retaining wall along the edge of pavement on I-495. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Manchester Estates Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.1.43 Henson Creek Stream Valley Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Prince George's County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Henson Creek Stream Valley Park (**Figure 2-30**) is a publicly-owned public park and recreation area accessed via Henson Drive in Temple Hills. Henson Creek Stream Valley Park is a linear resource buffering Henson Creek from the Potomac River in Fort Washington to Suitland Parkway in Suitland. The 1,103-acre park is primarily an undeveloped wooded area that provides a protective buffer for Henson Creek. Park amenities include the hard surface Henson Creek Trail that extends 5.7 miles through the southern portion of the park. Although the trail does not traverse the Capital Beltway, an extension north to Suitland Parkway is planned. This park is under the jurisdiction of M-NCPPC and was acquired in pieces beginning in 1967 using funding POS funds.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.1 acre of Henson Creek Stream Valley Park to accommodate augmenting the existing culvert that conveys Henson Creek beneath I-495; and providing access to construction vehicles and materials **Figure 2-30**. The Section 4(f) use is concentrated at a narrow,

linear area at the southeast corner of the park where it adjoins the inner loop of I-495. Both the culvert and Henson Creek are outside the park at this location. The activities within the area of Section 4(f) use would consist of grading and access for construction equipment and materials. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not disrupt the programmed extension of the Henson Creek Trail nor would it adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

The impact to the property under the Proposed Action would constitute a minor use. FHWA intends to make a *de minimis* impact determination for Henson Creek Stream Valley Park if M-NCPPC, Prince George's County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection.

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Henson Creek Stream Valley Park by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-495 are proposed. This entails constructing a closed section and retaining wall along the edge of pavement on I-495. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Henson Creek Stream Valley Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

Figure 2-26: Section 4(f) Property (Map 23 of 35)



Figure 2-27: Section 4(f) Property (Map 24 of 35)



Figure 2-28: Section 4(f) Property (Map 25 of 35)

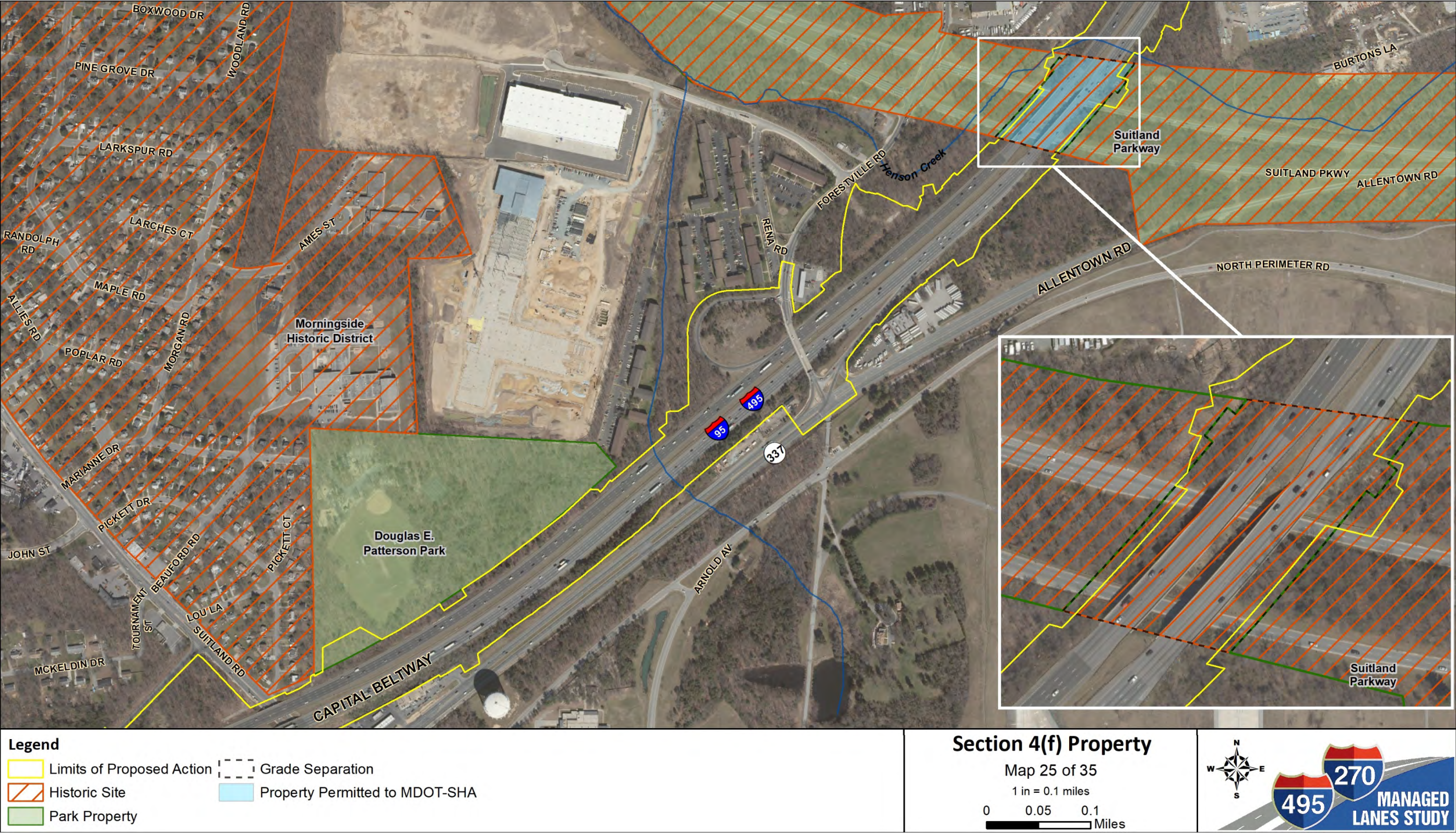


Figure 2-29: Section 4(f) Property (Map 26 of 35)

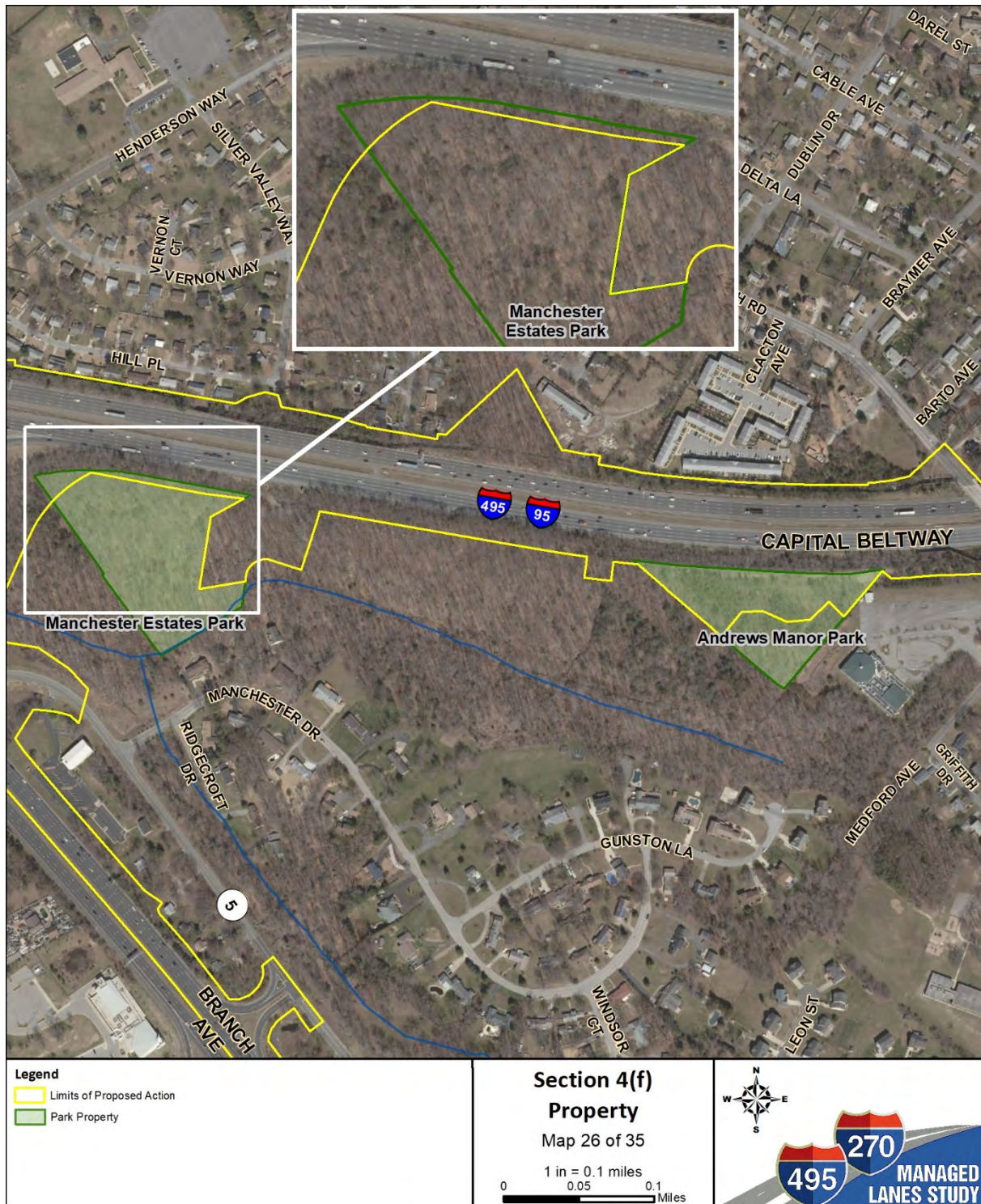


Figure 2-30: Section 4(f) Property (Map 27 of 35)



2.2 Section 4(f) Property along I-270

2.2.1 Academy Woods

Type of Section 4(f) Property: Historic Site

Official with Jurisdiction: MHT

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Academy Woods (**Figure 2-31**) is a Section 4(f) historic site comprised of a small neighborhood on 6.5 acres northeast of the I-495 and I-270 Spur interchange in Bethesda. The historic district is eligible for the NRHP under Criterion C as representative of a type, period, and method of construction. The 1967 to 1974 planned residential development of 13 single-family homes consists of atypical Contemporary and Postmodern houses extending along Grubby Thicket Way. Other character defining features of the subdivision include the cul-de-sac layout, lot orientation, and original streetlights.

B. Potential Section 4(f) Use

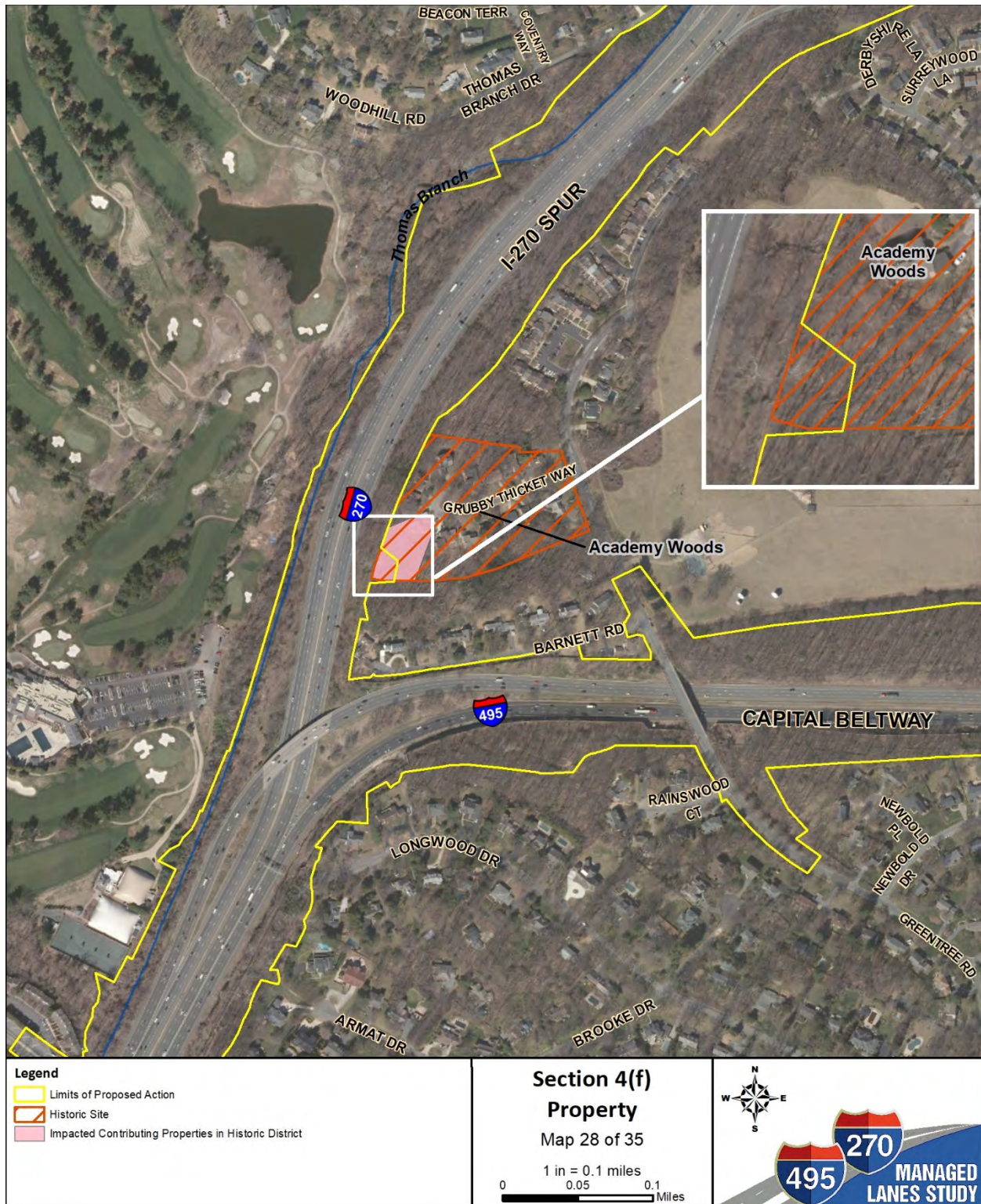
The Proposed Action would result in a Section 4(f) use of 0.2 acre to accommodate the construction, operation and future maintenance of a stormwater management facility (**Figure 2-31**). The area of Section 4(f) use is a trapezoidal area planted with trees at the southwestern corner of the historic district. Activities within the area of 4(f) use consist of tree removal; grading; construction, operation, and future maintenance of a stormwater management facility; and access for construction vehicles and equipment. The stormwater management facility would extend from the existing MDOT SHA right-of-way onto what is currently private property. The stormwater management facility is required at this location owing to the limited available space for the treatment of stormwater on this portion of I-270. Right-of-way would be acquired from the rear yard of one property that contributes to the significance of the historic site: 7224 Grubby Thicket Way. No standing structures greater than fifty years of age or elements that contribute to the significance of Academy Woods would experience a Section 4(f) use.

On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on Academy Woods. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. As such, the impact to Academy Woods Historic District under the Proposed Action would constitute a minor use. FHWA intends to issue a finding of *de minimis* impact to Academy Woods.

C. Applied Minimization

In addition to the minimization efforts described in Section 4, MDOT SHA has been able to reduce impacts to Academy Woods Historic District. Earlier designs for the stormwater management facility included impacts to 7225 and 7221 Grubby Thicket Way. After refinements to the design, these properties would no longer experience a Section 4(f) use. As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Academy Woods have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

Figure 2-31: Section 4(f) Property (Map 28 of 35)



2.2.2 Cabin John Regional Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Montgomery County

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Cabin John Regional Park (**Figure 2-32** and **Figure 2-33**) is a publicly-owned park and recreation area situated between Democracy Boulevard and southbound I-270. The 513.8-acre park contains a playground, dog park, picnic shelters, a miniature train, grills, horseshoe pits, and restrooms. The park has more than four miles of natural surface trails and two miles of hard surface trails. Athletic facilities include an indoor ice rink, baseball field, five softball fields, a volleyball court, and indoor tennis center. The Locust Grove Nature Center and Robert C. McDonnell Campground are also within the park. This park is under the jurisdiction of M-NCPPC Montgomery County and was acquired in 1960 using funding from the Capper-Cramton Act of 1930.

B. Potential Section 4(f) Use

The Build Alternatives would result in a use of 5.7 acres of Cabin John Regional Park, except for 7.2 acres under Alternative 10, 4.5 acres under Alternative 13B, and 5.2 acres under Alternative 13C to accommodate widening along I-270; augmenting two existing storm drains and one culvert; the construction and maintenance of new stormwater management features; and providing access for construction vehicles and materials (**Figure 2-32** and **Figure 2-33**). The area of Section 4(f) use extends approximately 6,000 feet along the length of the park, where it borders southbound I-270. Much of the impacted area is along a narrow strip planted with trees along the edge of the roadway. There are four areas where the area of Section 4(f) use extends further into the park.

- A half-acre area planted with trees at the southeast corner of the park, where Tuckerman Lane passes beneath I-270;
- Two small rectangular areas at existing storm drains along southbound I-270 at the eastern edge of the park and across the highway from Old Farm Neighborhood Conservation Area;
- An irregularly shaped, two-acre area at the eastern edge of the park along southbound I-270 and east of Gainsborough Road; and
- A 0.3 acre area on the west side of I-270, at the existing culvert conveying Cabin John Creek beneath I-270.

Activities in the area of Section 4(f) use would consist of tree removal, grading, a work area for a construction pipe to install augmentation pipes at the existing storm drains; a work area to improve the existing culvert beneath I-270 for Cabin John Creek; construction and maintenance of new stormwater management facilities; and access for construction vehicles and materials. The stormwater management facility is required at this location owing to the limited available space for the treatment of stormwater on this portion of I-270. Owing to the differences in elevation between the highway and park, a detailed constructability review identified that an offset of 14 feet is required behind the retaining wall along the

edge of pavement. This is in contrast to an offset of 10 feet used elsewhere on the project. Activities in this area may include erosion and sediment control, equipment maneuvering, and construction easements.

There is the potential for permanent impacts to the connecting trail between the Highway Loop Trail and Kidney Bean Loop Trail. Coordination with M-NCPPC Montgomery County is ongoing. Portions of Cabin John Regional Park would be permanently incorporated into the transportation facility. The impacts to Cabin John Regional Park require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.15** and **Section 5.1.16**).

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Cabin John Regional Park by eliminating linear stormwater management facilities along the edge of the park boundary. The narrowest typical section has been applied where improvements to I-270 are proposed along the park. This entails constructing a closed section with a retaining wall along the edge of pavement on I-270.

A high quality wetland was identified at the location of the proposed stormwater management facility, in an effort to eliminate impacts to the environmentally sensitive area, the feature was reduced in size and redesigned. Owing to the presence of Tilden Woods Stream Valley Park, Old Farm Neighborhood Conservation Area, Unit 6 of Cabin John Regional Park, and a residential neighborhood, shifting the centerline of the widening to the east was not an option.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Cabin John Regional Park from the Proposed Action have changed from 6.9 acres (under Alternative 10), 6.7 acres (under Alternative 13C), 5.4 acres (under Alternatives 8 and 9), and 5.2 acres (under Alternative 13B) on June 5, 2019 to 7.2 acres (under Alternative 10), 5.2 acres (under Alternative 13C), 5.7 acres (under Alternative 8 and 9), and 4.5 acres (under Alternative 13B) in this Draft Section 4(f) Evaluation. The reason for the inconsistent increase across the alternatives is the need for additional space to maneuver equipment while constructing a retaining wall along the edge of the roadway as part of the widest alternatives. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.2.3 Tilden Woods Stream Valley Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Montgomery County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Tilden Woods Stream Valley Park (**Figure 2-32**) is a publicly-owned park, and recreation area, accessed via Sully Lane in Bethesda. Tilden Woods Stream Valley Park extends along the banks of Old Farm Creek from Montrose Road to I-270. This 67.4-acre park consists of an undeveloped wooded area that provides a protective buffer along Old Farm Creek. This park is under the jurisdiction of M-NCPPC and was acquired in pieces beginning in 1961 using POS funds.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.2 acre of Tilden Woods Stream Valley Park to accommodate a constructability area related to widening I-270; replacing the bridge that carries I-270 over Tuckerman Lane; augmenting the existing culvert conveying Old Farm Creek beneath I-270; and providing access for construction vehicles and materials (**Figure 2-32**). The area of Section 4(f) use is concentrated in the shape of an L at the southwestern corner of the park where I-270 northbound passes over Tuckerman Lane. The area is planted sparsely with trees, having been disturbed by recently completed underground utility work. Activities within the area of Section 4(f) use would consist of tree removal; grading; a work area for a construction pit where an augmentation pipe would be installed; and access for construction vehicles and materials. The geometry of Tuckerman Lane would need to be altered to accommodate the new vertical height beneath the wider bridge on I-270. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Tilden Woods Stream Valley Park if M-NCPPC Montgomery County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

Consistent with the minimization efforts described in Section 4, MDOT SHA has been able to reduce impacts to Tilden Woods Stream Valley Park by eliminating stormwater management facilities from within the boundary of the public park. A retaining wall would be constructed at the edge of pavement along the park. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Tilden Woods Stream Valley Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.2.4 Old Farm Neighborhood Conservation Area

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Montgomery County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Old Farm Neighborhood Conservation Area (**Figure 2-32**) is a publicly-owned park and recreation area at 7030 Tilden Lane in Rockville. The park is bounded to the west by I-270. The 0.8-acre park is composed of an undeveloped wooded area. The park was acquired in 1962 and is under the jurisdiction of M-NCPPC.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.1 acre of Old Farm Neighborhood Conservation Area to construct, operate, and maintain a stormwater management facility on land adjacent to the park; and provide access for construction vehicles and materials (**Figure 2-32**). The area of Section 4(f) use is a small rectangular area planted with trees at the southern end of the park, directly east of the residential dwelling at 7024 Tilden Lane. Activities in the impacted area would consist of tree removal; grading; construction and maintenance of the stormwater management facility; and access for construction vehicles and materials. The stormwater management facility is required at this location owing to the limited available space for the treatment of stormwater on this portion of I-270. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Locust Hill Neighborhood Park if M-NCPPC, Montgomery County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

The narrowest typical section has been applied where improvements to I-270 are proposed along Old Farm Neighborhood Conservation Area. This entails constructing a closed section with a retaining wall along the edge of pavement on I-270. No linear surface stormwater management facilities would be constructed along I-270. Stormwater quantity treatment would be provided in underground vaults beneath the shoulder. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Old Farm Neighborhood Conservation Area have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

2.2.5 Cabin John Stream Valley Park, Unit 6 (M-NCPPC)

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: M-NCPPC Montgomery County

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Cabin John Stream Valley Park, Unit 6 (Figure 2-33:) is one of six units that comprise M-NCPPC Montgomery County's Cabin John Stream Valley Park, a publicly-owned park and recreation area. Cabin John Stream Valley Park, Unit 6 is the northernmost portion of the stream valley park and is situated east of I-270 bounded by Old Stage Road to the south and the I-270 offramp to Montrose Road to the north. The entirety of Cabin John Stream Valley Park encompasses 118 acres; of which Unit 6 comprises 19.8

acres. Cabin John Stream Valley Park features portions of the natural surface Cabin John Trail that runs north-south and connects the stream valley park's Potomac area to Cabin John Parkway as well as an undeveloped wooded area that provides a protective buffer along Cabin John Creek. The park is under the jurisdiction of M-NCPPC Montgomery County and Unit 6 was acquired in 1967.

B. Potential Section 4(f) Use

The Build Alternatives would result in a use of 0.4 acre of Cabin John Stream Valley Park, Unit 6, except for 0.3 acre under Alternative 13B, to accommodate realigning the ramp from I-270 north to Montrose Road; augmenting the existing culvert that conveys Cabin John Creek beneath I-270; and providing access for construction vehicles and materials (**Figure 2-33**). The area of Section 4(f) use is a semi-circular area concentrated at the western edge of the park around the existing culvert conveying Cabin John Creek beneath I-270. There would be no impact to Cabin John Trail. Activities in the area of Section 4(f) use would consist of tree removal; grading; a work area for the improvements to the existing culvert; and access for construction vehicles and materials. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. This Section 4(f) use would result in the permanent incorporation of portions of Unit 6 of Cabin John Stream Valley Park into the transportation facility. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Cabin John Stream Valley Park, Unit 6 if M-NCPPC, Montgomery County concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

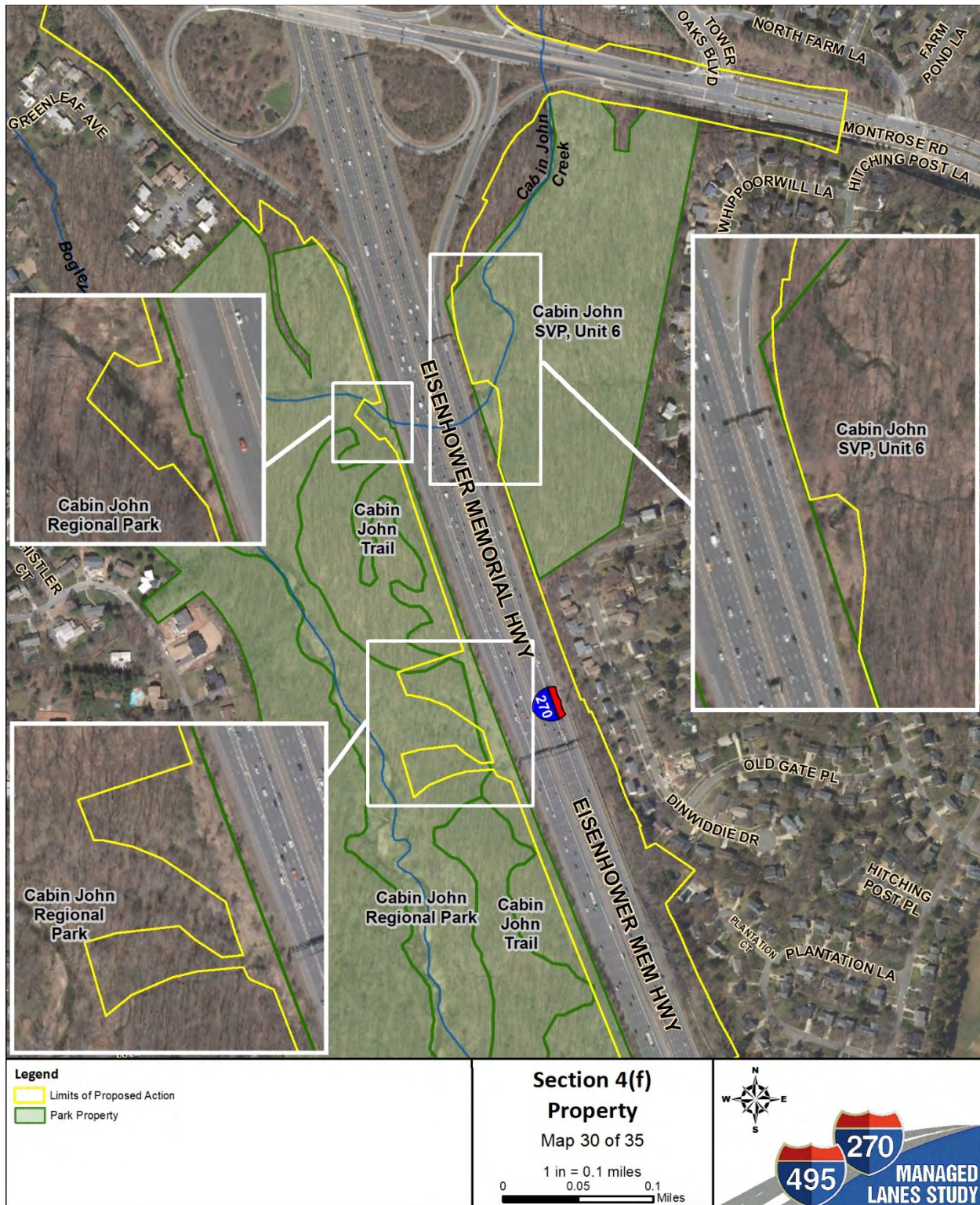
Consistent with the minimization efforts described in Section 4, MDOT SHA has been able to reduce impacts to Cabin John Stream Valley Park, Unit 6 by eliminating linear stormwater management facilities from within the boundary of the property. A retaining wall would be constructed at the edge of pavement along the public park. A 10-foot offset from the rear of the retaining wall is provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Cabin John Stream Valley Park, Unit 6 have changed from 0.5 acre (0.6 acre under Alternative 13B) on June 5, 2019 to the 0.4 acre (0.3 acre under Alternative 13B) in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with M-NCPPC staff.

Figure 2-32: Section 4(f) Property (Map 29 of 35)



Figure 2-33: Section 4(f) Property (Map 30 of 35)



2.2.6 Cabin John Stream Valley Park (Rockville)

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: City of Rockville Department of Recreation and Parks

Type of Section 4(f) Approval: Individual Evaluation

A. Description of Section 4(f) Property

Cabin John Stream Valley Park is a publicly-owned park and recreation area east of Tower Oaks Boulevard and south of Preserve Parkway in Rockville. The 4.5-acre park provides a wooded buffer along a portion of the environmentally sensitive Cabin John Creek. The park is under jurisdiction of City of Rockville Department of Recreation and Parks and was acquired in 2001 and 2002. There are currently no recreational features within the park.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 2.1 acres of Cabin John Stream Valley Park to construct, operate, and maintain a stormwater management facility; and provide access for construction vehicles and materials (**Figure 2-34**). The area of Section 4(f) use comprises a rectangular area planted with trees at the southern portion of the park, southeast of the intersection of Tower Oaks Boulevard and Preserve Parkway. Activities in the impacted area would consist of tree removal; grading; construction and maintenance of the stormwater management facility; and access for construction vehicles and materials. The stormwater management facility is required at this location owing to the limited available space for the treatment of stormwater on this portion of I-270. At a coordination meeting on February 10, 2020, officials with the City of Rockville identified the proposed stormwater management facility as an existing dry pond.

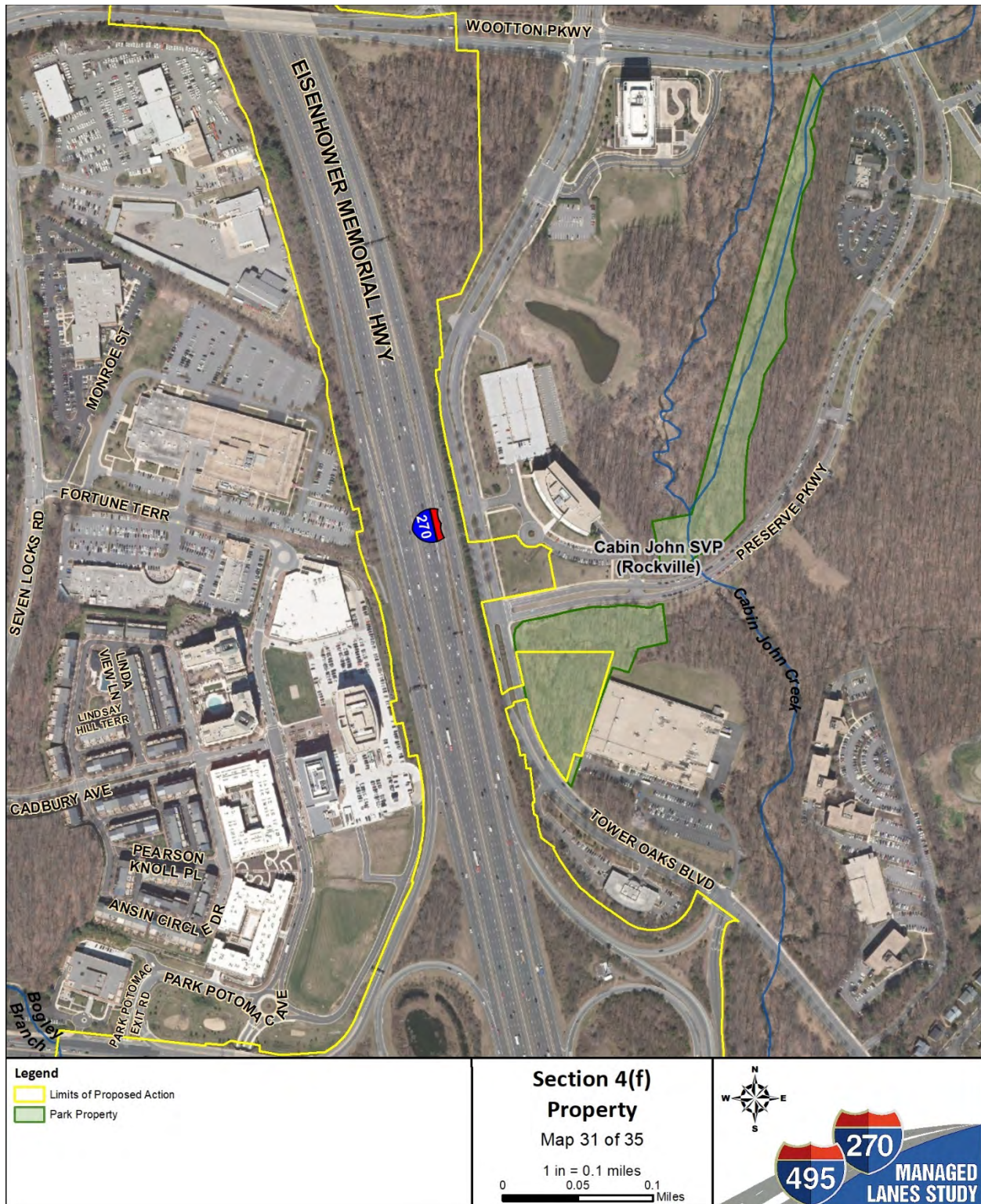
Portions of Cabin John Stream Valley Park would be permanently incorporated into the transportation facility. The impacts to Cabin John Stream Valley Park require avoidance alternatives evaluation (**Section 3.1**) and least overall harm analysis (**Section 5.1.16**).

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Cabin John Stream Valley Park by eliminating linear stormwater management facilities along the edge of northbound I-270. Linear features through this area would have caused the realignment of Tower Oaks Boulevard resulting in additional impacts to the park. The narrowest typical section has been applied where improvements to I-270 are proposed. This entails constructing a closed section with a retaining wall along the edge of pavement on I-270.

As a result of these minimization efforts and on-going coordination with the officials with jurisdiction, the impacts to Cabin John Stream Valley Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with City of Rockville staff.

Figure 2-34: Section 4(f) Property (Map 31 of 35)



2.2.7 Millennium Garden Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: City of Rockville Department of Recreation and Parks

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Millennium Garden Park is a publicly-owned park and recreation area at the southwest corner of the intersection of MD 189 and Potomac Valley Road in Rockville. Features of the 1.25 acre park consist of paved paths, an unpaved trail, and benches. The park is under the jurisdiction of the City of Rockville Department of Recreation and Parks.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.2 acre of Millennium Garden Park to accommodate the realignment of the interchange of MD 189 and I-270 (**Figure 2-35**). The area of Section 4(f) use is a narrow area that extends approximately 350 feet along the northwestern boundary of the park at MD 189. The paved trail on the park should remain accessible for the duration of construction activities at this location. The existing noise barrier along the ramp from I-270 north to MD 189 may need to be relocated. This could result in construction activities on the park property. Activities within the area of Section 4(f) use would consist of grading; erosion and sediment control; equipment maneuvering; and construction easements. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Millennium Garden Park if City of Rockville Department of Recreation and Parks concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

Consistent with the minimization described in Section 4, MDOT SHA was able to reduce impacts to Millennium Garden Park by eliminating linear stormwater management facilities along the edge of the offramp from I-270 north

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Millennium Garden Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with City of Rockville staff.

2.2.8 Bullards Park and Rose Hill Stream Valley Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: City of Rockville Department of Recreation and Parks

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Bullards Park and Rose Hill Stream Valley Park is a publicly-owned park and recreation area abutting the northbound lanes of I-270 in Rockville. The 4.7-acre park is divided into two sections. The stream valley park comprises the central and southern portions of the park while the northern portion contains basketball courts, hard and natural surface trails, a playground, and picnic area. The park is under jurisdiction of the City of Rockville Department of Recreation and Parks and was acquired in 1991.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.3 acre of Bullards Park and Rose Hill Stream Valley Park to accommodate improvements to the existing culvert conveying a tributary to Watts Branch beneath I-270; and activities related to the construction of a stormwater management facility on a parcel south of the park. The area of Section 4(f) use is concentrated at two locations: a semicircular area at the existing culvert adjacent to I-270 and a narrow linear area at the southwestern corner of the park (**Figure 2-35**). Activities within the area of Section 4(f) use would consist of grading; tree removal; improvements to the existing culvert; and access for construction vehicles and materials. The paved paths and active recreational facilities within the park would not be impacted. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA would issue a finding of *de minimis* impact if City of Rockville Department of Recreation and Parks concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments

C. Applied Minimization

Consistent with the minimization efforts described in Section 4, MDOT SHA has been able to reduce impacts to Bullards Park and Rose Hill Stream Valley Park by eliminating linear stormwater management facilities from along the edge of I-270. A retaining wall would be constructed at the edge of pavement with a 10-foot offset from the rear of the retaining wall provided for various constructability activities that may include erosion and sediment control, equipment maneuvering, and construction easements.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Bullards Park and Rose Hill Stream Valley Park have changed from 0.6 acre on June 5, 2019 to the 0.3 acre in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with City of Rockville staff.

2.2.9 Rockmead Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: City of Rockville Department of Recreation and Parks

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Rockmead Park is a publicly-owned park and recreational facility at 1800 Greenplace Terrace in Rockville. This 25.3-acre park abuts the southbound lanes of I-270. Park amenities include open space, benches, natural and hard surface paths, and playground equipment. The sidewalks along Watts Branch Parkway are part of the transportation facility and not within the boundaries of the park. Further, the City of Rockville identifies the park as an urban wildlife sanctuary and forest preserve. The park is under jurisdiction of City of Rockville Department of Recreation and Parks and was initially acquired in 1967 with additions in 1968, 1970, and 1976.

B. Potential Section 4(f) Use

The Build Alternatives would result in a use of 0.2 acre of Rockmead Park, except for 0.3 acre under Alternative 10, to accommodate improvements to two existing culverts that convey waterways beneath I-270 and providing access for construction vehicles and materials (**Figure 2-35**). The area of Section 4(f) use is concentrated at two small rectangular areas at the existing culvert locations. Activities within the area of Section 4(f) use would consist of tree removal; grading; a work area for the improvements to the existing culverts; and access for construction vehicles and materials. Any impacts to the noise barrier along the edge of I-270 southbound would not result in a Section 4(f) use of Rockmead Park. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Rockmead Park if City of Rockville Department of Recreation and Parks concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments

C. Applied Minimization

Consistent with the minimization efforts described in Section 4, MDOT SHA has been able to reduce impacts to Rockmead Park by eliminating surface stormwater management facilities from along I-270 where it extends along the boundary of the park.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Rockmead Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with City of Rockville staff.

Figure 2-35 Section 4(f) Property (Map 32 of 35)

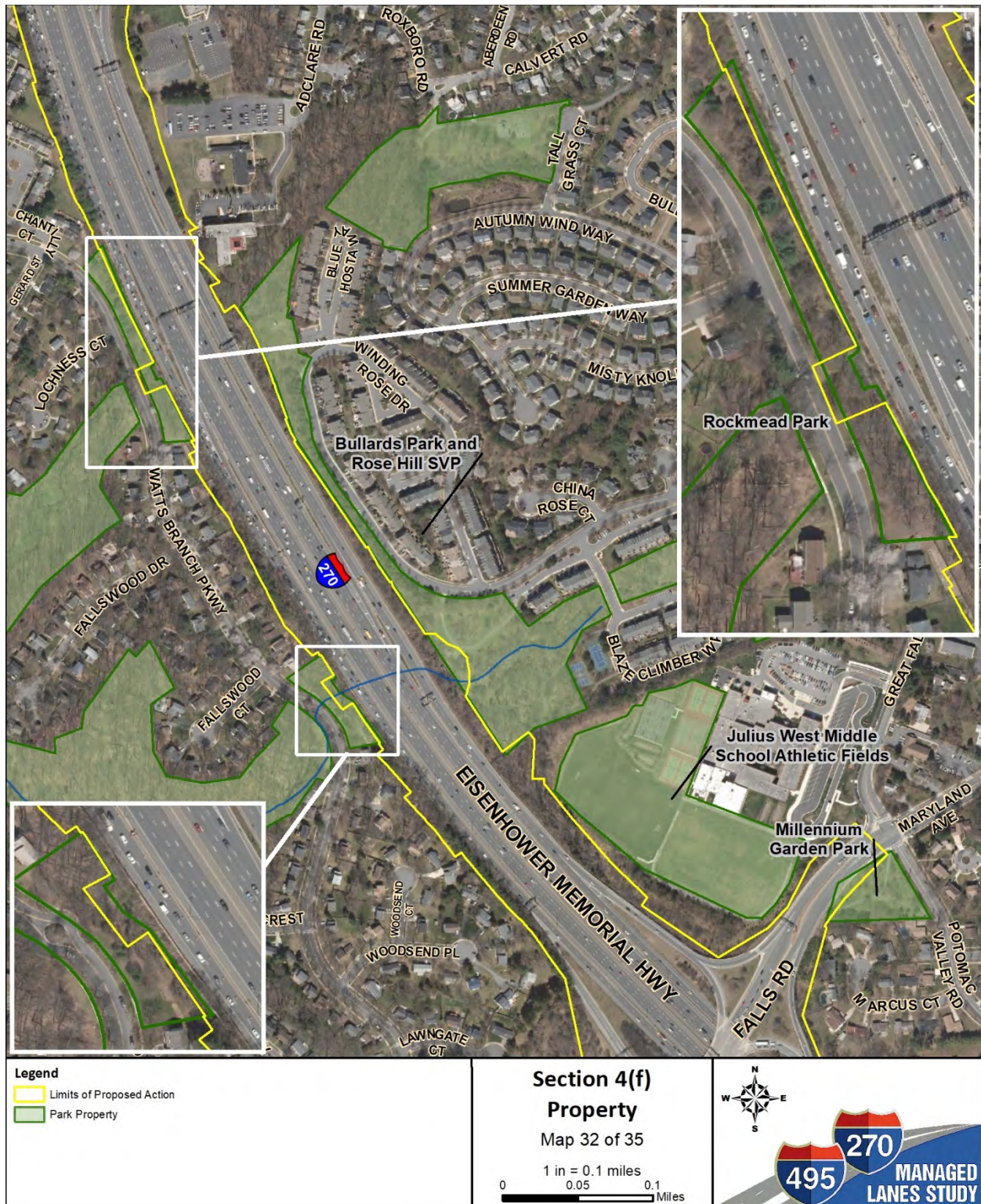


Figure 2-36: Section 4(f) Property (Map 33 of 35)



2.2.10 Woottons Mill Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: City of Rockville Department of Recreation and Parks

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Woottons Mill Park is a publicly-owned park and recreation area on Hurley Road in Rockville. Woottons Mill Park extends along a portion of Watts Branch from the southwest quadrant of the I-270 and MD 28 interchange to the intersection of Scott Drive and Wootton Parkway. Amenities within this 106.5-acre park include basketball and tennis courts, benches and picnic tables, natural surface and hard surface paths, playground equipment, and garden plots. A portion of the park is designated as an urban wildlife sanctuary and forest preserve. The park is under jurisdiction of City of Rockville Department of Recreation and Parks and was initially acquired in 1966 with later additions in 1967, 1970, 1972, 1990 and 1996.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.2 acre of Woottons Mill Park to accommodate improvements to two existing storm drain outfalls beneath the ramp from eastbound MD 28 to southbound I-270. The area of Section 4(f) use is concentrated at two small rectangular areas at the existing outfall locations (**Figure 2-36**). Activities within the area of Section 4(f) use would consist of tree removal; grading; a work area for the improvements to the existing culverts; and access for construction vehicles and materials. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Section 4(f) use would constitute a minor use. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

FHWA intends to make a *de minimis* impact determination for Woottons Mill Park if the City of Rockville Department of Recreation and Parks concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments

C. Applied Minimization

Consistent with the minimization efforts described in Section 4, MDOT SHA has been able to reduce impacts to Woottons Mill Park by eliminating surface stormwater management facilities from along the ramp from MD 28 to southbound I-270.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Woottons Mill Park have increased from 0.1 acre on June 5, 2019 to 0.2 acre in this Draft Section 4(f) Evaluation. The increase in the Section 4(f) use is owing to an increased work area related to augmenting two existing storm drains beneath the onramp from eastbound MD 28 to southbound I-270. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with City of Rockville staff.

2.2.11 Woodley Gardens

Type of Section 4(f) Property: Historic Site

Official with Jurisdiction: MHT

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Woodley Gardens is a planned residential development containing Colonial Revival-style, single- and multi-family dwellings constructed between 1960 and 1970 in Rockville, Maryland. The approximately 200-acre development is east of I-270 and south of the Gude Drive overpass. Woodley Gardens is an important, early example of mixed housing types in a planned residential development and is therefore eligible for the NRHP under criterion A as a historic district. Woodley Gardens is also significant as a historic district under Criterion C as an excellent, intact example of a planned residential development with a period of significance ranging from 1960 to 1970. Overall, 517 dwellings are within the planned subdivision. Significant elements of the historic property include the dwellings, shopping center, swim club, Woodley Gardens Park, and the Rockville Senior Center and Park. The latter is inventoried in **Section 2.2.12** as a public park that would potentially experience a Section 4(f) use.

B. Potential Section 4(f) Use

The Build Alternatives would result in a use 0.7 acre of Woodley Gardens under Alternatives 8, 9, 9M, and 13B, 1.1 acres under Alternative 10, and 1.0 acre under Alternative 13C to accommodate the construction, operation, and future maintenance of a stormwater management facility and provide access for construction vehicles and materials (**Figure 2-36** and **Figure 2-37**). The area of Section 4(f) use is concentrated at the northwestern corner of the historic district, which is the southeastern quadrant of where the bridge carrying Gude Drive passes over I-270. Activities within the area of Section 4(f) use consist of grading; tree removal; construction of a stormwater management facility; and access for construction vehicles and materials. The stormwater management facility is required at this location owing to the limited available space for the treatment of stormwater on this portion of I-270. A second area of impact within the historic district is at the western edge of the Woodley Gardens Shopping Center at 1101 Nelson Street. No elements greater than fifty years of age or contribute to the significance of the historic district. The impact would be related to access for construction vehicles and materials. Two properties that contribute to the significance of Woodley Gardens would experience a Section 4(f) use: Rockville Senior Center Park and Woodley Gardens Park. A walking path on the park property would be relocated as part of the Proposed Action. At a coordination meeting with the City of Rockville on February 14, city officials identified a potential conflict with a gas line at this location. MDOT SHA reviewed utility plans and determined the conflict would not affect the potential placement of the stormwater management facility. While the walking path is a recreational element on the park property, it was constructed after the period of significance and does not contribute to the historic district.

On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on Woodley Gardens, including Rockville Senior Center. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. The impact to Woodley Gardens under the Build Alternatives would constitute a minor use. FHWA intends to make a finding of *de minimis* impact to Woodley Gardens.

C. Applied Minimization

Consistent with the minimization efforts described in Section 4 MDOT SHA was able to reduce impacts to Woodley Gardens by eliminating above-ground linear stormwater management facilities along the I-270 where they would result in impacts to the historic district.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Woodley Gardens have changed from 0.7 acre (0.9 acre under Alternative 10 and 0.8 acre under Alternative 13C) on June 5, 2019 to 0.7 acre (1.1 acres under Alternative 10 and 1.0 acre under Alternative 13C) in this Draft Section 4(f) Evaluation. The reason for the increase in the use of Section 4(f) property is an adjustment to the boundary of the historic district to correctly include Woodley Gardens Shopping Center. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with MHT.

2.2.12 Rockville Senior Center and Park

Type of Section 4(f) Property: Public Park and Historic Site

Officials with Jurisdiction: City of Rockville Department of Recreation and Parks, MHT

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Rockville Senior Center and Park (**Figure 2-37**) is a publicly-owned park and recreational facility at 1150 Carnation Drive in Rockville. This 12.1-acre park is immediately south of West Gude Drive and abuts the northbound lanes of I-270. Park amenities consist of benches, picnic tables, walking paths, a nature trail, community garden, outdoor fitness equipment, art, bocce ball court, and playground equipment. The senior center building features additional recreational facilities including fitness rooms, a woodworking studio and meeting space. Originally constructed in 1972 as the Woodley Gardens Elementary School, in 1994 Montgomery County conveyed the property to the City of Rockville for use as a recreational facility. As a recreational facility, the park is under jurisdiction of City of Rockville Department of Recreation and Parks.

The Rockville Senior Center and Park additionally contributes to the significance of Woodley Gardens, eligible for the NRHP under Criteria A and C as an early example of a developed residential-focused, mixed use community in Rockville. Significant elements of the historic property include the dwellings, shopping center, swim club, Woodley Gardens Park, and the Rockville Senior Center.

B. Potential Section 4(f) Use

The Proposed Action would result in a use of 0.7 acre of Rockville Senior Center and Park, except for 0.9 acre under Alternative 10 and 0.8 acre under Alternative 13C, to accommodate the construction, operation, and future maintenance of a stormwater management facility and provide access for construction vehicles and materials. The area of Section 4(f) use is concentrated at the northwestern corner of Rockville Senior Center and Park, which is the southeastern quadrant of where the bridge carrying Gude Drive passes over I-270. Activities within the area of Section 4(f) use consist of grading; tree removal; construction of a stormwater management facility; and access for construction vehicles and materials. The stormwater management facility is required at this location owing to the limited available

space for the treatment of stormwater on this portion of I-270. Rockville Senior Center Park is both a park and the only contributing property within the historic district that would experience a Section 4(f) use. A walking path on the property would be relocated. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on Woodley Gardens, including Rockville Senior Center. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. FHWA intends to make a finding of *de minimis* impact to Rockville Senior Center and Park if the City of Rockville Department of Recreation and Parks concurs that the Proposed Action, after measures to mitigate and minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

Consistent with the minimization efforts described in Section 4 MDOT SHA was able to reduce impacts to Rockville Senior Center and Park by eliminating above-ground linear stormwater management facilities along the I-270 where they would result in additional impacts to the park and historic district.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Rockville Senior Center and Park have increased slightly under Alternative 10 from 0.8 acre on June 5, 2019 to 0.9 acre in this Draft 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with City of Rockville staff.

2.2.13 Ward Building

Type of Section 4(f) Property: Historic Site

Official with Jurisdiction: MHT

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

The Ward Building (**Figure 2-37**) is a Brutalist-style suburban corporate office constructed in 1978 at 1300 Piccard Drive, Rockville, Maryland. The property is 4.76 acres laying just east of I-270 and north of the Gude Drive overpass. The building is surrounded by small lawns and planting beds, featuring asphalt parking lots on all four sides. Two asphalt driveways connect the parking lot to Piccard Drive, with concrete sidewalks linking the building's entrances to the parking lots. Small landscaped concrete plazas separate exterior stair features at the northeast and southwest entrances, part of original construction. The Ward Building is eligible under Criterion C for its high artistic value as an example of Brutalist-style architecture. Its original exterior stairway/plaza features and signing contribute to its historic significance.

B. Potential Section 4(f) Use

The Proposed Action would result in a use of 0.1 acre of the Ward Building, except for less than 0.1 acre under Alternative 13B, to accommodate widening of I-270 and provide access for construction vehicles and materials. The area of Section 4(f) use is concentrated at two rectangular areas where the irregularly shaped tax parcel extends towards the right-of-way at the southern and western corners of the property. These areas feature a manicured grass lawn and ornamental tree plantings. Activities within the area of

Section 4(f) use would include tree removal, grading, and access for construction vehicles and materials. No elements greater than 50 years of age or that contribute to the significance of the Ward Building are anticipated to experience a Section 4(f) use.

On March 12, 2020 MHT concurred that the Managed Lanes Study would have no adverse effect on the Ward Building. MHT additionally provided written acknowledgement of FHWA's intent to make a *de minimis* impact finding. As such, the impact to the Ward Building under the Proposed Action would constitute a minor use. FHWA intends to make a finding of *de minimis* impact to Ward Building.

C. Applied Minimization

Consistent with the minimization efforts described in Section 4 MDOT SHA was able to reduce impacts to Ward Building by eliminating above-ground linear stormwater management facilities along the I-270 where they would result in additional impacts to the park and historic district.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Ward Building have been reduced from 0.2 acre on June 5, 2019 to the 0.1 acre (< 0.1 acre under Alternative 13B) in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with MHT staff.

2.2.14 Malcolm King Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: City of Gaithersburg Department of Parks, Recreation and Culture

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Malcolm King Park (**Figure 2-38**) is a publicly-owned park and recreation area at 1200 West Side Drive in Gaithersburg. The 72.9-acre park abuts the interchange of southbound I-270 and westbound I-370. Park amenities include a basketball court, picnic area, playground, tot lot, two miles of hiking trails, and two tennis courts. The majority of the park's acreage is wooded and serves as an environmental buffer for Muddy Branch. The park is under jurisdiction of the City of Gaithersburg Department of Parks, Recreation and Culture and was initially acquired in 1966 with additions in 1967, 1969, and 1999.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of less than 0.1 acre of Malcolm King Park to accommodate a constructability area related to widening I-270; augmenting the existing culvert conveying Muddy Branch beneath I-270; providing access for construction vehicles and materials. The Section 4(f) use would take place within a rectangular area at the northeast corner of the park planted with trees. Activities within the area of Section 4(f) use would consist of grading; tree removal; a work area to improve the culvert beneath I-270; and access for construction vehicles and materials. The paved path that connects the residential neighborhood with Malcom King Park may be relocated, but access to the path and park would be maintained for the duration of construction. No recreational facilities would experience an impact from the proposed use of Section 4(f) property. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

The impact to the property under the Proposed Action would constitute a minor use. FHWA would issue a finding of *de minimis* impact if the City of Gaithersburg Department of Parks, Recreation and Culture, concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

Consistent with the minimization efforts described in Section 4 MDOT SHA was able to reduce impacts to Malcolm King Park by eliminating above-ground linear stormwater management facilities along the I-270 where they would result in additional impacts to the park. Consultation with the City of Gaithersburg has been initiated.

As a result of these minimization efforts and on-going coordination with the official with jurisdiction, impacts to Malcolm King Park have been reduced from 0.1 acre on June 5, 2019 to less than 0.1 acre in this Draft Section 4(f) Evaluation. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with City of Gaithersburg staff.

2.2.15 Morris Park

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: City of Gaithersburg Department of Parks, Recreation and Culture

Type of Section 4(f) Approval: *De Minimis* Impact

A. Description of Section 4(f) Property

Morris Park (**Figure 2-38**) is a publicly-owned park and recreation area on Summit Hall Road in Gaithersburg. The 37.2-acre park abuts the interchange of northbound I-270 and westbound I-370. Park amenities include two baseball fields, three tennis courts, a basketball court, soccer field, picnic pavilion, picnic area with grill, playground, and tot lot. Wooded areas of the park provide an environmental buffer along Muddy Branch creek. The park is under jurisdiction of the City of Gaithersburg Department of Parks, Recreation and Culture and was initially acquired in 1967 with additional acquisitions in 1968 and 1971.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.1 acre of Morris Park to accommodate a constructability area related to widening I-270; augmenting the existing culvert conveying Muddy Branch beneath I-270; providing access for construction vehicles and materials. The Section 4(f) use would take place within a rectangular area at the northwest corner of the park sparsely planted with trees. Activities within the area of Section 4(f) use would consist of grading; tree removal; a work area to improve the culvert beneath I-270; and access for construction vehicles and materials. No recreational features on the park would experience an impact. The Proposed Action would not adversely affect the activities, features, or attributes that qualify this park for protection under Section 4(f).

The impact to the property under the Proposed Action would constitute a minor use. FHWA would issue a finding of *de minimis* impact if the City of Gaithersburg Department of Parks, Recreation and Culture, concurs that the Proposed Action, after measures to minimize harm are employed, would not adversely

affect the activities, features, or attributes that make the property eligible for Section 4(f) protection; and in consideration of public comments.

C. Applied Minimization

Consistent with the minimization efforts described in Section 4 MDOT SHA was able to reduce impacts to Morris Park by eliminating above-ground linear stormwater management facilities along the I-270 where they would result in additional impacts to the park. Consultation with the City of Gaithersburg has been initiated.

As a result of these minimization efforts and on-going coordination with the OWJ, the impacts to Morris Park have remained unchanged since June 5, 2019. The effort to avoid, minimize and mitigate impacts will continue through ongoing and future coordination with City of Gaithersburg staff.

Figure 2-37: Section 4(f) Property (Map 34 of 35)

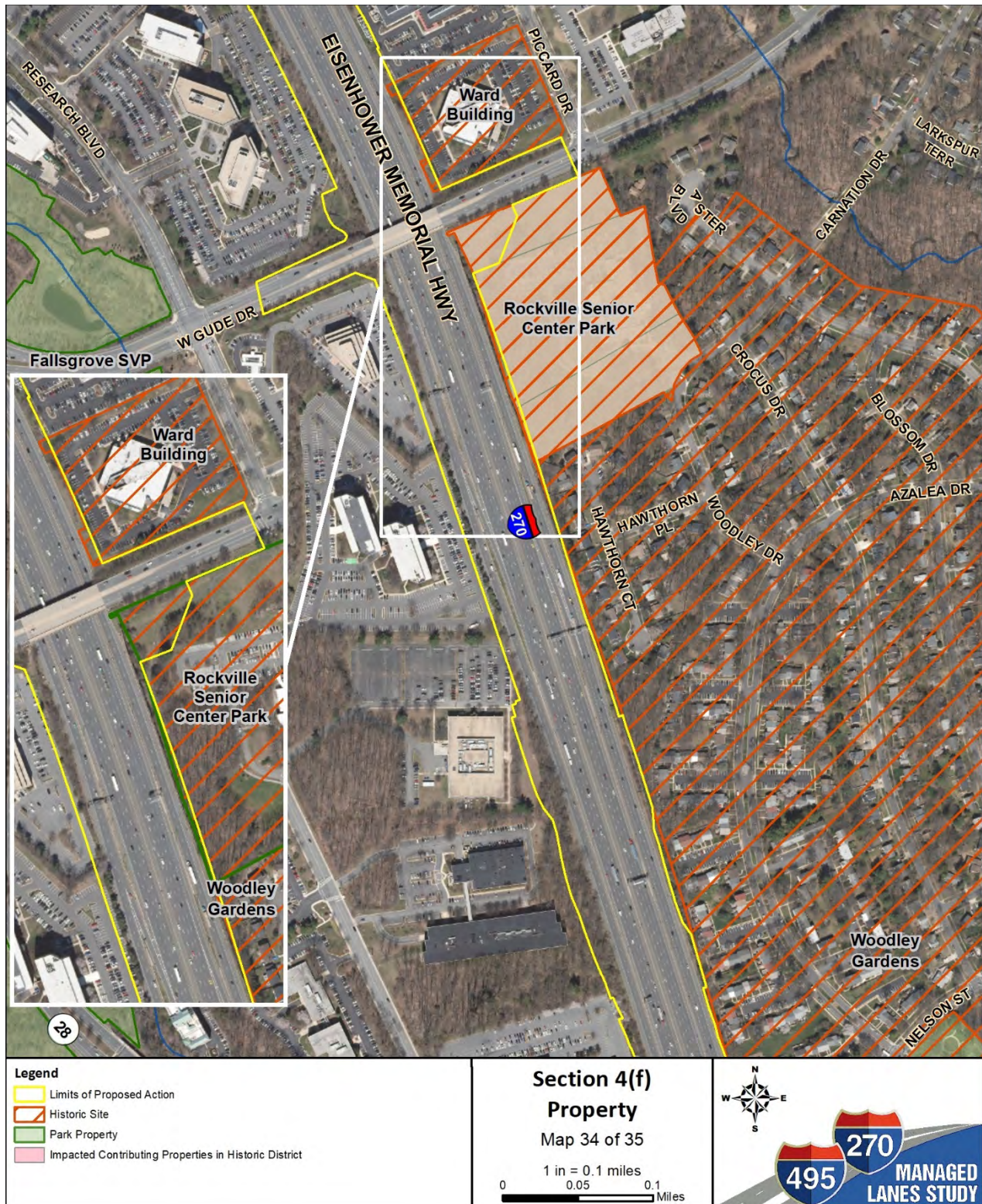


Figure 2-38: Section 4(f) Property (Map 35 of 35)



2.3 Impacted Properties that Qualify as Exceptions to Section 4(f)

Based on the review of Section 4(f) properties, the Proposed Action would result in impacts to ten properties that would qualify under one or more of the exceptions to Section 4(f) listed at 23 CFR 774.13. Properties that would experience an impact that qualifies as an exception to Section 4(f) are presented in **Table 2-6**.

Table 2-6: Properties with Impacts Subject to an Exception to Section 4(f)

Section 4(f) Property	Type of Section 4(f) Exception
Bethesda Trolley Trail	23 CFR 774.13(f)(3) and (4)
Baltimore & Potomac Railroad, Washington City Branch	23 CFR 774.13(a)(3)
Spellman Overpass	23 CFR 774.13(f)(3) and (4)
Baltimore & Ohio Railroad, Washington Branch	23 CFR 774.13(a)(3)
Archeological Site 18MO749	23 CFR 774.13(b)
Archeological Site 18MO751	23 CFR 774.13(b)
Archeological Site 44FX0374	23 CFR 774.13(b)
Archeological Site 44FX0379	23 CFR 774.13(b)
Archeological Site 44FX0381	23 CFR 774.13(b)
Archeological Site 44FX0389	23 CFR 774.13(b)

2.3.1 Bethesda Trolley Trail

Type of Section 4(f) Property: Public Park

Officials with Jurisdiction: Montgomery County Department of Transportation

Type of Section 4(f) Approval: Exception under 774.13(f)(3)

A. Description of Section 4(f) Property

The Bethesda Trolley Trail, also known as the North Bethesda Trail, is a publicly-owned, recreation facility that follows the alignment of an abandoned trolley line between Rockville and Bethesda. The shared use path is a paved, off-road, recreational and commuter trail that passes over both I-495 and I-270 near Fleming Avenue. The overpasses were completed in 2004 and 2005.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 0.2 acre of Bethesda Trolley Trail (**Figure 2-8**). The Section 4(f) use would accommodate widening of I-495 and I-270 that would impact the abutments of the bridges carrying the trail over the highways. Because of this use, MDOT SHA would relocate the

bridges carrying the Bethesda Trolley Trail over I-495 and I-270, temporarily closing the trail at these two locations. This action qualifies as an exception to the requirements for Section 4(f) approval under 23 CFR § 774.13 (f)(3) and (4), “Certain trails, paths, bikeways, and sidewalks...that occupy a transportation facility right-of-way without limitation to any specific location within that right-of-way, so long as the continuity of the trail, path, bikeway, or sidewalk is maintained; and...that are part of the local transportation system and which function primarily for transportation.”

2.3.2 Baltimore & Ohio Railroad, Washington Branch

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: ACHP, MHT

Type of Section 4(f) Approval: Exception under 774.13(a)(3)

A. Description of Section 4(f) Property

The Baltimore & Ohio Railroad, Washington Branch was determined eligible for the NRHP under Criteria A and C on February 22, 2019. This Section 4(f) historic site is a linear rail line that extends 13.8 miles from the border of Prince George’s and Anne Arundel Counties into Washington, DC (**Figure 2-20**). The boundary encompasses 146.4 acres. The railroad is significant under Criterion A for its association with improvements in nineteenth century communications technology. In 1844, the first intercity telegraph line connected Baltimore and Washington, DC using the railroad right-of-way. It is also significant under Criterion C for its extant engineering structures and design as the work of a master railroad engineer Benjamin Latrobe II.

B. Potential Section 4(f) Use

The Proposed Action would result in an impact of 0.6 acre to accommodate widening the bridge carrying I-495 across the railroad. Section 106 consultation has resulted in a finding of no adverse effect to the historic site. Because the Baltimore and Potomac Railroad, Washington City Branch is an extant transportation facility that would not be adversely affected by the Proposed Action, in accordance with 774.13(a)(3) Section 4(f) approval is not required. Therefore, there is no Section 4(f) use of the Baltimore & Ohio Railroad, Washington Branch, which meets the criteria of a Section 4(f) exception described in **Section 1.2.6**.

2.3.3 Spellman Overpass

Type of Section 4(f) Property: Public Park

Official with Jurisdiction: City of Greenbelt Dept. of Recreation and Parks

Type of Section 4(f) Approval: Exception under 774.13(f)(3) and (4)

A. Description of Section 4(f) Property

Spellman Overpass is a publicly-owned recreation facility that carries a paved path over the Baltimore Washington Parkway. The shared use path is an off-road, recreational trail that connects the residential area of Greenbelt with Eleanor Roosevelt High School. The overpass and trail were constructed during the 1980s. The trail is under the jurisdiction of the City of Greenbelt Department of Recreation and Parks.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of < 0.1 acre of Spellman Overpass Trail (**Figure 2-22**). The impacts at this location would accommodate widening of Baltimore Washington Parkway; construction of a noise wall; construction, operation and maintenance of a linear stormwater management facility; and providing access for construction vehicles and materials. These impacts would occur at grade in a location where the trail is above these activities. The proposed stormwater management facility would not affect the functioning of the trail. The area of impacts is along the northbound lanes of the Baltimore Washington Parkway and the planted area immediately to the east. Bridge replacement is not anticipated at this time and access to Spellman Overpass would be maintained through the duration of construction at this location. This action would qualify as an exception to the requirements for Section 4(f) approval under 23 CFR § 774.13 (f)(3) and (4), "Certain trails, paths, bikeways, and sidewalks...that occupy a transportation facility right-of-way without limitation to any specific location within that right-of-way, so long as the continuity of the trail, path, bikeway, or sidewalk is maintained; and...that are part of the local transportation system and which function primarily for transportation."

2.3.4 Baltimore & Potomac Railroad, Washington City Branch

Type of Section 4(f) Property: Historic Site

Officials with Jurisdiction: MHT

Type of Section 4(f) Approval: Exception under 774.13(a)(3)

A. Description of Section 4(f) Property

The Baltimore & Potomac Railroad, Washington City Branch was determined eligible for the NRHP under Criteria A and C on February 22, 2019. This Section 4(f) historic site is a linear rail line that extends 13 miles from the border of Prince George's and Anne Arundel Counties to the border of Prince George's County and Washington, DC (**Figure 2-23**). The boundary encompasses 284.4 acres. The railroad is significant under Criterion A for breaking the monopoly on rail travel between the northeastern states and Washington, DC that had been held between 1835 and 1872. It is further significant under Criterion A for the experimental use of electrification and high speed rail service. The railroad is also significant under Criterion C for retaining integrity from its period of significance, including elements from pre-electrification and post-electrification periods. It is an excellent example of railroad engineering. Elements that contribute to the significance of the railroad consist of the catenary poles, signal bridges, and Bowie and Landover substations.

B. Potential Section 4(f) Use

The Proposed Action would result in a Section 4(f) use of 1.0 acre to accommodate widening the bridge carrying I-495 across the railroad (**Figure 2-23**). Section 106 consultation has resulted in a finding of no adverse effect. Because the Baltimore & Potomac Railroad, Washington City Branch is a transportation facility that would not be adversely affected by the Proposed Action, in accordance with 774.13(a)(3) Section 4(f) approval is not required. Therefore, there is no Section 4(f) use of the Baltimore & Potomac Railroad, Washington City Branch, which meets the criteria of a Section 4(f) exception described in **Section 1.2.6**.

2.3.5 Site 18MO749

Site 18MO749 is an Early Woodland site located within the Chesapeake and Ohio Canal National Historical Park approximately 200 ft (60 m) north of the river and approximately 350 ft (107m) west of I-495. It encompasses an area of 0.77 acres and contained an assemblage of precontact artifacts including quartz flakes, Early Woodland pottery and tools. Given the artifact density, buried context, and the frequency, type, and context of the material recovered, Site 18MO749 has the ability to answer significant questions about prehistoric settlement patterns in the region. Site 18MO749 retains a high degree of stratigraphic integrity and has the potential to provide meaningful new data on precontact lifeways in the area. Site 18MO749 is recommended eligible for the NHRP under Criterion D and does not warrant preservation in places as it is important due to what can be learned through data recovery

An archaeological resource is not protected by Section 4(f) if FHWA determines, after consultation with MHT and the ACHP (if participating), that the archaeological resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place (23 CFR 774.13(b)(1)). On March 12, 2020 MHT concurred with MDOT SHA's determination that Site 18MO749 is eligible for the NRHP under Criterion D. Therefore, Site 18MO749 is not addressed further in this evaluation.

2.3.6 Site 18MO751

Site 18MO751 is a nineteenth- and twentieth-century domestic scatter associated with the Lock 12 Lockhouse within the Chesapeake and Ohio Canal National Historical Park. The site is located east and adjacent to the I-495 embankment and south of the Chesapeake and Ohio Canal prism. A dry-laid stone foundation was recorded within the site, measuring approximately 30 ft (9 m) by 20 ft (6 m). The artifact assemblage ranges in date from the second quarter of the nineteenth century into the twentieth century, likely beginning ca. 1820. Based on the nature of the material recovered, its proximity to what would have been the primary residence for a canal lockkeeper, Site 18MO751 is associated with the daily occupation of the canal lockhouse. Site 18MO751 has the potential to provide significant information about the occupation and use of Lock 12 and its associated lockhouse. The investigations indicate that the site contains intact archaeological contexts and features related to the operation of the canal and the domestic lives of lockkeepers. On March 12, 2020 MHT concurred that Site 18MO751 is eligible for the NHRP under Criterion D. Therefore, Site 18MO751 is not addressed further in this evaluation. If impacts cannot be avoided, further archaeological investigations will be included in the treatment plan that is being developed as part of the Section 106 Programmatic Agreement.

2.3.7 Sites 44FX0374, 44FX0379, 44FX0381, and 44FX0389

Six sites within the George Washington Memorial Parkway (44FX0373, 44FX0374, 44FX0379, 44FX0381, 44FX0389, and 44FX3160) appear to represent a related set of activities over roughly contemporaneous periods and occur within a distinct landscape setting. The investigations indicate that these sites can provide important information about precontact occupations and use of the landscape. MDOT SHA considered these sites to be part of an archaeological district, determined eligible for the NRHP as a "significant concentration, linkage, or continuity of sites, ... united historically by ... physical development" (US DOI 1991:5). However, VDHR did not concur with MDOT SHA's recommendation of the sites as an individual archaeological district. As a result, Sites 44FX0373 and 44FX3160 have been determined not individually eligible for the NRHP. Sites 44FX0374 and 44FX0379, 44FX0381, and 44FX0389 are recommended as individually eligible for the NRHP under Criterion D; and have minimal value for warrant

preservation in place and qualify as exceptions to Section 4(f) as defined in 23 CFR 774.13(b). NPS, VDHR, and MDOT SHA are continuing Section 106 consultation regarding the eligibility of the archaeology district at the time of publication. The outcome of consultation will be documented as part of Section 106 consultation as well as in the Final Section 4(f) Evaluation. If impacts cannot be avoided, further archaeological investigations will be included in the treatment plan that is being developed as part of the Section 106 Programmatic Agreement.

2.4 Summary of Section 4(f) Property with Potential *De Minimis* Impacts

Based on the review of Section 4(f) properties in **Section 2.1** and **2.2**, the Proposed Action would result in a minor Section 4(f) use of the 36 properties listed in **Table 2-7**. FHWA intends to make Section 4(f) *de minimis* impact findings for these properties. Pursuant to 23 CFR 774.3 (b), FHWA in cooperation with MDOT SHA, will notify the OWJ of this intent and request written concurrence that the Proposed Action would not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f). In a letter dated March 12, 2020, MHT acknowledged FHWA's intent to make a *de minimis* finding for the minor use of nine historic Section 4(f) resources as noted in **Table 2-7** below. MHT acknowledgment FHWA's intent to make a *de minimis* finding for Grosvenor Estate applies to Fleming Local Park, a portion of which is included within the boundary of the former. Similarly, MHT's acknowledgement of FHWA's intent to make a *de minimis* finding for Greenbelt Historic District extends to Indian Springs Park and Buddy Attick Lake Park, which contribute to the historic district.

Table 2-7: Summary of Section 4(f) Properties with Potential *De Minimis* Impact Finding

Section 4(f) Property	Officials with Jurisdiction for Section 4(f)
Cabin John Stream Valley Park, Unit 2	M-NCPPC, Montgomery County
Burning Tree	MHT
Fleming Local Park	M-NCPPC, Montgomery County and MHT
Grosvenor Estate	MHT
Locust Hill Neighborhood Park	M-NCPPC, Montgomery County
Forest Glen Historic District	MHT
Forest Glen Neighborhood Park	M-NCPPC, Montgomery County
Calvary Evangelical Lutheran Church	MHT
South Four Corners Neighborhood Park	M-NCPPC, Montgomery County
Montgomery Blair High School Athletic Fields	Montgomery County Public Schools; M-NCPPC
Blair Local Park	M-NCPPC, Montgomery County
Hollywood Park	M-NCPPC, Prince George's County
Greenbelt Historic District	MHT, NPS
Buddy Attick Lake Park	City of Greenbelt, MHT, NPS
Indian Springs Park	City of Greenbelt, NPS, MHT
McDonald Field	City of Greenbelt
Beckett Field	New Carrollton Department of Public Works
Southwest Branch Stream Valley Park	M-NCPPC, Prince George's County
Heritage Glen Park	M-NCPPC, Prince George's County
Douglas E. Patterson Park	M-NCPPC, Prince George's County
Manchester Estates Park	M-NCPPC, Prince George's County
Henson Creek Stream Valley Park	M-NCPPC, Prince George's County

Section 4(f) Property	Officials with Jurisdiction for Section 4(f)
Academy Woods Historic District	MHT
Tilden Woods Stream Valley Park	M-NCPPC, Montgomery County
Old Farm Neighborhood Conservation Area	M-NCPPC, Montgomery County
Cabin John Stream Valley Park, Unit 6	M-NCPPC, Montgomery County
Millennium Garden Park	City of Rockville Department of Recreation and Parks
Bullards Park and Rose Hill Stream Valley Park	City of Rockville Department of Recreation and Parks
Rockmead Park	City of Rockville Department of Recreation and Parks
Woottons Mill Park	City of Rockville Department of Recreation and Parks
Woodley Gardens Historic District	MHT
Rockville Senior Center Park	City of Rockville Dept. of Recreation and Parks, MHT
Ward Building	MHT
Malcolm King Park	Gaithersburg Dept. of Parks, Recreation and Culture
Morris Park	Gaithersburg Dept. of Parks, Recreation and Culture

2.5 Archaeological Properties

Under Section 106 of the National Historic Preservation Act of 1966, a series of archaeological identification and evaluation investigations are underway as part of the Study. To date, three archaeological resources located within the LOD for the Proposed Action have been recommended eligible for the NRHP. Sites 18MO749 and 18MO751 within the Chesapeake and Ohio Canal National Historical Park were recommended eligible under Criterion D. MHT concurred on this determination on March 12, 2020. A proposed Dead Run Ridges Archaeological District within George Washington Memorial Park was also recommended eligible under Criterion D. On February 14, 2020, VDHR did not concur with characterizing the archaeological resources as an archaeological district. VDHR recommended Sites 44FX0374, 44FX0379, 44FX0381, and 44FX0389 as individually eligible for the NRHP. As the sites are recommended as individually eligible for the NRHP under Criterion D; and have minimal value for warrant preservation in place they qualify as exceptions to Section 4(f) as defined in 23 CFR 774.13(b) and described in **Section 2.3.17**. NPS, VDHR, and MDOT SHA are continuing Section 106 consultation regarding the eligibility of the archaeology district at the time of publication. The outcome of consultation will be documented as part of Section 106 consultation as well as in the Final Section 4(f) Evaluation.

The Montgomery County Poor Farm Cemetery is within the LOD of the Proposed Action. This property will be subject to additional delineation, evaluation and treatment under the Section 106 Programmatic Agreement and consultation with the consulting parties and any identified descendants. MDOT SHA will work to minimize impacts and coordinate with affected communities on treatment where human remains may exist regardless of NRHP eligibility. Upon further investigations, if this cemetery is found to also meet the eligibility criteria for the NRHP, MDOT SHA will make an eligibility determination and conduct additional Section 106 review, evaluation, and treatment as part of the Programmatic Agreement (PA).

No additional NRHP-eligible archaeological resources have yet been identified within the LOD for the Proposed Action but additional studies of previously unsurveyed properties are currently underway. However, Phase IA archaeological assessments and completed studies in the vicinity of the locations that have not previously been surveyed suggest there is a minimal likelihood that any archaeological resources will be identified that warrant preservation in place.

3

3 AVOIDANCE ANALYSIS

3.1 Avoidance Alternatives

A *feasible and prudent avoidance alternative* is one that avoids using any Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweigh the importance of protecting the Section 4(f) property (23 CFR 774.17). In assessing the importance of protecting Section 4(f) properties, it is appropriate to consider the relative value of the resource to the preservation purpose of the statute. The preservation purpose of Section 4(f) is described in 49 U.S.C. § 303(a), which states: “It is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

An alternative is not *feasible* if it cannot be built as a matter of sound engineering judgement.

An alternative is not *prudent* if:

- It compromises the project to a degree that is unreasonable to proceed with the project in light of its stated Purpose and Need;
- It results in unacceptable safety or operational problems;
- It causes severe social, economic, or environmental impacts even after reasonable mitigation; 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 above that while individually minor, cumulatively cause unique problems; or impacts of extraordinary magnitude.

The presence of linear, mostly north-south oriented, Section 4(f) properties such as Cabin John Stream Valley Park, Rock Creek Stream Valley Park, Sligo Creek Stream Valley Park, Northwest Branch Stream Valley Park, Southwest Stream Valley Park, Henson Creek Stream Valley Park, George Washington Memorial Parkway, Clara Barton Parkway, Baltimore Washington Parkway, Sligo Creek Parkway, and

Suitland Parkway, in contrast to the largely east-west oriented interstate corridors, limits the potential for feasible and prudent avoidance alternatives to exist in this corridor, which makes avoidance of all Section 4(f) properties difficult. Each of these park properties extends perpendicular or parallel to the alignment of I-495 or I-270. Additionally, the Corridor Study Boundary is characterized as a densely populated, urban area with large residential communities, business complexes, large governmental institutions, numerous community facilities, and hundreds of sensitive cultural and natural resources. Since I-495 and I-270 are existing interstate systems that serve local and regional traffic and connect to major arterials in each county, addressing the need on a system level is critical to achieving the overall purpose of the Study.

Six alternatives that would completely avoid the use of Section 4(f) properties have been developed and are discussed below. They are evaluated in accordance with the definition of a *feasible* and *prudent* avoidance alternative found in 23 CFR 774.17.

3.1.1 Alternative 1: No Build Alternative

Alternative 1 would avoid all Section 4(f) property impacts. Under this alternative routine maintenance and safety improvements would occur but there would be no changes to the existing lane configuration on I-495 and I-270 (**Figure 3-1**). There would be no operational improvements or increased capacity along I-495 and I-270; existing and future traffic volumes would not be accommodated at this location.

Alternative 1 would avoid impacts to Section 4(f) properties, but would be unreasonable to proceed with in light of the Study's stated Purpose and Need. Alternative 1 causes other severe problems of a magnitude that substantially outweigh the importance of protecting Section 4(f) properties. It would not accommodate existing and long-term traffic growth, enhance trip reliability, or improve the movement of goods and services. I-495 and I-270 are the two most heavily traveled freeways in the National Capital Region, each with an Average Annual Daily Traffic volume of up to 260,000 vehicles per day in 2018. On both of these interstate systems, congestion within the Study limits lasts between 7 and 10 hours per day resulting in the second highest congestion in the United States. Alternative 1 would not provide the much-needed capacity improvements to serve both existing and future traffic growth on these interstate systems.

Figure 3-1: Alternative 1 Typical Sections



3.1.2 Increased Bus Transit

This alternative would include expansion of existing bus transit services within the limits of the Study on both I-270 and I-495 and the additional surrounding roadway network. This could be in the form of an increase in bus service on existing I-495 and I-270 within the limits of the Study, or consideration of dedicated facilities such as bus rapid transit systems on existing infrastructure. A Bus Transit Alternative would be limited to roadway striping. No additional capital or capacity improvements to I-495 and I-270 would occur.

A 2017 study by the National Capital Region Transportation Planning Board (TPB), Long-Range Plan Task Force, titled, *An Assessment of Regional Initiatives for the National Capital Region - Draft Technical Report on Phase II of the TPB Long-Range Plan Task Force*,⁶ studied a series of regional transportation initiatives compared to the baseline of the Financially Constrained Long-Range Plan (CLRP). One of the initiatives studied was a regionwide system of bus rapid transit (BRT) and transitway networks (known as *Initiative 4: Regionwide Bus Rapid Transit and Transitways*). This included new BRT facilities in Montgomery County, Prince George's County, Northern Virginia, DC, and a transitway from Branch Avenue to Waldorf. These lines are in addition to those already in the CLRP.

This study showed that an extensive, regionwide network of BRT and transitway facilities would result in a one percent reduction in average travel times for transit, HOV and single-occupancy vehicle commute trips relative to the 2040 CLRP scenario. Daily vehicle hours of delay would be reduced by two percent, and transit commute mode share would increase four percent. Daily vehicle miles traveled (VMT) and daily VMT per capita would be reduced by less than one percent. Share of passenger miles on reliable modes would increase by six percent.

As a result of these issues, the bus transit alternative would be unreasonable to proceed with the alternative in light of the stated Purpose and Need. This avoidance alternative causes other severe problems of a magnitude that substantially outweigh the importance of protecting the Section 4(f) properties.

Given the modest improvements to travel times and vehicle hours of delay expected from an extensive regionwide network of BRT and transitways, dedicated BRT facilities along only I-495 and I-270 would not achieve the Study's Purpose and Need as it would not address existing and long-term traffic growth, would not enhance trip reliability along I-495 or I-270, and would not accommodate Homeland Security. Under this alternative, fares would be collected, but additional analysis would be needed to determine financial feasibility based on ridership and operations and maintenance costs. In addition, improvement in the movement of goods and services would be limited to commuter benefits and not the movement of freight or services that require vehicular movement (i.e., mechanical, electrical, etc. services).

3.1.3 Transportation System Management/Transportation Demand Management

Transportation System Management (TSM)/Transportation Demand Management (TDM) strategies are improvements to existing facilities that improve the operation and coordination of transportation services and facilities. The TSM options could include interchange reconfigurations, modifications to turn lanes

⁶<https://www.mwcog.org/documents/2017/12/20/long-range-plan-task-force-reports-projects-regional-transportation-priorities-plan-scenario-planning-tpb/>

and acceleration/deceleration lanes, ramp metering, peak period shoulder use, enhancements to parallel roadway networks, enhanced traveler information, etc. TDM strategies focus on system demand and ways to change drivers' behavior aimed at providing the most efficient and effective use of existing transportation services and facilities. Options include rideshare and telecommuting promotion, park-and-ride lots, flexible work hours, carpool subsidies, and transit subsidies; all of which are most effective on a regional basis and commonly implemented through employers. TSM/TDM strategies would only be implemented where they do not create impacts to Section 4(f) properties.

The TSM/TDM Alternative would involve extending the Innovative Congestion Management (ICM) improvements currently under construction along I-270 onto I-495. The ICM improvements are anticipated to provide traffic operational benefits in I-270. However, they are expressly designed to be short term solutions. For example, in the AM peak, as virtually all of the relevant congestion measures indicate, the I-270 network with the ICM improvements performs better than under the existing (2015) conditions. Overall, detailed modeling of the I-270 ICM improvements also indicated that as traffic continues to increase, the traffic operations are expected to return to existing levels of congestion by 2040. Based on the 2040 modeling from the ICM Improvement Study and VISSIM modeling on the No Build Alternative for this Study, I-270 would accommodate upwards of 19 percent more vehicles in the northern section and 7 percent more vehicles around I-495 during the peak hour. Similar results would be expected on I-495 if these types of improvements were implemented. The benefit would be recognized in the short-term but could not be sustained for the long-term.

The TSM/TDM Alternative would consist of adaptive ramp metering to optimize the traffic operations where no managed lanes would be provided. This system would be intended to regulate the flow of traffic onto the mainline based on real-time mainline operations to prevent congestion associated with the heavy ramp merging volumes. The system would be designed to limit impacts to arterials by increasing the flow rate onto the freeway when the queues increase on the entrance ramps to prevent or limit queuing back onto the arterials.

Another improvement would be signal timing optimization to best accommodate the anticipated traffic patterns resulting from implementation of this alternative. This strategy reduces vehicle wait times at intersections within the limits of the Study without requiring physical widening or impacts by adjusting the length of green lights to match demand.

Other potential TSM/TDM improvements were deemed infeasible for the following reasons:

- **Hard shoulder running** is not considered feasible because the width of existing median shoulders is less than 12 feet for a significant portion of the limits of the Study, preventing its use as a peak period lane. The outside shoulder was also not considered acceptable as a shoulder through lane because it would require widening to provide additional auxiliary lanes for the interchanges within the limits of the Study. This widening would result in impacts to Section 4(f) properties.
- **Interchange reconfigurations** to improve traffic operations were not considered feasible because the modifications would require new/widened ramps, arterial modifications, and auxiliary lane widening. At many locations, these improvements would result in impacts to Section 4(f) properties.

TSM/TDM alternatives, by their nature, do not include the addition of roadway capacity, and could not address the large-scale challenges with existing capacity along the existing interstate systems. Therefore, because of the limited scope of these types of improvements, TSM/TDM improvements alone would not address the existing or future capacity needs. The TSM/TDM alternative is therefore not prudent because it would be unreasonable to proceed with the alternative in light of the stated Purpose and Need and it would result in unacceptable operational problems.

Because the actions that would be included as part of TSM/TDM solutions would only address a small fraction of congestion challenges and only do so in the short-term, Alternative 2 would not accommodate existing and future long-term traffic, nor would these measures enhance trip reliability. In addition, Alternative 2 does not directly provide an additional travel choice, accommodate Homeland Security, improve the movement of goods and services, nor enhance multimodal connectivity; and it does not provide a revenue source. Based on these factors, the TSM/TDM alternative is not a feasible and prudent alternative.

3.1.4 Section 4(f) Avoidance Alternative 1

Section 4(f) Avoidance Alternative 1 would construct four new managed lanes off-alignment between George Washington Memorial Parkway and MD 4 (**Figure 3-2**). The managed lanes would be constructed in Montgomery and Prince George's counties, outside the alignment of existing I-495 between the American Legion Bridge and the MD 202 interchange. The alignment of Section 4(f) Avoidance Alternative 1 would cross from outside to inside the existing I-495 at the MD 202 interchange and continue south until rejoining existing I-495 at the limit of the Study between the interchanges with MD 4 and MD 5.

To avoid the use of any Section 4(f) property on I-270, four managed lanes would be constructed off alignment to the west of existing I-270. The alignment of Section 4(f) Avoidance Alternative 1 would rejoin existing I-270 at the MD 200 interchange, the limit of the Study.

The proposed improvements would avoid impacts to all Section 4(f) properties inventoried in the Corridor Study Boundary. Section 4(f) Avoidance Alternative 1 would avoid the following inventoried Section 4(f) properties through bridging: Chesapeake and Ohio Canal National Historical Park, Clara Barton Parkway, Cabin John Stream Valley Park, Rock Creek Stream Valley Park, Sligo Creek Stream Valley Park, Northwest Branch Stream Valley Park, Southwest Branch Stream Valley Park, and Suitland Parkway.

The new off alignment managed lanes system would operate in addition to the I-495 GP lanes, providing additional traffic capacity for system users. It would, therefore, meet the Purpose and Need by alleviating some of the congestion on I-495 and I-270. It would also meet Purpose and Need by accounting for future growth, accommodating homeland security, and improving the movement of goods and services.

However, constructing new roadway on new alignment would require a new limit of disturbance approximately 200 feet wide along a distance of approximately 50 miles at an estimated construction cost of \$25 billion. The new alignment would be disruptive to established suburban communities, land use patterns, and local road systems. Section 4(f) Avoidance Alternative 1 would result in significant additional impacts to wetlands, waterways, endangered species habitat, and forest resources. Section 4(f) Avoidance Alternative 1 would result in significant impacts to residences, businesses, and institutions through a large swatch of densely populated areas in Montgomery and Prince George's counties. The alignment of the

avoidance alternative would necessitate relocating thousands of properties when compared to the Proposed Action. As a result Section 4(f) Avoidance Alternative 1 would have severe impacts on established communities.

Although Section 4(f) Avoidance Alternative 1 would avoid impacts to all Section 4(f) properties identified in the Corridor Study Boundary it would result in additional construction, maintenance, and operational costs of an extraordinary magnitude. After reasonable mitigation, it would still cause severe social, economic, and environmental impacts; severe disruption to established communities; and severe impacts to environmental resources protected under other Federal statutes. Section 4(f) Avoidance Alternative 1 causes other severe problems of a magnitude that substantially outweighs the importance of protecting Section 4(f) properties.

3.1.5 Section 4(f) Avoidance Alternative 2

Section 4(f) Avoidance Alternative 2 would construct four new managed lanes off-alignment between George Washington Memorial Parkway and MD 4 (**Figure 3-2**). The managed lanes would be constructed in Montgomery and Prince George's counties, inside the alignment of existing I-495 through nearly full the limits of the Study: from the Potomac River crossing and between interchanges with MD 4 and MD 5.

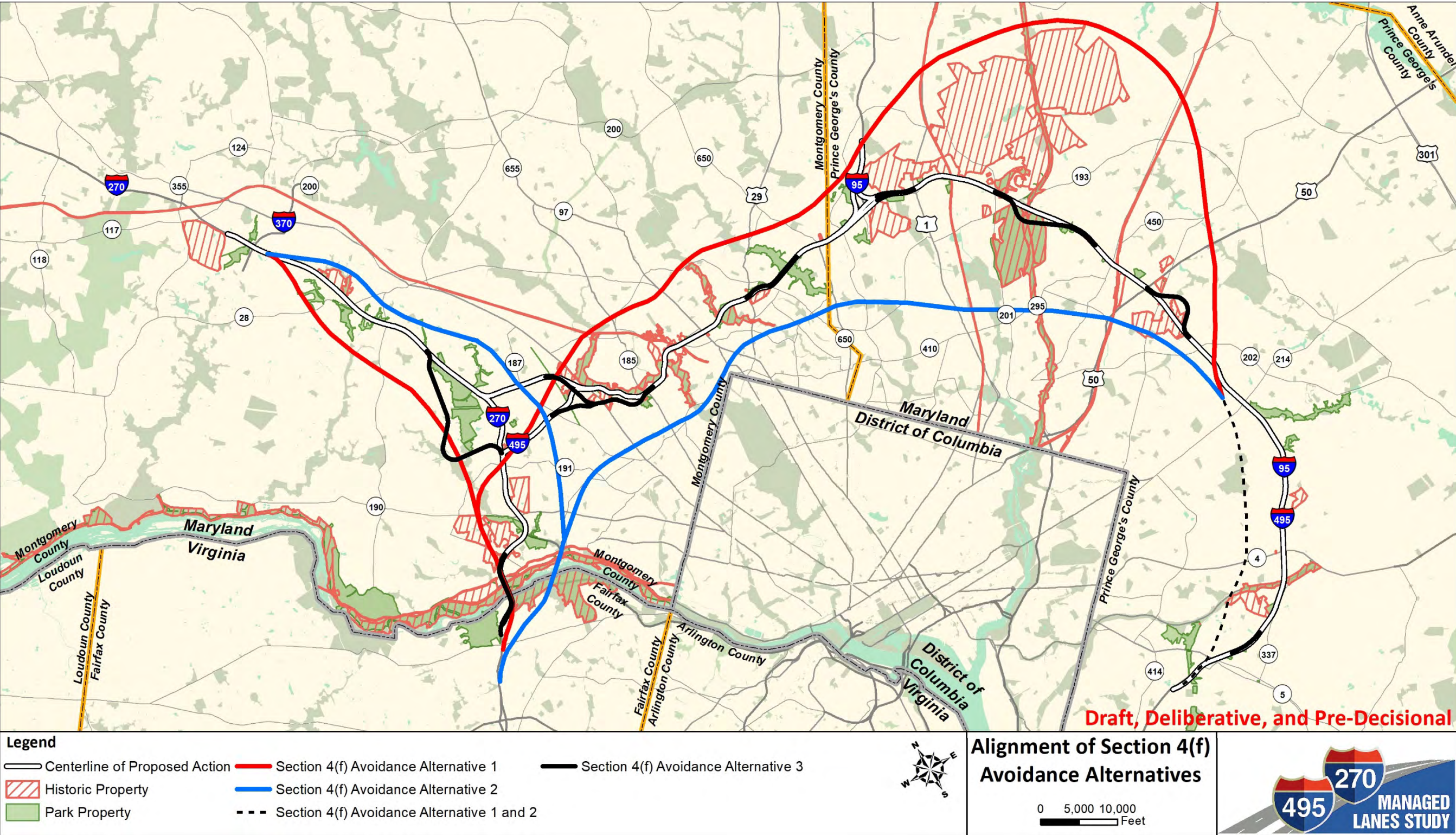
To avoid the use of any Section 4(f) property on I-270, four managed lanes would also be constructed off-alignment to the east of existing I-270. The alignment of Section 4(f) Avoidance Alternative 1 would rejoin existing I-270 at the MD 200 interchange, the limit of the Study.

The proposed improvements would avoid impacts to all Section 4(f) properties inventoried in the Corridor Study Boundary. Section 4(f) Avoidance Alternative 2 would avoid the following inventoried Section 4(f) properties through bridging: George Washington Memorial Parkway, Chesapeake and Ohio Canal National Historical Park, Clara Barton Parkway, Cabin John Stream Valley Park, Rock Creek Stream Valley Park, Sligo Creek Stream Valley Park, Northwest Branch Stream Valley Park, Southwest Branch Stream Valley Park, and Suitland Parkway.

The new off alignment managed lanes system would operate in addition to the I-495 GP lanes and provide additional traffic capacity for system users. It would, therefore, meet the Purpose and Need by alleviating some of the congestion on I-495 and I-270. It would also meet Purpose and Need by accounting for future growth, accommodating homeland security, and improving the movement of goods and services.

However, as with Section 4(f) Avoidance Alternative 1, constructing new roadway on new alignment would require a limit of disturbance 200 feet wide along a distance of approximately 40 miles at an estimated construction cost of \$20 billion. The new alignment would be disruptive to established suburban and urban communities, land use patterns, and local road systems. Section 4(f) Avoidance Alternative 2 would result in significant additional impacts to wetlands, waterways, endangered species habitat, and forest resources. The proposed alignment would result in significant impacts to residences, businesses, and institutions through a large swath of densely populated areas in Montgomery and Prince George's counties. Thousands of additional properties would be relocated when compared to the Proposed Action. As a result Section 4(f) Avoidance Alternative 2 would have severe impacts on established communities.

Figure 3-2: Alignment of Section 4(f) Avoidance Alternatives 1, 2, and 3



Although Section 4(f) Avoidance Alternative 2 would avoid impacts to the Section 4(f) properties identified in the Corridor Study Boundary it would result in additional construction, maintenance, and operational costs of an extraordinary magnitude. After reasonable mitigation, it would still cause severe social, economic, and environmental impacts; severe disruption to established communities; and severe impacts to environmental resources protected under other Federal statutes. Section 4(f) Avoidance Alternative 2 causes other severe problems of a magnitude that substantially outweighs the importance of protecting Section 4(f) properties.

3.1.6 Section 4(f) Avoidance Alternative 3

Section 4(f) Avoidance Alternative 3 would construct four managed lanes as proposed in the Proposed Action. However, where impacts to Section 4(f) properties would occur, the location specific options described in **Section 5.1** would be incorporated into the alignment of Section 4(f) Avoidance Alternative 3 (**Figure 3-2**). For the purposes of Section 4(f) Avoidance Alternative 3, it is assumed that *de minimis* impact findings throughout the Managed Lanes Study would be eliminated through minimization and by applying innovative design solutions.

Section 4(f) Avoidance Alternative 3 would incorporate alignment shifts, tunnels, and bridges to avoid impacts to Section 4(f) properties at 15 different locations throughout the Managed Lanes Study to avoid impacts to all Section 4(f) properties inventoried within the Corridor Study Boundary. The estimated cumulative cost of the location specific options is \$9 billion greater than the Proposed Action. In a manner similar to Section 4(f) Avoidance Alternatives 1 and 2, the alignment shifts would be disruptive to established suburban and urban communities, land use patterns, and local road systems. Shifting the alignment of the managed lanes system throughout the corridor would also present operational challenges related to providing access and egress between the managed lanes and GP lanes. Section 4(f) Avoidance Alternative 3 would result in significant additional impacts to wetlands, waterways, endangered species habitat, and forest resources. The proposed alignment would result in significant impacts to residences, businesses, and institutions through a large swath of densely populated areas along I-495 through Montgomery County and Prince George's County and I-270 in Montgomery County. Hundreds of additional properties would be relocated when compared to the Proposed Action. As a result Section 4(f) Avoidance Alternative 3 would have severe impacts on established communities.

Although Section 4(f) Avoidance Alternative 3 would avoid impacts to the Section 4(f) properties identified in the Corridor Study Boundary it would result in additional construction, maintenance, and operational costs of an extraordinary magnitude. After reasonable mitigation, it would still cause severe social, economic, and environmental impacts; severe disruption to established communities; and severe impacts to environmental resources protected under other Federal statutes. Section 4(f) Avoidance Alternative 2 causes other severe problems of a magnitude that substantially outweighs the importance of protecting Section 4(f) properties.

3.2 Avoidance Analysis Summary

As discussed in Section 3.1, the orientation of multiple linear parks perpendicular to the Study alignments makes avoidance of all Section 4(f) properties difficult. The analysis described in this section was not able to identify an alternative that totally avoids the use of any Section 4(f) property while addressing the Purpose and Need and without causing other severe problems of a magnitude that substantially outweighs the importance of protecting Section 4(f) properties. In addition to trying to devise avoidance



alternatives that completely avoid the use of Section 4(f) property, MDOT SHA also looked at avoiding each Section 4(f) property that experiences a use under the Proposed Action through the development of Location Specific Options. Those options, consisting of alignment shifts, tunnels, and bridges designed to avoid impacts to specific Section 4(f) properties, are presented in **Section 5.1, page 165**. The final determination of whether there is no feasible and prudent avoidance alternative to the use of land from Section 4(f) properties will be presented in the Final Section 4(f) evaluation. Therefore, the Section 4(f) evaluation continues with a least overall harm analysis.

4

4 ALL POSSIBLE PLANNING

Section 4(f) states FHWA may not approve the use of Section 4(f) property unless there is no feasible and prudent avoidance alternative and the action includes all possible planning to minimize harm to the property resulting from such use. “All possible planning,” as defined in 23 CFR 774.17, includes all reasonable measures to minimize harm or mitigate for adverse impacts and effects. The cost of mitigation should be a reasonable public expenditure in light of the severity of the impact on Section 4(f) property, in accordance with 23 CFR 771.105(e).

Avoidance analysis has already occurred in the context of searching for alternatives that completely avoid all Section 4(f) properties. For the Draft Section 4(f) Evaluation, all possible planning to minimize harm has been specifically applied to Proposed Action (**Section 5.3**) as well as all of the other Least Overall Harm Alternatives analyzed in **Sections 5.1** and **5.2**. These minimization actions are documented in this section. However, the final determination of whether or not all possible planning has occurred with respect to historic properties awaits completion of the Section 106 process.

Pursuant to Section 106, MDOT SHA is in the process of drafting a PA to resolve adverse effects to historic properties. In general, mitigation measures agreed upon as part of the Section 106 process satisfy the all possible planning to minimize harm requirement for historic sites under Section 4(f).

With regard to public parks, all possible planning will involve the minimization activities described herein as well as mitigation coordinated with the OWJ over public parks and recreation areas. All possible planning to minimize harm will additionally involve an agreement document that outlines the process to continue coordination with the OWJ over Section 4(f) properties through the design phase of the project. Members of the public are also afforded an opportunity to provide comments. Mitigation measures involving the public parks and recreation areas may involve a replacement of land and/or facilities of comparable value and function, or monetary compensation to enhance the remaining land.

The measures outlined in this Draft 4(f) Evaluation, therefore, are preliminary but appropriate and suitable for informing the preparation of the PA and future coordination with the OWJs over public parks. The final determination of whether or not all possible planning has occurred is reserved for the Final Section 4(f) Evaluation, after considering comments on the Draft Section 4(f) Evaluation.

4.1 Methodology and Assumptions for Establishing Limits of Disturbance

The Limits of Disturbance (LOD) are the proposed boundary within which all construction, access, material storage, grading, clearing, landscaping, and related activities would occur. The design for on-site stormwater management, including ponds and large facilities along the roadside and within interchanges, was developed to a concept level of detail and is included within the LOD. Existing streams that would be impacted by roadside grading have been relocated where possible.

Improvements needed to accomplish profile adjustments and roadway shifts for roads that cross over I-495 and I-270, due to mainline widening, were designed at a preliminary level. The LOD incorporates the modifications along these crossroads. It was assumed that any required noise barriers along I-495 and I-270 would be located within the LOD. A 30-foot offset to the proposed LOD was established beyond the edge of I-495 and I-270 mainline bridges over water and roadways to accommodate the reconstruction.

MDOT SHA conducted a preliminary assessment of potential impacts and identified the necessary major utility relocations. Locations of known utilities were assessed to determine the potential likelihood for requiring relocation. Where relocations were deemed most likely MDOT SHA established a variable offset, between 10 and 50 feet, beyond the typical cut and fill lines associated with the LOD.

In general, the proposed LOD was compared to existing right-of-way and adjusted according to the presence of a few conditions. Where the distance between the cut and fill lines and the existing right-of-way was greater than 10 feet, the LOD was set at the existing right-of-way line. Adjacent land use, such as the presence of Section 4(f) properties, environmentally sensitive natural resources, military installations, educational institutions, and residential neighborhoods, was considered in the development of the LOD as described in the following sections.

4.2 Considerations for Adjacent Land Use and Minimization of the LOD

During the development of the engineering layouts and LOD for the Proposed Action a process was used to limit or avoid impacts to sensitive environmental features. This includes the application of five progressively narrower roadside typical sections to first avoid and then minimize impacts to Section 4(f) properties. The roadside typical sections were applied to the Proposed Action in an iterative manner, from widest to narrowest to the greatest extent necessary to comply with regulatory requirements, as well as to accommodate existing roadside conditions and land use constraints.

The five typical sections consist of:

1. An open section with a full-width bioswale for stormwater management;
2. An open section with a reduced-width bioswale for stormwater management;
3. An open section with no surface stormwater management;
4. A closed section with concrete barrier; and
5. A closed section with retaining wall.

All roadside design values meet MDOT SHA and American Association of State Highway and Transportation Officials design standards. Existing roadways were widened into the median wherever possible to in an effort to first avoid and then minimize impacts to Section 4(f) properties.

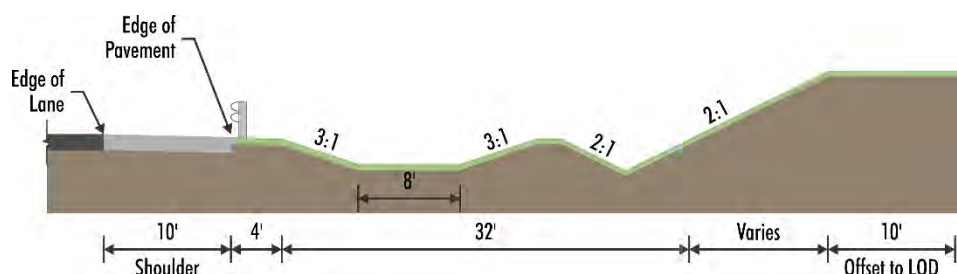
The costs and layouts of the Build Alternatives assume application of the various steps of the roadside typical sections. These engineering modifications were applied to demonstrate possible planning to minimize harm to Section 4(f) property. Unless limited by other constraints (driven by factors such as topography, the presence of non-contributing properties within an historic district, or specific stormwater management needs, as discussed in **Section 2**), when adjacent to Section 4(f) properties the LOD was set based on the 10-foot offset from the cut and fill lines or was set at the resource boundary if the distance between the cut/fill line and the resource boundary was greater than 10 feet.

In addition to the standard minimization process, MDOT SHA considered all reasonable measures to minimize impacts to Section 4(f) properties. MDOT SHA engaged in extensive coordination with the majority of the OWJ over Section 4(f) properties through existing regulatory processes (such as Section 106 consultation), regularly scheduled coordination meetings, and meetings requested by stakeholders. Additional coordination took place via written letter, over the phone, and via electronic communication. This coordination resulted in minimizing harm to Section 4(f) properties through a variety of means, such as: eliminating or relocating stormwater management facilities; shifting the centerline of the transportation facility; developing alternative interchange configurations; relocating slip ramps; refining construction access locations; and limiting the number, type, and configuration of signage. The results of coordination and descriptions of the minimization efforts resulting from such coordination are discussed in detail in **Section 2**.

4.2.1 Step 1: Open Section with Full Stormwater Management

The widest roadside typical section with surface stormwater management shown in **Figure 4-1** is an open section without curb and gutter that allows stormwater sheet flow off the road into a drainage ditch. The typical section would include W-beam guardrail at the edge of pavement; an eight-foot wide flat bottom Environmental Site Design (ESD) swale with 3:1 side slopes; a V-ditch with 2:1 side slopes that ties to the existing ground; and a 10-foot offset to the LOD to accommodate erosion and sediment control, noise barrier construction, and construction easements. This typical section is used as the starting typical section since it would provide the greatest flexibility for roadside grading and linear stormwater management.

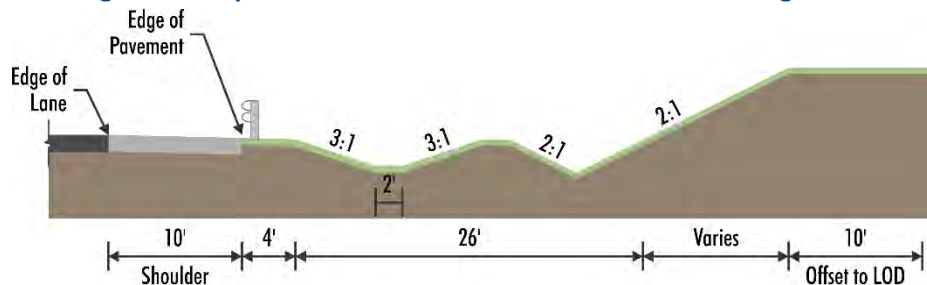
Figure 4-1: Open Section with Full Stormwater Management



4.2.2 Step 2: Open Section with Reduced Stormwater Management

A second roadside typical section with surface stormwater management shown in **Figure 4-2** is an open section that would include W-beam guardrail at the edge of pavement; a 2-foot wide flat bottom ESD swale, the minimum allowable by MDE with 3-to-1 side slopes; a V-ditch with 2-to-1 side slopes that ties to existing ground; and a 10-foot offset to the LOD to accommodate erosion and sediment control, noise barrier construction, and construction easements. This would maintain linear stormwater management, but at a reduced water storage capacity compared to Step 1.

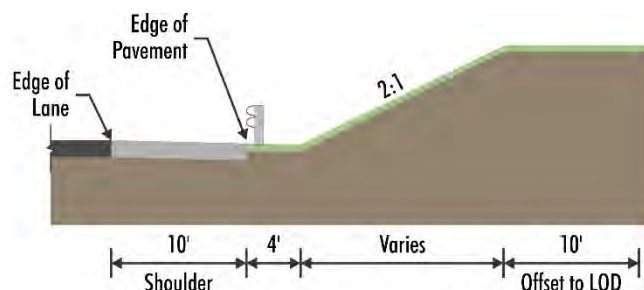
Figure 4-2: Open Section with Reduced Stormwater Management



4.2.3 Step 3: Open Section with No Stormwater Management

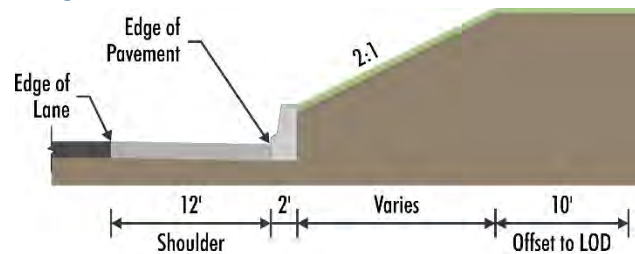
This roadside typical section is an open section shown in **Figure 4-3** with no surface stormwater management facilities and would include W-beam guardrail at the edge of pavement; a 2:1 slope to tie to existing ground; and a 10-foot offset to the LOD to accommodate erosion and sediment control, noise barrier construction, and construction easements. This section would maintain an open section for drainage conveyance without linear stormwater management. Stormwater quantity management and treatment would be provided via ponds and underground vaults.

Figure 4-3: Open Section with No Stormwater Management



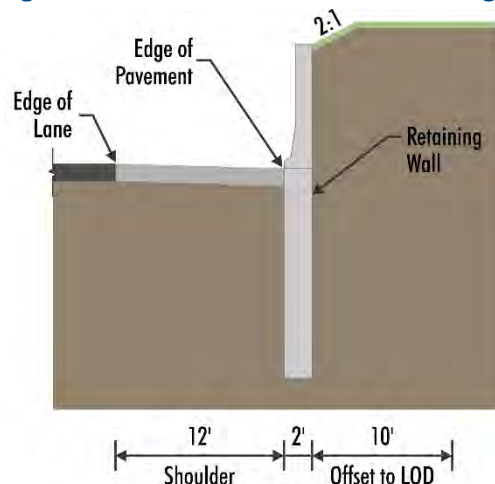
4.2.4 Step 4: Closed Section with Concrete Barrier

This closed roadside typical section as shown in **Figure 4-4** would include a single-face concrete barrier at the edge of pavement with no linear surface stormwater management facilities; a 2:1 slope behind the barrier to tie to existing ground; and a 10-foot offset to the LOD to accommodate erosion and sediment control, noise barrier construction, and construction easements. The paved outside shoulder would be 12 feet wide to provide a 2-foot offset to the barrier. Stormwater quantity management and treatment would be provided via ponds and underground vaults.

Figure 4-4: Closed Section with Concrete Barrier

4.2.5 Step 5: Closed Section with Retaining Wall

This closed roadside typical section as shown in **Figure 4-5** would include a retaining wall at the edge of pavement and no surface stormwater management facilities; and a 10-foot offset from the back of the wall to the LOD to accommodate erosion and sediment control, noise barrier construction, and construction easements. The paved outside shoulder would be 12 feet wide to provide a 2-foot offset to the retaining wall. Stormwater quantity management and treatment would be provided via ponds and underground vaults. This would be the narrowest typical section.

Figure 4-5: Closed Section with Retaining Wall

4.3 Mitigation

Minimizing harm to Section 4(f) property can include mitigation through specific actions to compensate for impacts, not just measures to reduce impacts. For Section 4(f) uses that cannot be avoided or further minimized, mitigation would be considered. The level of mitigation considered would be commensurate with the severity of the impact on the Section 4(f) property. Final mitigation would be determined through continued consultation with the officials having jurisdiction over each Section 4(f) property and presented in the Final Section 4(f) Evaluation. MDOT SHA and FHWA have committed to providing meaningful benefit to impacted Section 4(f) properties by improving the values, services, attributes and functions that may be compromised. The goal of mitigation is net benefit to the property impacted. To-date, preliminary mitigation discussions with many of the OWJ have included replacement land, completing additional cultural and natural resource surveys, reconfiguring recreational facilities, relocating recreational facilities

out of environmentally compromised areas (i.e. floodplains), restoring streams, and funding of cultural and park related buildings and amenities.

In a letter dated March 12, 2020, the MHT concurred that the undertaking would have an adverse effect to historic properties pursuant to 36 CFR Part 800. The Regulations for Protection of Historic Properties, 36 CFR Part 800, define an undertaking as having an adverse effect on a historic property when "the integrity of the property's location, design, setting, materials, workmanship, feeling, or association" are diminished. Adverse effects include the "introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting." Potential mitigation measures for the Section 4(f) use of historic sites would be identified within a Programmatic Agreement that would be developed with FHWA, MDOT SHA, ACHP, NPS, MHT, VDHR, and the Section 106 consulting parties. Mitigation measures will be developed on a case by case basis. By signature, agencies will assure that the mitigation measures would be completed.

Discussions with OWJ over parkland resources are ongoing to determine meaningful mitigation for impacts to these resources. Possible mitigation measures may include:

- Replacement with lands of at least comparable value, and of reasonably equivalent usefulness and location.
- Replacement of facilities impacted by the project, including sidewalks, paths, benches, lights, trees, fields, courts, stormwater facilities, parking lots, trails, swales, buildings, and other facilities.
- Relocation of recreational facilities outside of environmentally compromised areas (i.e. floodplains);
- Restoration and landscaping of disturbed areas.
- Incorporation of design features and habitat features where necessary.
- Payment of fair market value for the land.
- Rehabilitation of deteriorating facilities and assets on nearby parkland.
- Relocation of impacted facilities and assets to allow for use similar to that which existed pre-impact.
- Design and construction of new facilities.
- Non-native invasive species management.
- Environmental enhancements with the goals of habitat and/or water quality improvements.

Any additional measures recommended during consultation with the official with jurisdiction that are relevant to and commensurate with the impacts.

All minimization and mitigation measures will be documented in the Final Section 4(f) Evaluation.

Pursuant to 23 CFR 774.17, a determination of Section 4(f) *de minimis* impacts inherently includes the requirement for all possible planning to minimize harm because impacts have already been reduced to a *de minimis* level. Therefore, additional planning to minimize harm is not required for those properties where a *de minimis* impact finding is made.

Section 6(f) and Maryland POS are federal and state programs, respectively, that have specific mitigation requirements. Mitigation opportunities are more flexible under Section 4(f) and may or may not include replacement lands. Section 6(f) directs NPS to assure that replacement lands are of equal value, location, and usefulness as impacted lands.

The Maryland POS Law provides that land under a state grant from POS may not be acquired or developed without written approval from the Secretary of the Department of Natural Resources, Secretary of the Department of Budget and Management, and the Secretary of the Department of Planning. Any conversion of land use may be approved only after the land has been replaced with land of equivalent area and of equal recreation or open space value. Further, replacement lands must be equal or greater to the appraised monetary value of the land to be converted.

5

5 LEAST OVERALL HARM

Pursuant to 23 CFR 774.3(c)(1), if the avoidance analysis determines that there is no feasible and prudent avoidance alternative, then only the alternative that causes the least overall harm may be approved. Since the discussion in Section 3 demonstrates there is no feasible and prudent avoidance alternative, all remaining alternatives are evaluated to determine which would cause the least overall harm. Therefore, this section provides a review of the multiple remaining alternatives that use one or more Section 4(f) properties, including alternatives that would eliminate or reduce the use of individual Section 4(f) properties.

23 CFR 774.3(c)(1) identifies seven factors for identifying the alternative with the least overall harm.

- **Factor 1:** The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property);
- **Factor 2:** 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;
- **Factor 3:** The relative significance of each Section 4(f) property; and
- **Factor 4:** The views of the OWJ over each Section 4(f) property.
- **Factor 5:** The degree to which each alternative meets the Purpose and Need for the project;
- **Factor 6:** After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
- **Factor 7:** Substantial differences in costs among the alternatives.

5.1 Location Specific Options

The following discussion describes location specific alternatives that would avoid the use of individual Section 4(f) properties and evaluates those alternatives using the seven factors of least overall harm. Each option would be integrated into the Proposed Action in a manner that would avoid the Section 4(f) property(ies) identified in the sections below. The options consist of alignment shifts, tunnels, or bridges that were developed to avoid those Section 4(f) properties for which the Section 4(f) use is not anticipated to be *de minimis*. In general, these location specific options would result in additional use of other Section 4(f) properties, adverse impacts of a severe magnitude to resources not subject to Section 4(f) protection, or a substantial increase in cost. Because the location specific options modify relatively short portions of

the end-to-end Proposed Action, each would meet the Purpose and Need of the Study to some degree. However, those location specific options that more substantially deviate from the existing alignments of I-495 and I-270 and result in a lengthier travel routes would be less effective in addressing the project needs.

5.1.1 Location Specific Option 1 (LS-1)

Section 4(f) Properties Avoided: C&O Canal NHP and Clara Barton Parkway

A. Description

The Proposed Action would replace the existing American Legion Bridge on alignment. The newly constructed bridge would be wide enough to accommodate managed lanes and result in a Section 4(f) use of George Washington Memorial Parkway (**Section 2.1.1**), C&O Canal NHP (**Section 2.1.2**), and Clara Barton Parkway (**Section 2.1.3**). The conceptual design of the bridge that would be constructed as part of the Proposed Action would require the placement of piers within the boundary of George Washington Memorial Parkway in Virginia as well as the construction of temporary access roads within the boundaries of Clara Barton Parkway and C&O Canal NHP in Maryland and George Washington Memorial Parkway in Virginia.

Option LS-1 would construct a new suspension bridge east of the existing American Legion Bridge to avoid the Section 4(f) use of C&O Canal NHP and Clara Barton Parkway (**Figure 5-1** through **Figure 5-4**). The new bridge would carry both GP and managed lanes and feature a clear span of 3,250 feet, a length which could only be met by a suspension bridge. In order to anchor the towers and cables that support the design, the bridge span would extend 800 feet beyond the towers at either side of the crossing. The design of the suspension bridge would require placing the western tower within the Turkey Run area of George Washington Memorial Parkway and thus would not avoid a use of that Section 4(f) property. Option LS-1 would eliminate all interchanges between I-495 and George Washington Memorial Parkway and Clara Barton Parkway.

B. Analysis

In consideration of Least Overall Harm Factor 5, applying Option LS-1 would compromise the ability of the Study to meet the Purpose and Need by adding significant risk to financial viability through removing direct access to the managed lanes at George Washington Memorial Parkway. Additionally, in consideration of Least Overall Harm Factor 7, Option LS-1 would cost approximately \$900 million, or \$600 million more than the Proposed Action along this portion of the project. Even though it avoids the Section 4(f) use of C&O Canal NHP and Clara Barton Parkway, owing to the substantial difference in cost and compromised ability to meet the Purpose and Need, Option LS-1 would result in more harm than the Proposed Action.

In consideration of Least Overall Harm Factor 1, because it avoids the use of two NPS Section 4(f) properties and significantly reduces the use of George Washington Memorial Parkway (as listed in **Table 5-1**), there would be greater ability to mitigate adverse impacts caused by Option LS-1 when compared to the Proposed Action. Additionally, in consideration of Least Overall Harm Factor 2, Option LS-1 would result in less remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

Table 5-1: Section 4(f) Properties Avoided by Option LS-1

Section 4(f) Property	Section 4(f) Avoidance (in Acres)
George Washington Memorial Parkway ¹	11.5
C&O Canal NHP	15.4
Clara Barton Parkway	1.8
Total Section 4(f) Property Avoided	28.7

1. Option LS-1 would not totally avoid the use of George Washington Memorial Parkway

The three Section 4(f) properties situated along the bridge option qualify for Section 4(f) protection as both public recreational facilities and historic sites. These properties are George Washington Memorial Parkway, Clara Barton Parkway, and Chesapeake and Ohio Canal NHP. In consideration of Least Overall Harm Factor 3, the properties are of substantially equal significance. While the Proposed Action would result in a Section 4(f) use of each of these properties, Option LS-1 would only result in the use of George Washington Memorial Parkway.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of the Draft Section 4(f) Evaluation.

Option LS-1 would span the Potomac River and result in fewer impacts to streams and wetlands. However because the proposed suspension bridge would be erected off alignment, Option LS-1 would result in greater impacts to forest resources in Maryland and Virginia. Under Option LS-1, removing the existing American Legion Bridge and portion of I-495 would provide opportunities to mitigate for impacts to trees. Neither the Proposed Action nor Option LS-1 would result in relocations. In consideration of Least Overall Harm Factor 6, Option LS-1 and the Proposed Action would result in substantially equal harm to resources not protected by Section 4(f).

Figure 5-1: Overview Map of Location Specific Options LS-1 and LS-2

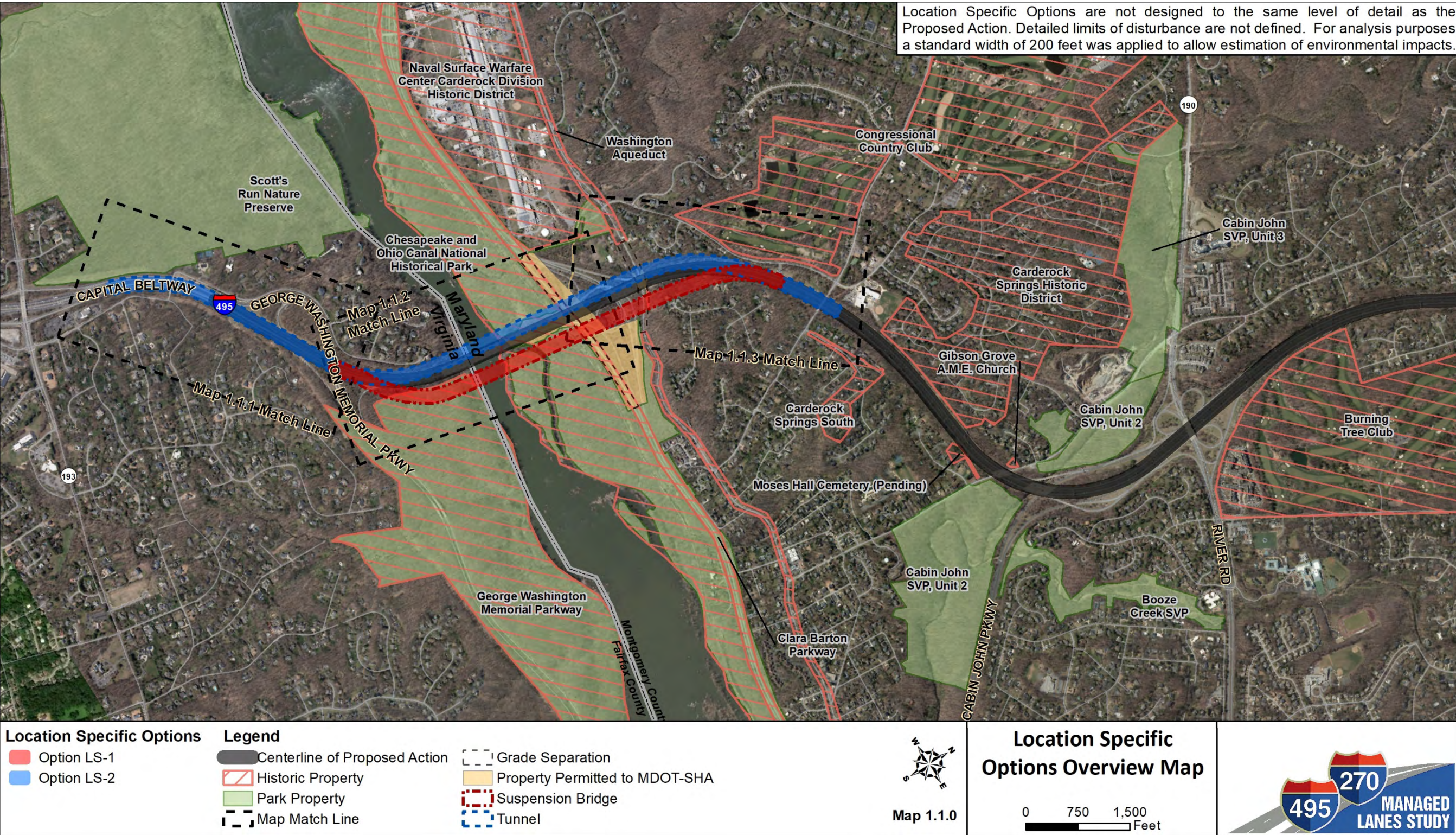


Figure 5-2: Detail of Location Specific Options LS-1 and LS-2 (Map 1 of 3)

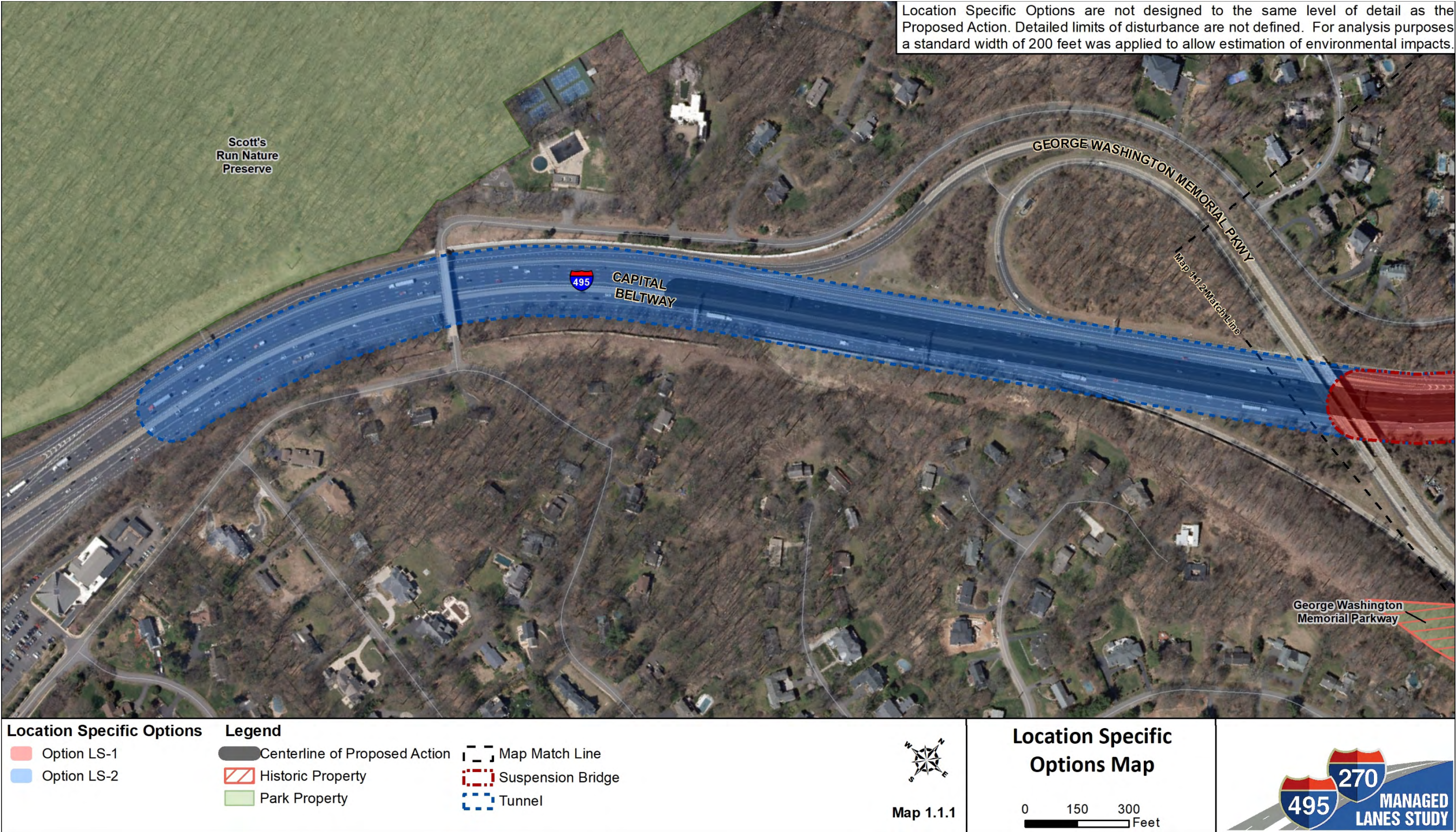


Figure 5-3: Detail of Location Specific Options LS-1 and LS-2 (Map 2 of 3)

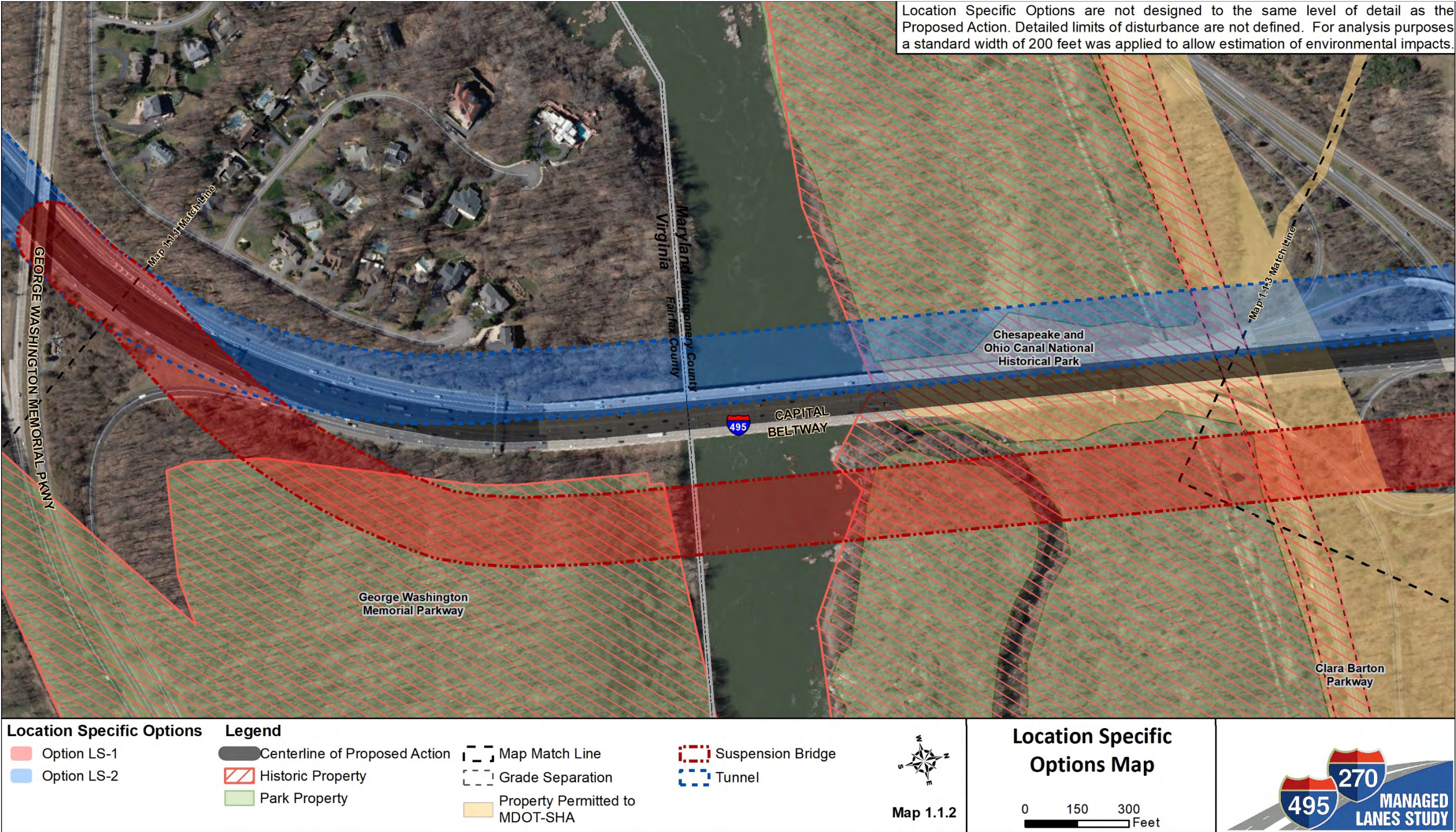
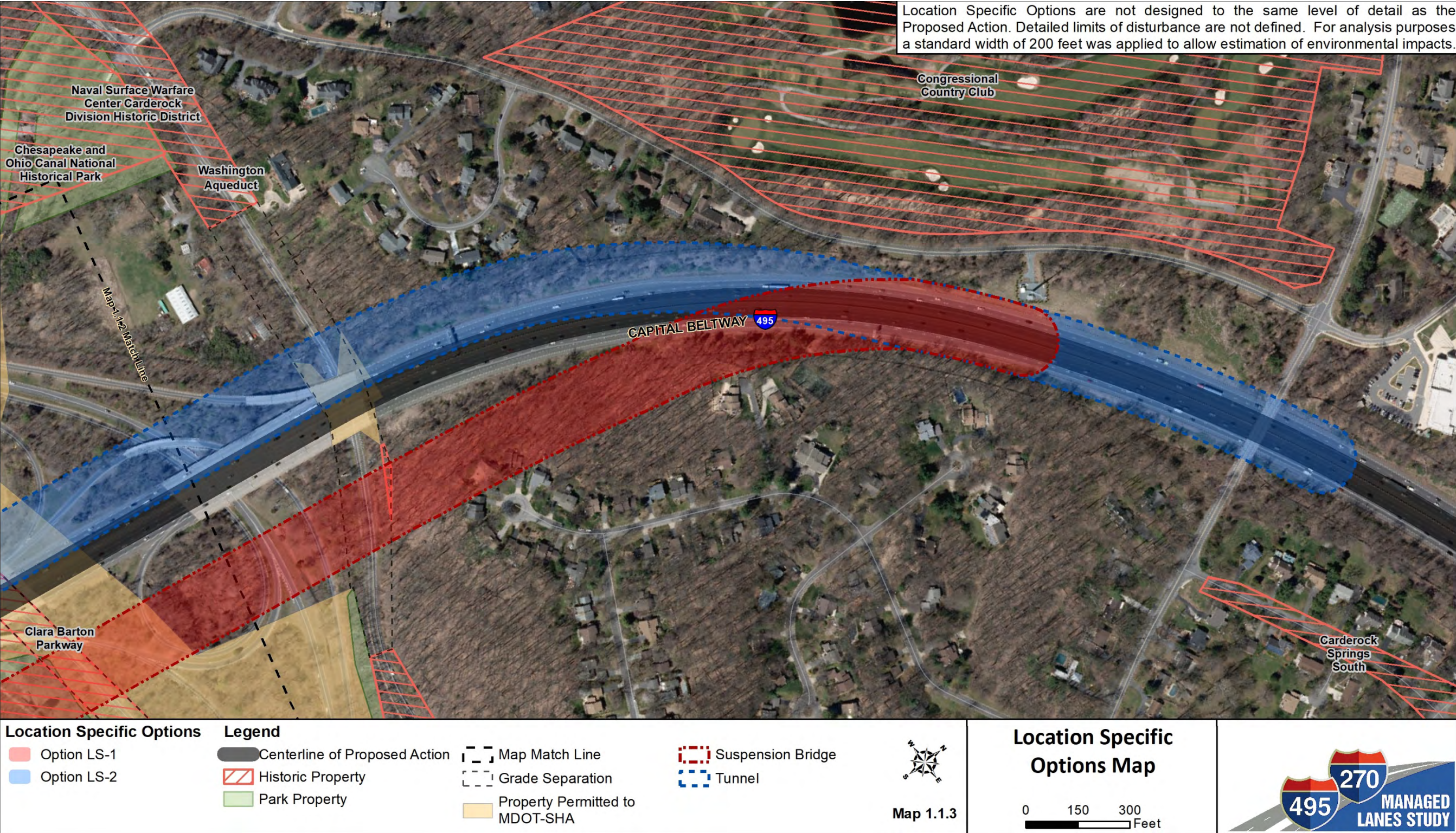


Figure 5-4: Detail of Location Specific Options LS-1 and LS-2 (Map 3 of 3)



5.1.2 Location Specific Option 2 (LS-2)

Section 4(f) Properties Avoided: George Washington Memorial Parkway, C&O Canal NHP, and Clara Barton Parkway

A. Description

The Proposed Action would replace the existing American Legion Bridge on alignment with widening and result in the Section 4(f) use of George Washington Memorial Parkway (**Section 2.1.1**), C&O Canal NHP (**Section 2.1.2**), and Clara Barton Parkway (**Section 2.1.3**). The conceptual design of the bridge that would be constructed as part of the Proposed Action would require the placement of piers within the boundary of George Washington Memorial Parkway in Virginia as well as the construction of temporary access roads within the boundaries of Clara Barton Parkway and C&O Canal NHP in Maryland and George Washington Memorial Parkway in Virginia.

Option LS-2 would construct a tunnel to carry both the GP lanes and managed lanes beneath the Potomac River close to the alignment of the existing American Legion Bridge (**Figure 5-1** through **Figure 5-4**). In order to reach the required depth of 80 to 120 feet to safely tunnel beneath the Potomac River and avoid the use of Section 4(f) property, the tunnel would need to be approximately 11,000 feet long. Tunnel portal locations would be approximately 2,000 feet south of the George Washington Memorial Parkway in Virginia, and 2,200 feet north of MacArthur Boulevard in Maryland. Direct access to the George Washington Parkway and Clara Barton Parkway from I-495 would be eliminated.

B. Analysis

In consideration of Least Overall Harm Factor 5, implementing Option LS-2 would compromise the ability of the Study to meet the Purpose and Need by adding significant risk to financial viability through removing direct access, especially at George Washington Memorial Parkway. Additionally, in consideration of Least Overall Harm Factor 7, Option LS-2 would cost in approximately \$1.3 billion or \$1 billion more than the Proposed Action along this portion of the project. Even though it avoids impacts to C&O Canal NHP, Clara Barton Parkway, and George Washington Memorial Parkway, owing to the substantial difference in cost and compromised ability to meet the Purpose and Need, Option LS-2 would result in more harm than the Proposed Action.

In consideration of Least Overall Harm Factor 1, when compared to the Proposed Action Option LS-2 would have a greater ability to mitigate for the use of Section 4(f) property owing to avoiding the use of the three NPS Section 4(f) properties listed in **Table 5-2**. In support of this assessment, Option LS-2 would create additional opportunities for mitigation through the removal of the existing I-495. Implementing Option LS-2 would have the beneficial effect of eliminating the visual and physical intrusion of the American Legion Bridge and I-495 on George Washington Memorial Parkway, C&O Canal NHP, and Clara Barton Parkway. In consideration of Least Overall Harm Factor 2, when compared to the Proposed Action Option LS-2 would result in less remaining harm to the protected activities, attributes, and features that qualify Section 4(f) property for protection.

The three Section 4(f) properties along the tunnel option qualify for Section 4(f) protection as both public recreational facilities and historic sites. These properties are George Washington Memorial Parkway, C&O Canal NHP, and Clara Barton Parkway. In Consideration of Least Overall Harm Factor 3, the properties are

of substantially equal significance. The Proposed Action would result in significant impacts to each of these three Section 4(f) properties. Option LS-2 would not impact any of the three.

Table 5-2: Section 4(f) Properties Avoided by Option LS-2

Section 4(f) Property	Section 4(f) Avoidance (in Acres)
George Washington Memorial Parkway	12.2
C&O Canal NHP	15.4
Clara Barton Parkway	1.8
Total Section 4(f) Property Avoided	29.4

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation.

Option LS-2 would construct a tunnel to convey both the managed lanes and GP lanes beneath the Potomac River near the alignment of the existing American Legion Bridge. When compared to the Proposed Action, Option LS-2 would result in fewer impacts to streams, wetlands, and forest resources. Option LS-2 would result in some impacts to forest resources at the locations of the tunnel portals. The full area of forest impacts would depend on the method of construction, but any impacts are expected to be less than the Proposed Action. Additionally, five residential relocations would be necessary at the location of the tunnel portal in Maryland, when compared to the Build Alternatives, which would require none at this location. In consideration of Least Overall Harm Factor 6, when compared to the Proposed Action Option LS-2 would result in less harm to Section 4(f) properties and resources not protected by Section 4(f).

5.1.3 Location Specific Option 3 (LS-3)

Section 4(f) Properties Avoided: Unit 3 of Rock Creek Stream Valley Park, Bethesda Trolley Trail, and Locust Hill Neighborhood Park

A. Description

The Proposed Action would widen I-495 on alignment through Rock Creek Stream Valley Park, Unit 3, as described in **Section 2.1.9** and expand the highway beyond the existing MDOT SHA easement.

Option LS-3 would relocate the GP and managed lanes on I-495 approximately 0.5 mile to the south to avoid impacts to Unit 3 of Rock Creek Stream Valley Park (**Figure 5-5** through **Figure 5-11**). The drastic alignment shift to the south is needed to avoid impacts while maintaining the existing movements on I-495 at I-270, MD 187, MD 355, and MD 185, as well as accommodate proposed direct access to the managed lanes system. In designing the alignment shift option, additional consideration was given to avoiding significant elements of the Section 4(f) properties on the south side of I-495. To achieve avoidance of Unit 3 of Rock Creek Stream Valley Park while also minimizing to the extent possible impacts to other Section 4(f) properties, a shift of 0.5 mile is necessary.

B. Analysis

In consideration of Least Overall Harm Factor 1, when compared to the Proposed Action Option LS-3 would result in 10.4 acres of additional impacts to Section 4(f) properties. Despite eliminating the use of the Section 4(f) properties listed in **Table 5-3**, total use of Section 4(f) properties would increase owing to the use of the properties listed in **Table 5-4**. This would result in less ability to mitigate adverse impacts to Section 4(f) properties. Additionally, in consideration of Least Overall Harm Factor 2, Option LS-3 would result in greater remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection. Implementing Option LS-3 would result in demolishing the historic Grosvenor Estate and eliminating North Chevy Chase Local Park.

In consideration of Least Overall Harm Factor 6, Option LS-3 would cause severe impacts to community resources, potentially resulting in the relocation of 325 properties. Option LS-3 would also impact the roadway infrastructure of several existing communities, potentially cutting off access to these areas. In consideration of Least Overall Harm Factor 7, Option LS-3 would cost an estimated \$2.8 billion or \$1.7 billion more than the Proposed Action along this portion of the project. Owing to the increase in the use of Section 4(f) property, severe impacts to community resources, and substantial difference in cost, Option LS-3 would result in more harm than the Proposed Action.

Table 5-3: Section 4(f) Properties Avoided by Option LS-3

Section 4(f) Property	Section 4(f) Avoidance (in Acres)
Rock Creek Stream Valley Park, Unit 3	3.3
Locust Hill Neighborhood Park	0.3
Bethesda Trolley Trail	0.2
Total Section 4(f) Property Avoided	3.8

Table 5-4: Properties Experiencing an Increase in Section 4(f) Use by Option LS-3

Section 4(f) Property	Increase in Impact (in Acres)
Rock Creek Stream Valley Park, Unit 2	0.2
North Chevy Chase Local Park	5.8
Fleming Local Park	2.0
Grosvenor Estate	4.0
Elmhirst Parkway Neighborhood Conservation Area	2.0
In the Woods	0.2
Total Increase in Use of Section 4(f) Property	14.2



In consideration of Least Overall Harm Factor 3, Unit 3 of Rock Creek Stream Valley Park is a large, heavily used, multi-function, recreational facility that provides opportunities to a wide segment of densely populated lower Montgomery County where no comparable facilities exist. The park is also historically significant for its association with early twentieth century environmental protection and regional planning efforts in Metropolitan Washington. As historic sites of statewide significance and parts of a large park that offers diverse recreational opportunities to a regional population, Units 2 and 3 of Rock Creek Stream Valley Park are the most significant Section 4(f) property along this portion of the Study.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation.

In consideration of Least Overall Harm Factor 5, Option LS-3 would maintain the same typical section as the Proposed Action and meet the Purpose and Need of the Study to a degree comparable to the Proposed Action.

Figure 5-5: Overview Map of Location Specific Option LS-3

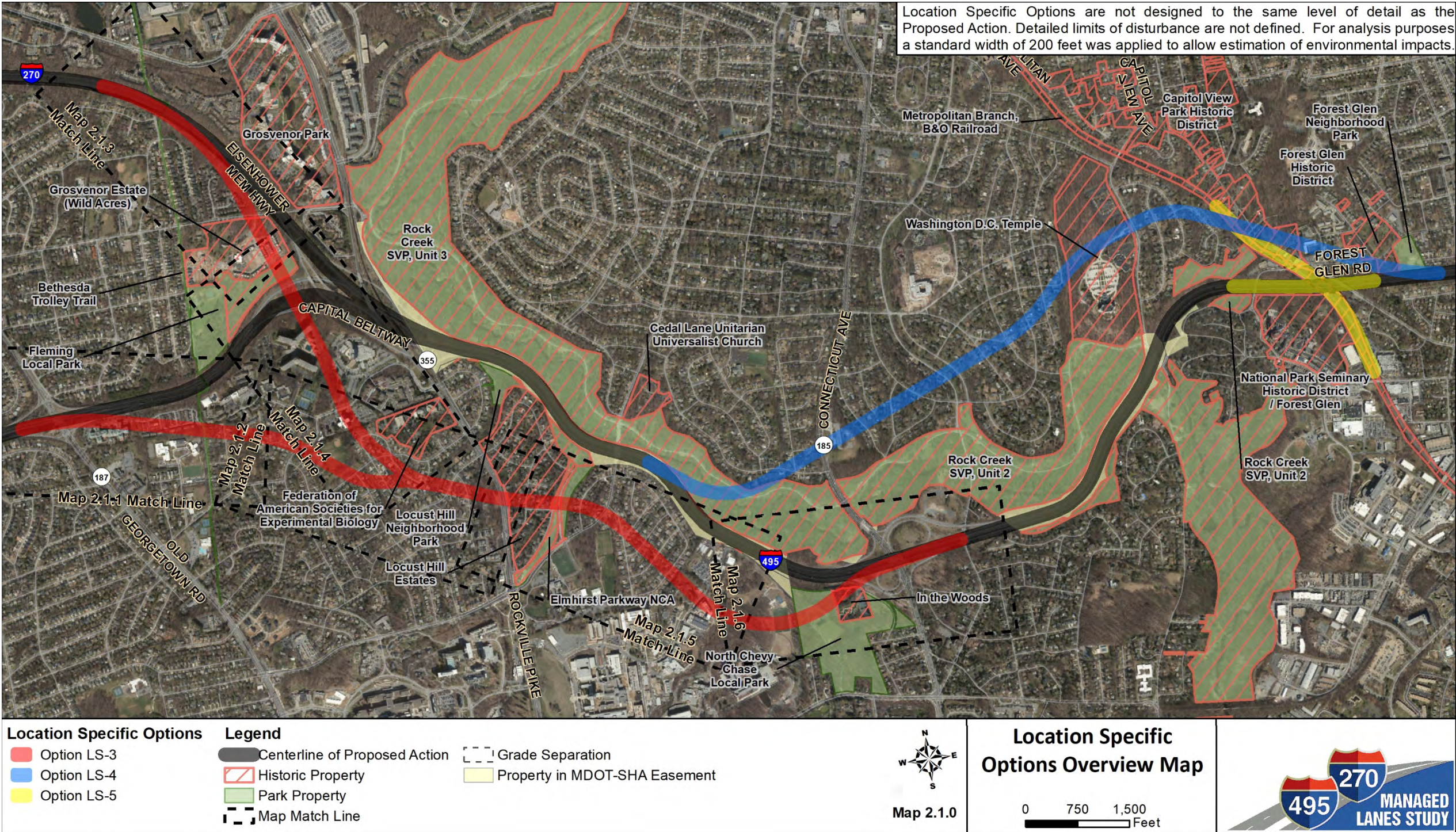


Figure 5-6: Detail of Location Specific Option LS-3 (Map 1 of 6)

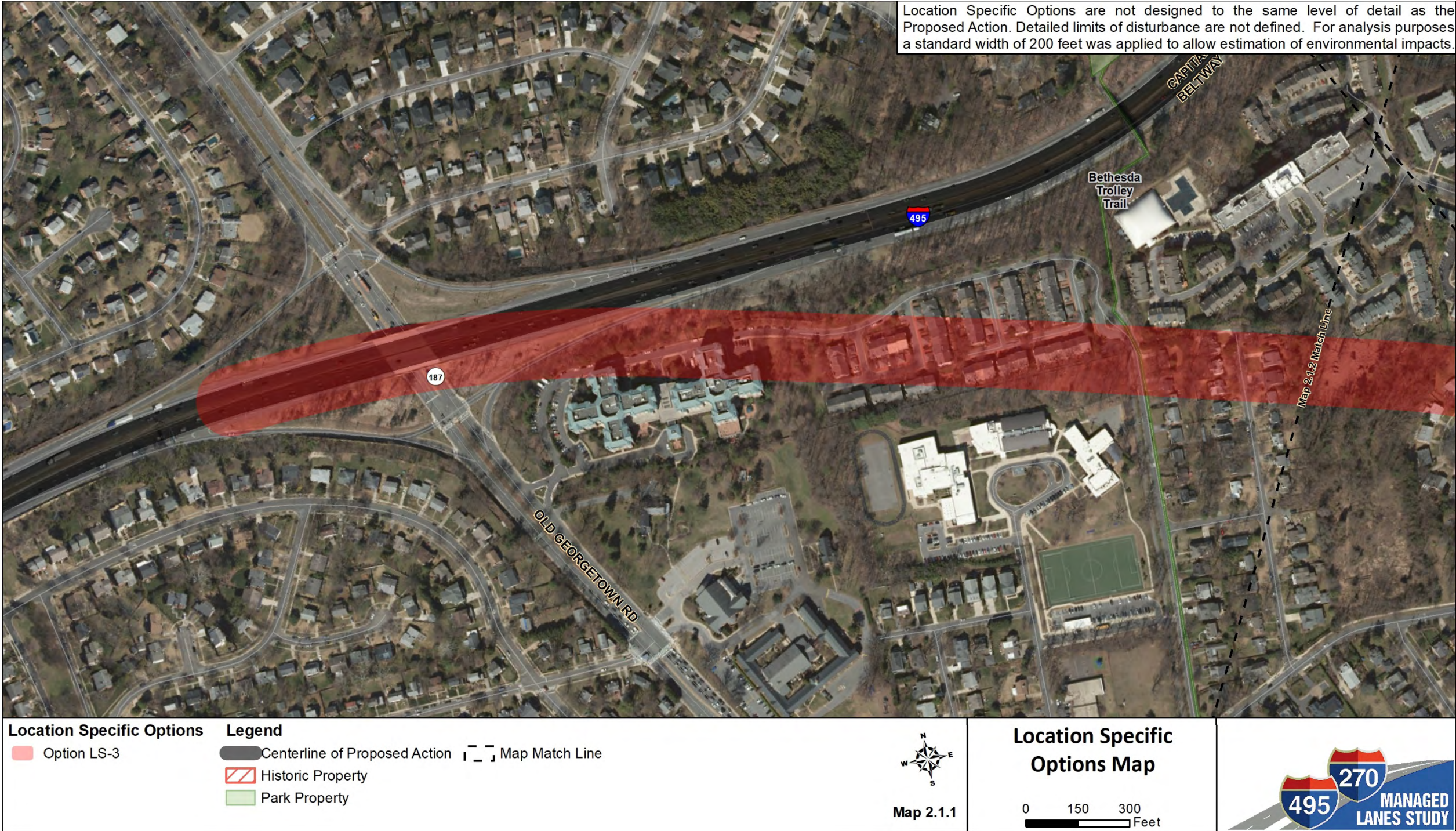


Figure 5-7: Detail of Location Specific Option LS-3 (Map 2 of 6)



Figure 5-8: Detail of Location Specific Option LS-3 (Map 3 of 6)

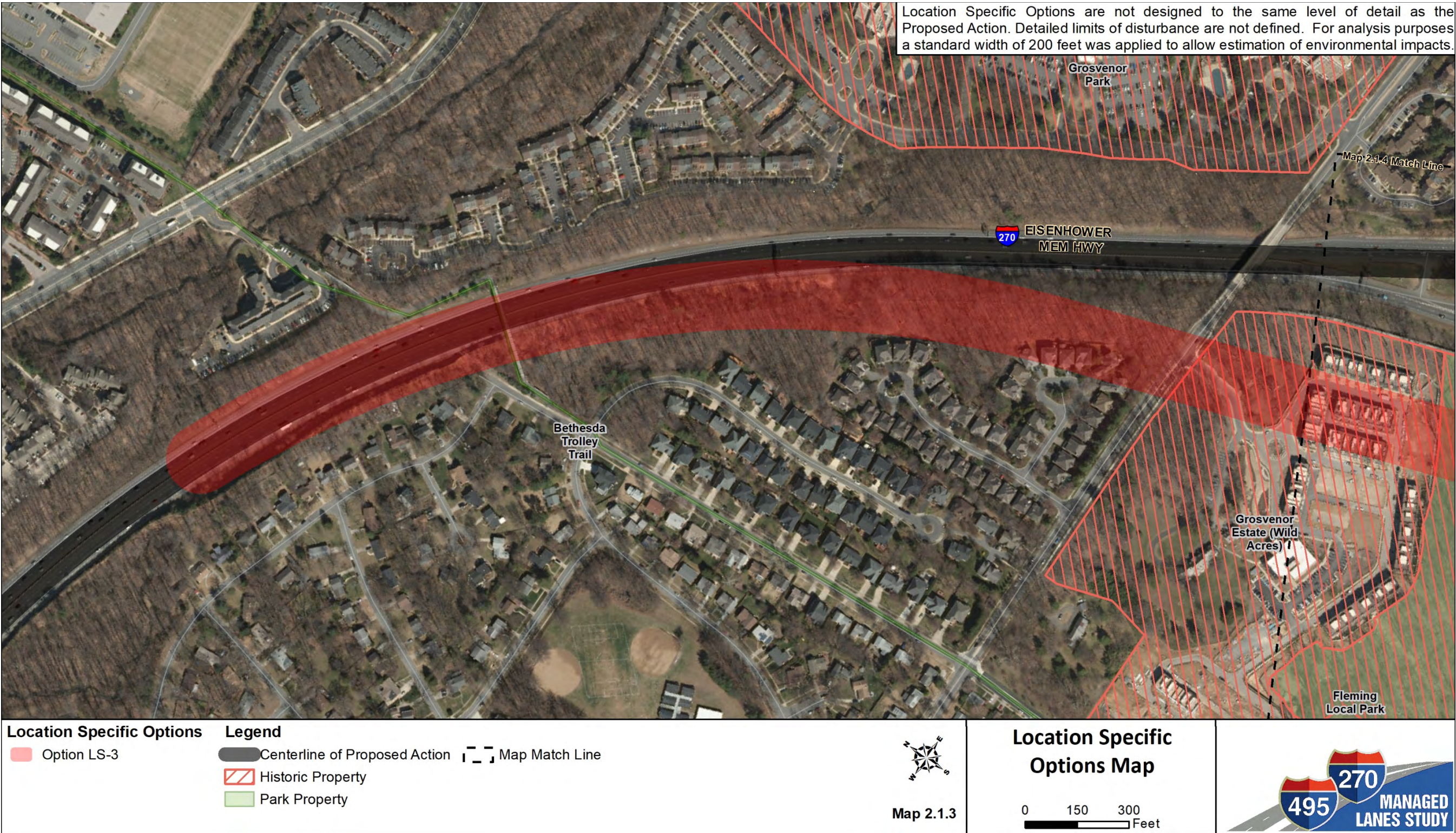


Figure 5-9: Detail of Location Specific Option LS-3 (Map 4 of 6)

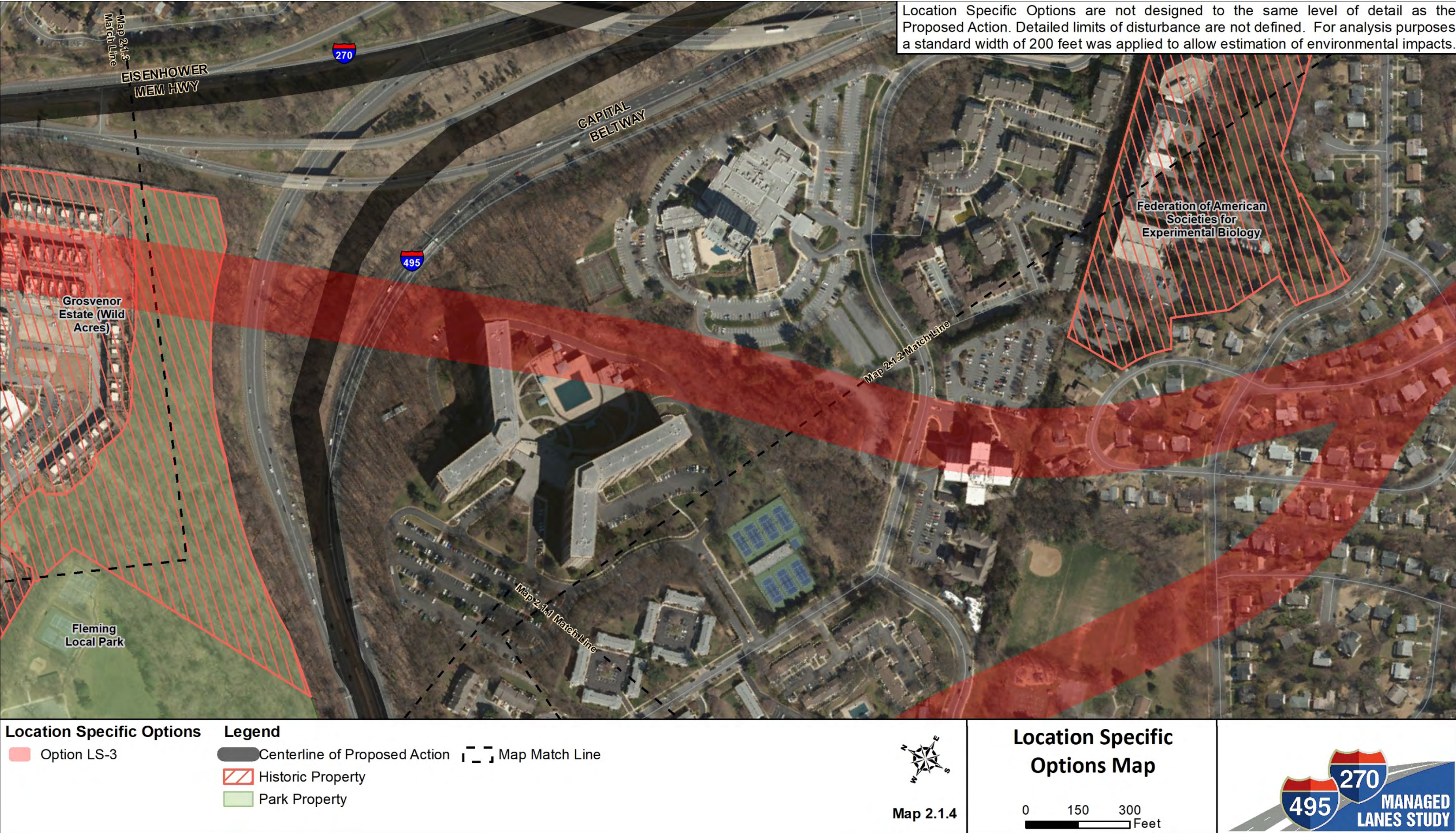


Figure 5-10: Detail of Location Specific Option LS-3 (Map 5 of 6)

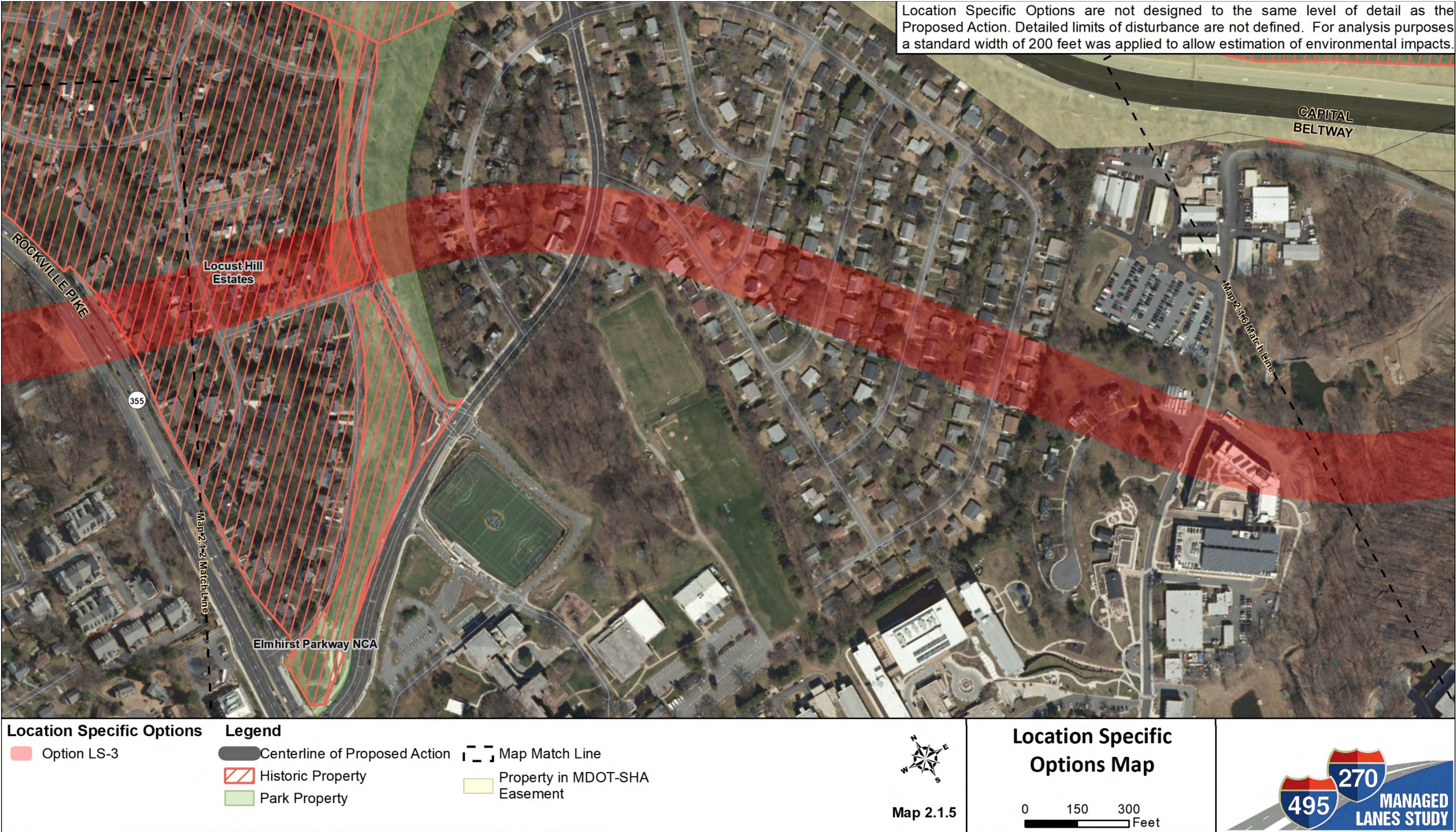
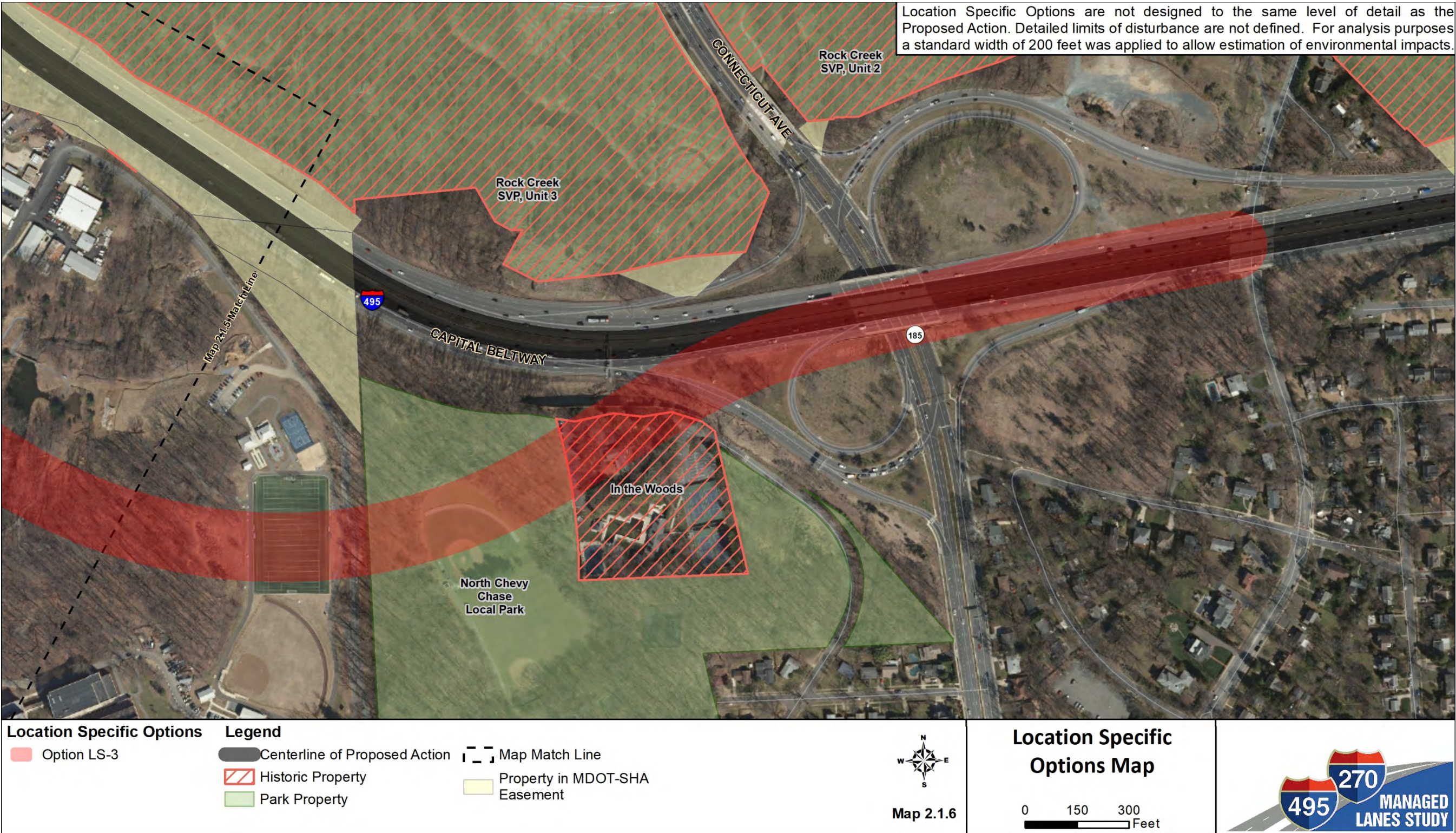


Figure 5-11: Detail of Location Specific Option LS-3 (Map 6 of 6)



5.1.4 Location Specific Option 4 (LS-4)

Section 4(f) Properties Avoided: Unit 2 of Rock Creek Stream Valley Park, National Park Seminary Historic District/Forest Glen, and Metropolitan Branch, B&O Railroad

A. Description

The Proposed Action would widen I-495 on existing alignment through Unit 2 of Rock Creek Stream Valley Park, as described in **Section 2.1.11** and expand the highway beyond the existing MDOT SHA easement. Option LS-4 would relocate mainline I-495 approximately 0.5 miles to the north to avoid a Section 4(f) use of Rock Creek Stream Valley Park, Unit 2 (**Figure 5-12** through **Figure 5-16**). LS-4 would avoid the Section 4(f) use of Rock Creek Stream Valley Park, Unit 2; National Park Seminary Historic District/Forest Glen; and Metropolitan Branch, B&O Railroad. Option LS-4 would avoid a Section 4(f) use of Metropolitan Branch, B&O Railroad through a grade separation. However, the alignment of Option LS-4 would bisect Rock Creek Stream Valley Park, Unit 3, and result in the increased Section 4(f) use of Forest Glen Historic District, Forest Glen Neighborhood Park, and the Washington DC Temple.

B. Analysis

In consideration of Least Overall Harm Factor 1, when compared to the Proposed Action Option LS-4 would result in 11 acres of additional impacts to Section 4(f) properties. Despite eliminating the use of the Section 4(f) properties listed in **Table 5-5**, total use of Section 4(f) properties would increase owing to the use of the properties listed in **Table 5-6**. This would result in less ability to mitigate adverse impacts to Section 4(f) properties. Additionally, in consideration of Least Overall Harm Factor 2, Option LS-4 would result in greater remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

In consideration of Least Overall Harm Factor 6, Option LS-4 would cause severe impacts to community resources, potentially resulting in the relocation of 257 properties. By comparison, the Proposed Action would not result in any relocations along this portion. In consideration of Least Overall Harm Factor 7, Option LS-4 would cost an estimated \$1.4 billion or \$700 million more than the Proposed Action on this portion of the project. Owing to the increase in the use of Section 4(f) property, severe impacts to community resources and substantial difference in cost, Option LS-4 would result in more harm than the Proposed Action.

Table 5-5: Properties Avoided by Option LS-4

Section 4(f) Property	Section 4(f) Avoidance (in Acres)
Rock Creek Stream Valley Park, Unit 2	0.4
National Park Seminary Historic District	1.2
Metropolitan Branch, B&O Railroad	8.8
Total Section 4(f) Property Avoided	10.4

Table 5-6: Properties Experiencing an Increase in Section 4(f) Use by Option LS-4

Section 4(f) Property	Increase in Section 4(f) Use (in Acres)
Rock Creek Stream Valley Park, Unit 3	14.3
Forest Glen Historic District	2.8
Forest Glen Neighborhood Park	1.2
Washington, DC Temple	3.0
Total Increase in Use of Section 4(f) Property	21.3

In consideration of Least Overall Harm Factor 3, Unit 2 of Rock Creek Stream Valley Park is a large, heavily used, multi-function recreational facility that provides opportunities to a wide segment of densely populated lower Montgomery County where no comparable facilities exist. The park is also historically significant for its association with early twentieth century environmental protection and regional planning efforts in Metropolitan Washington. As historic sites of statewide significance and parts of a large park that offers diverse recreational opportunities to a regional population, Units 2 and 3 of Rock Creek Stream Valley Park are the most significant Section 4(f) property along this portion of the Study.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 5, Option LS-4 would maintain the same typical section as the Proposed Action and meet the Purpose and Need of the Study to a degree comparable to the Proposed Action.

Figure 5-12: Overview Map of Location Specific Option LS-4

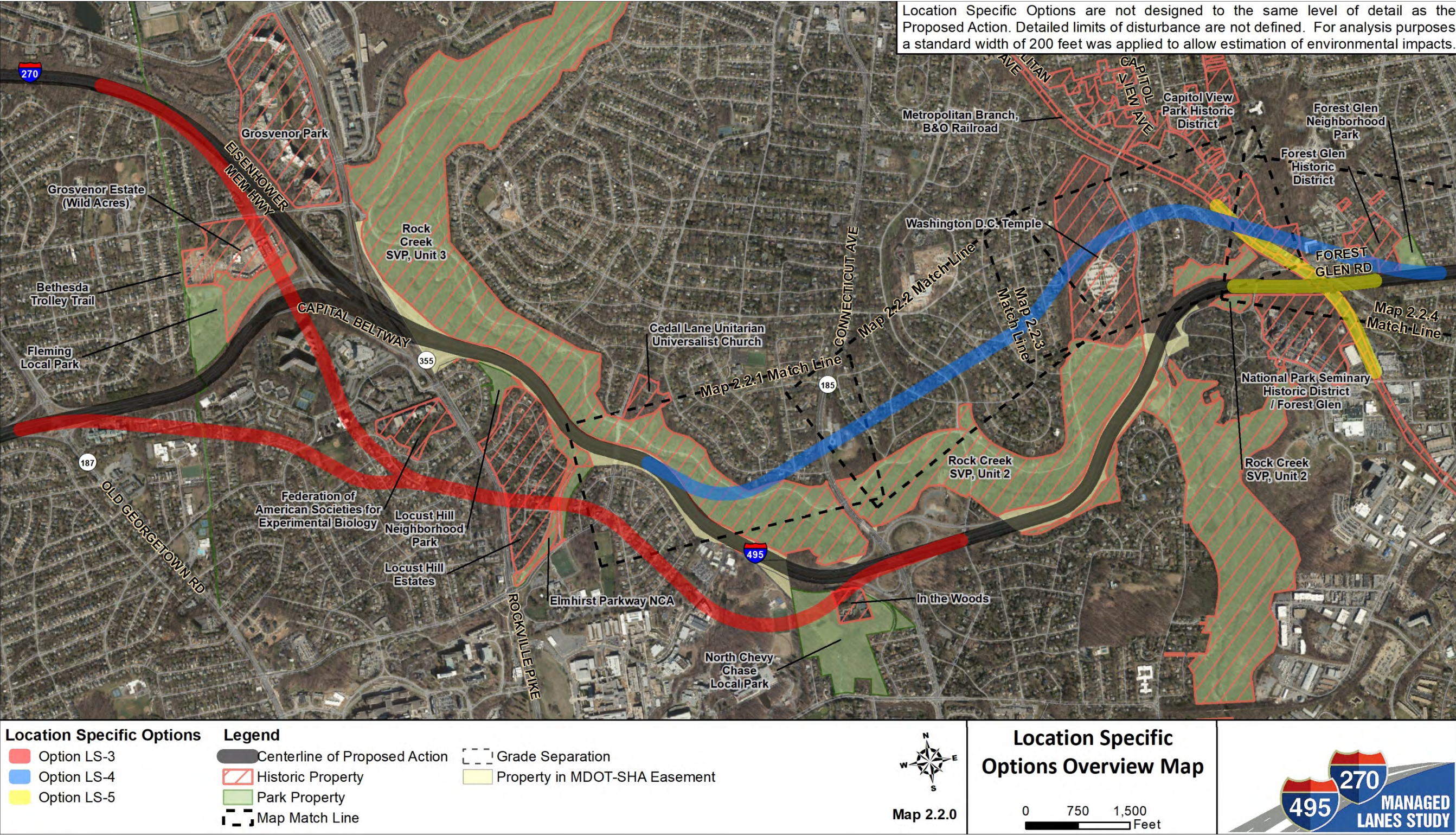


Figure 5-13: Detail of Location Specific Option LS-4 (Map 1 of 4)

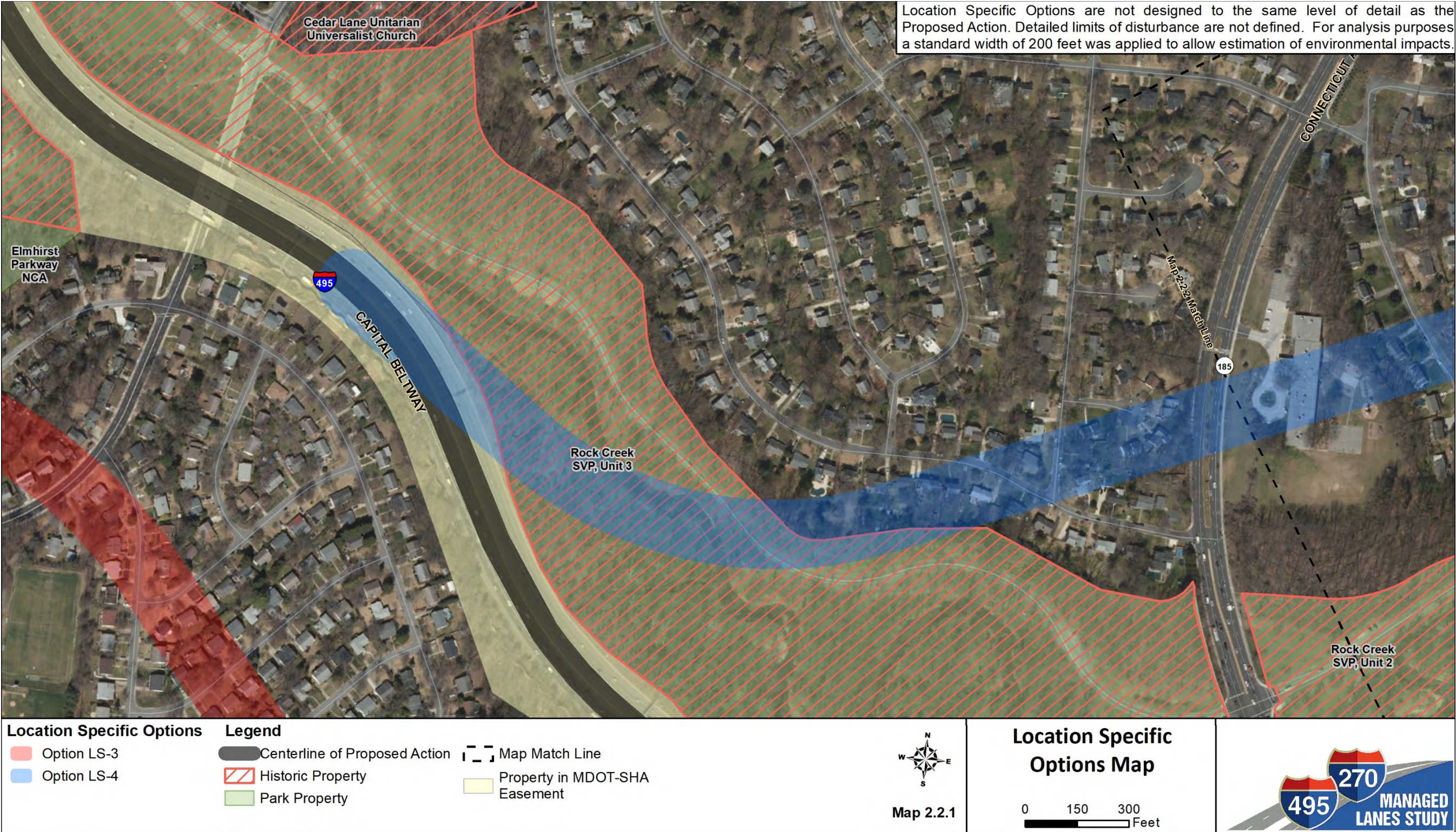


Figure 5-14: Detail of Location Specific Option LS-4 (Map 2 of 4)

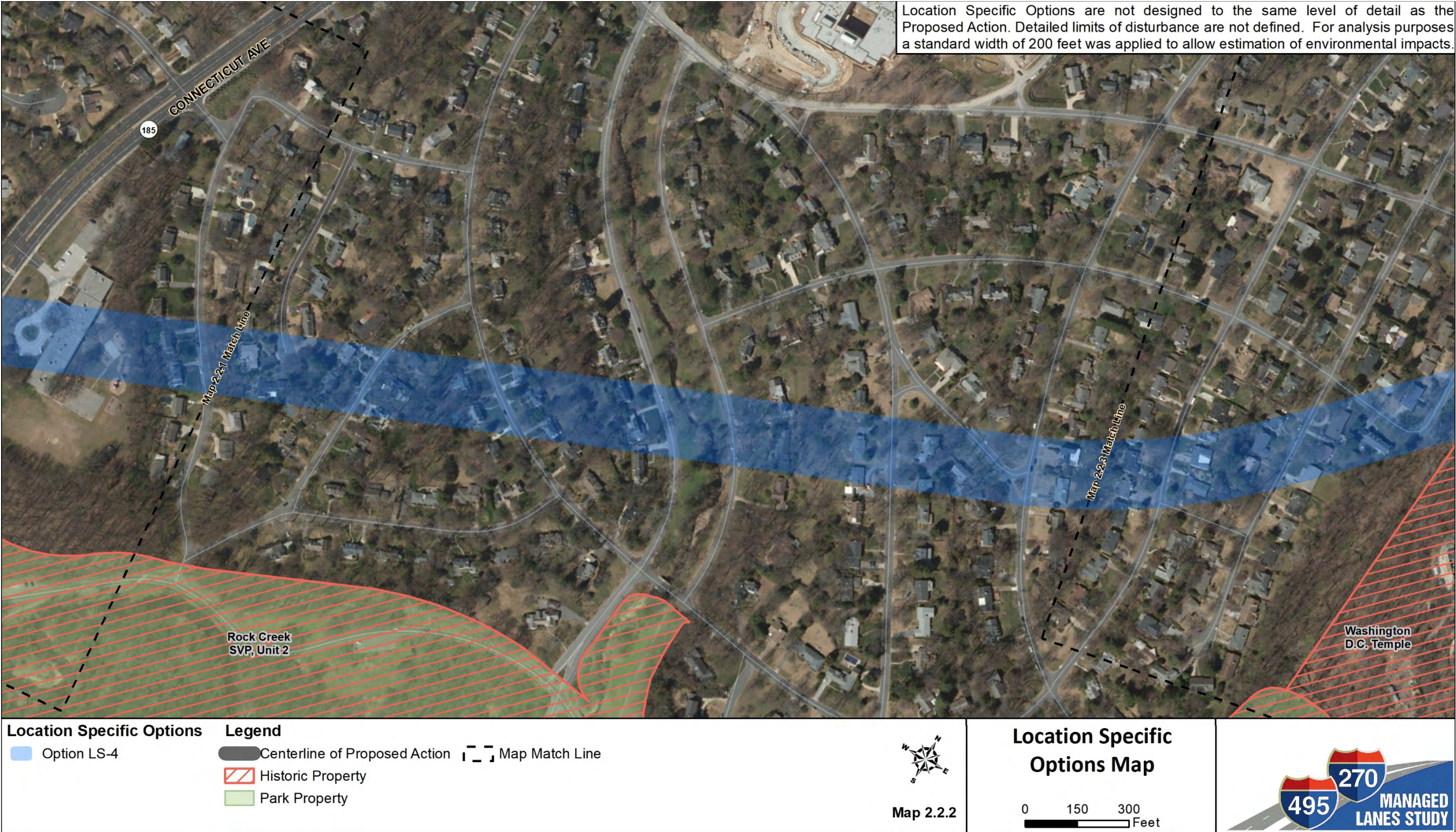


Figure 5-15: Detail of Location Specific Option LS-4 (Map 3 of 4)

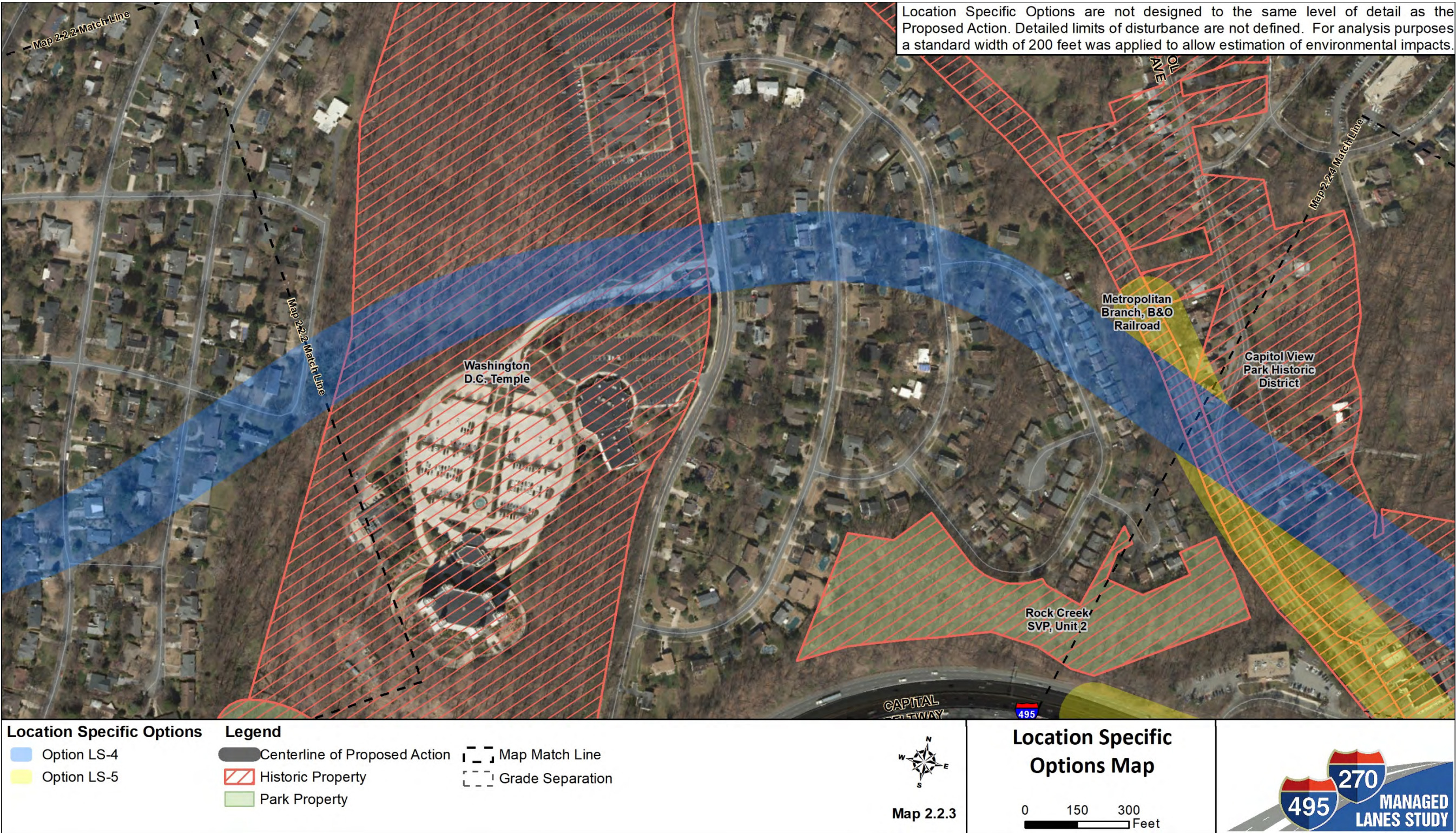
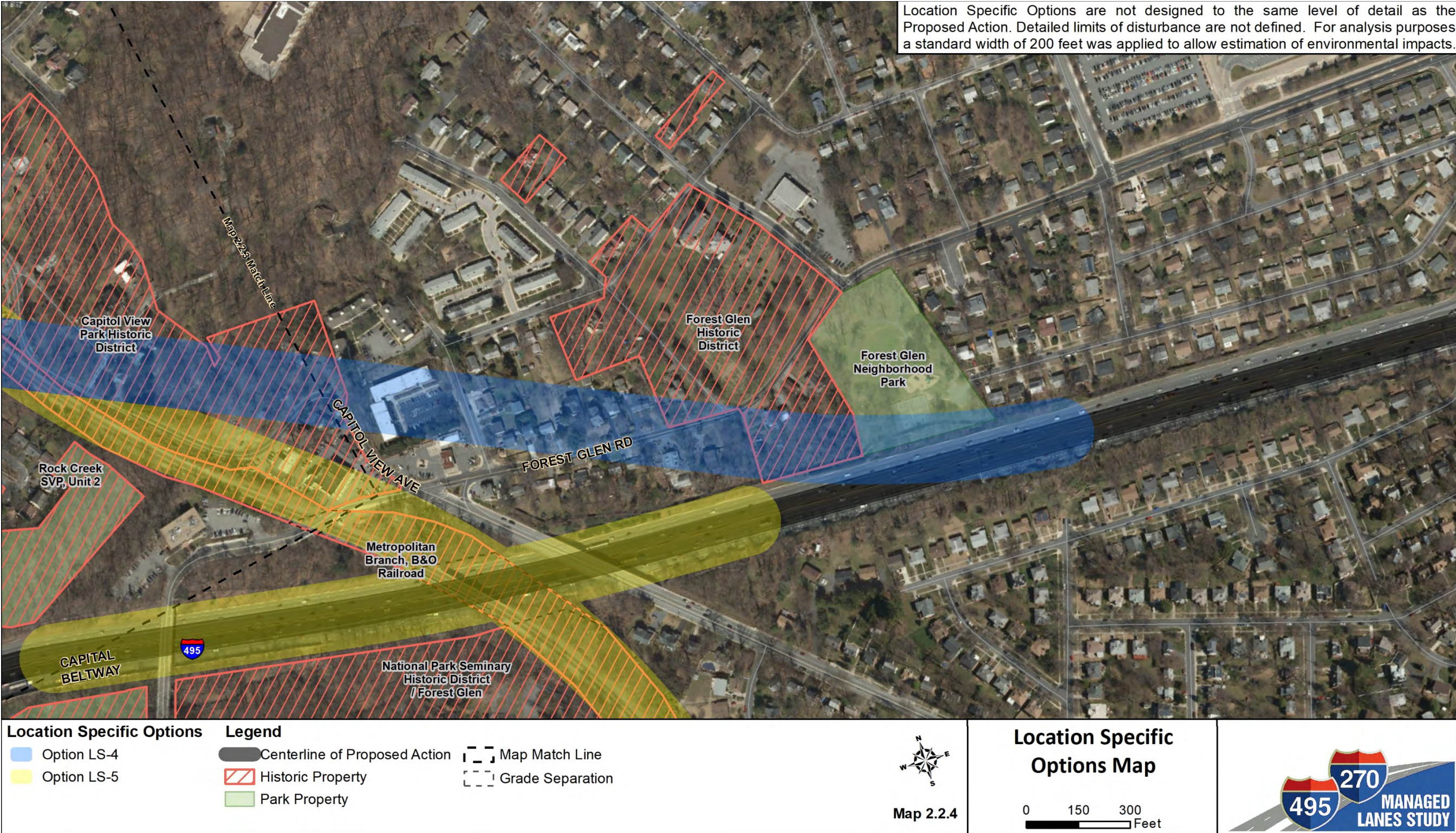


Figure 5-16: Detail of Location Specific Option LS-4 (Map 4 of 4)

Location Specific Options are not designed to the same level of detail as the Proposed Action. Detailed limits of disturbance are not defined. For analysis purposes a standard width of 200 feet was applied to allow estimation of environmental impacts.



5.1.5 Location Specific Option 5 (LS-5)

Section 4(f) Property Avoided: National Park Seminary Historic District/Forest Glen

A. Description

The Proposed Action would widen I-495 on existing alignment at this location. The widening would require replacing the bridges carrying the historic Metropolitan Branch, B&O Railroad and Linden Lane across I-495. The replacement and relocation of these bridges would impact National Park Seminary Historic District/Forest Glen as described in **Section 2.1.12**. Option LS-5 would relocate the replacement bridge carrying Metropolitan Branch, B&O Railroad further to the east to avoid impacts to National Park Seminary Historic District/Forest Glen (**Figure 5-17** and **Figure 5-18**).

B. Analysis

In consideration of Least Overall Harm Factor 1, when compared to the Proposed Action Option LS-5 would result in 3.8 acres of additional impacts to Section 4(f) properties. Despite eliminating the Section 4(f) use of National Park Seminary Historic District/Forest Glen (**Table 5-7**), total use of Section 4(f) properties would increase owing to the use of the properties listed in **Table 5-8**. This would result in less ability to mitigate adverse impacts to Section 4(f) properties. Additionally, in consideration of Least Overall Harm Factor 2, Option LS-5 would result in greater remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

In consideration of Least Overall Harm Factor 6, Option LS-5 would cause severe impacts to community resources, potentially resulting in the relocation of 16 properties, including the demolition of contributing properties within Capitol View Park Historic District. In consideration of Least Overall Harm Factor 7, Option LS-5 would cost approximately \$182 million, which is \$27 million more than the Proposed Action along this portion of the project. Owing to the increase in the use of Section 4(f) property, severe impacts to community resources, and substantial difference in cost, Option LS-5 would result in more harm than the Proposed Action.

Table 5-7: Properties Avoided by Option LS-5

Section 4(f) Property	Section 4(f) Avoidance (in Acres)
National Park Seminary Historic District	1.3
Total Section 4(f) Property Avoided	1.3

Table 5-8: Properties Experiencing an Increase in Section 4(f) Use by Option LS-5

Section 4(f) Property	Increase in Section 4(f) Use (in Acres)
Rock Creek Stream Valley Park, Unit 2	0.1
Capitol View Park Historic District	5.0
Total Increase in Use of Section 4(f) Property	5.1

In consideration of Least Overall Harm Factor 3, Unit 2 of Rock Creek Stream Valley Park is a large, heavily used, multi-function, recreational facility that provides opportunities to a wide segment of densely

populated lower Montgomery County where no comparable facilities exist. The park is also historically significant for its association with early twentieth century environmental protection and regional planning efforts in Metropolitan Washington. As an historic site of statewide significance and part of a large park that offers diverse recreational opportunities to a regional population, Unit 2 of Rock Creek Stream Valley Park is the most significant Section 4(f) property along this portion of the Study. In consideration of relative significance, National Park Seminary Historic District is an historically significant architectural folly comprising a unique location, setting, feeling, and collection of architecture. While National Park Seminary is a unique and significant historic site, it does not provide the recreational opportunities of Rock Creek Park. Comparatively, a small impact to Rock Creek Park under Option LS-5 would not result in a Section 4(f) use of significant features or attributes that characterize the property as an historic site or would negatively affect the qualities of the park that qualify the property for Section 4(f) protection. Capital View Park Historic District is a pre-World War II residential subdivision. When compared to Rock Creek Park and National Park Seminary Historic District, pre-World War II subdivisions are a relatively well represented Section 4(f) property type. However, Option LS-5 would result in significant impacts to Capitol View Park Historic District and would result in the demolition of multiple residential dwellings that contribute to the significance of the district.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation.

In consideration of Least Overall Harm Factor 5, Option LS-5 would maintain the same typical section as the Proposed Action and meet the Purpose and Need of the Study to a degree comparable to the Proposed Action.

Figure 5-17: Overview Map of Location Specific Option LS-5

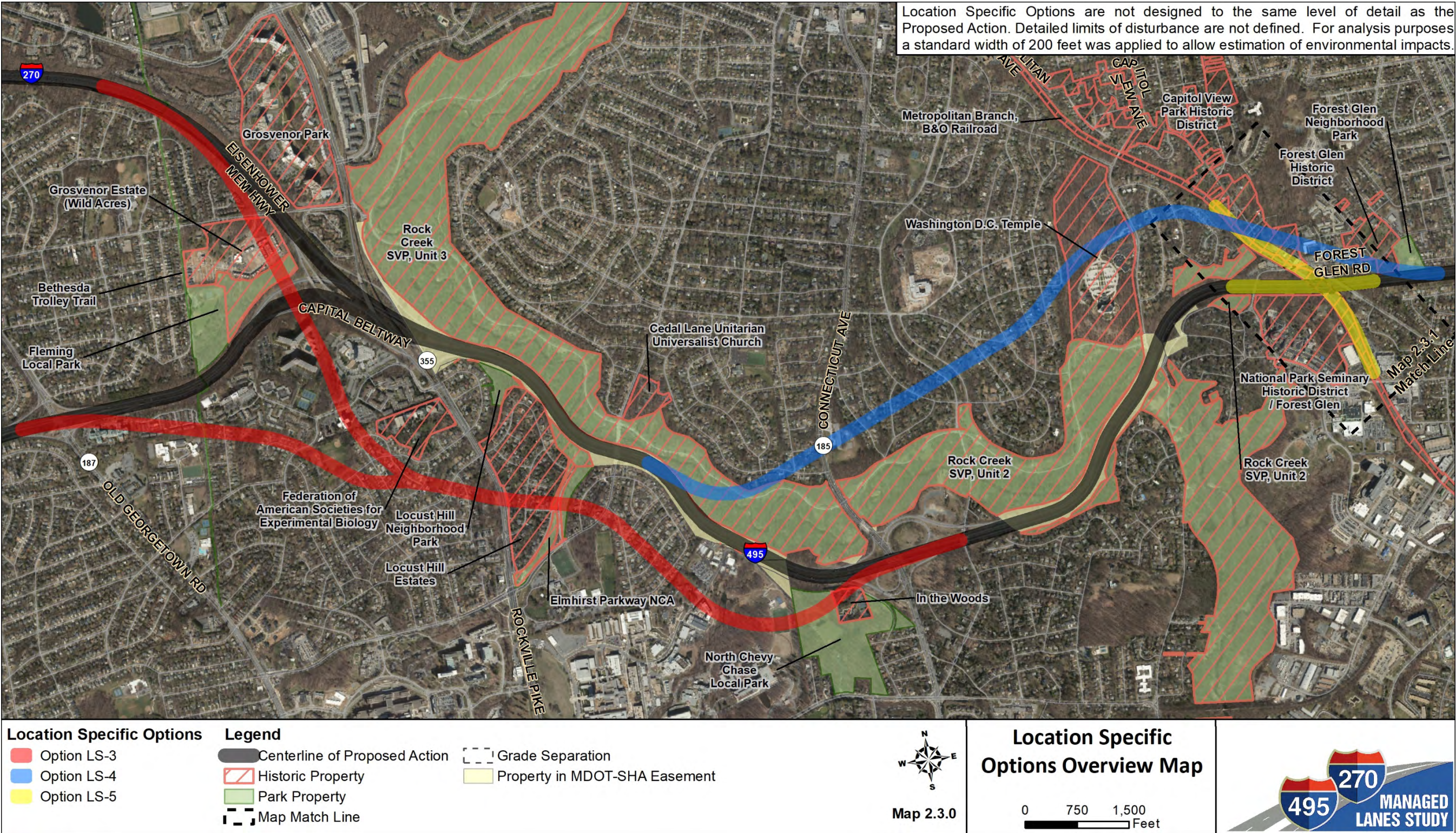
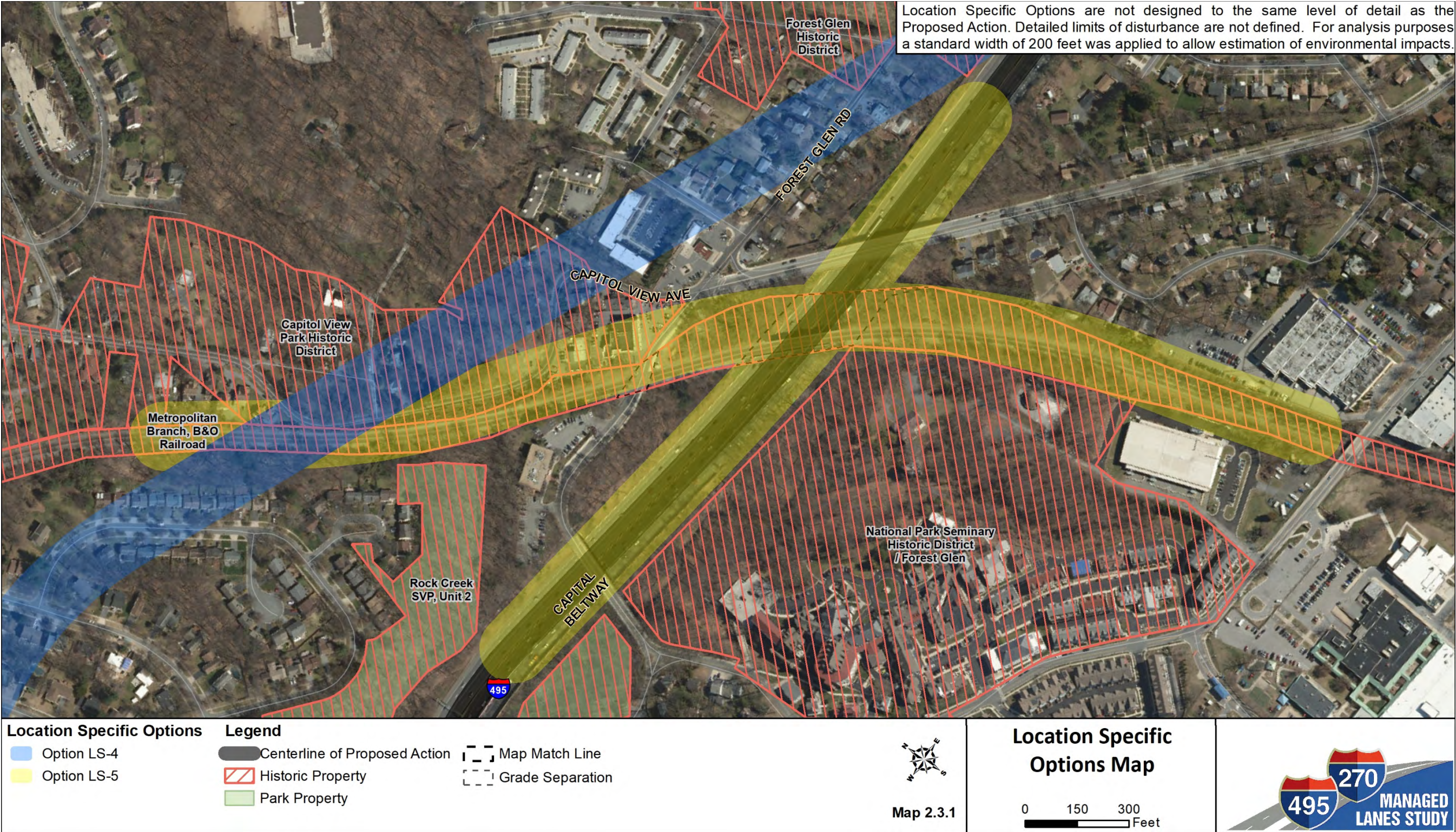


Figure 5-18: Detail of Location Specific Option LS-5



5.1.6 Location Specific Option 6 (LS-6)

Section 4(f) Properties Avoided: Sligo Creek Parkway, South Four Corners Neighborhood Park, Blair Local Park, Montgomery Blair High School Athletic Fields

A. Description

The Proposed Action would widen I-495 on existing alignment at this location. The widening would impact Sligo Creek Parkway, as described in **Section 2.1.17**. Option LS-6 would relocate I-495 approximately 0.7 miles to the south to avoid a Section 4(f) use of Sligo Creek Parkway (**Figure 5-19** through **Figure 5-23**). Avoidance would be achieved by bridging over the narrowest portion of Sligo Creek Parkway. Option LS-6 would maintain the same typical section as the Proposed Action while eliminating the Section 4(f) use of National Park Seminary Historic District/Forest Glen.

B. Analysis

In consideration of Least Overall Harm Factor 1, when compared to the Proposed Action Option LS-6 would result in 12 acres of additional impacts to Section 4(f) properties. Despite eliminating the use of the Section 4(f) properties listed in **Table 5-9**, total use of Section 4(f) properties would increase owing to the use of the properties listed in **Table 5-10**. This would result in less ability to mitigate adverse impacts to Section 4(f) properties. Additionally, in consideration of Least Overall Harm Factor 2, Option LS-6 would result in greater remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection. While avoiding impacts to four Section 4(f) properties, the additional impacts to Indian Spring Club Estates and Indian Spring Country Club would be considerable and result in the demolition of dozens of contributing residential dwellings. By comparison, the impacts to Sligo Creek Stream Valley Park from the Proposed Action are to landscaping features that can be more readily mitigated.

In comparison to the Proposed Action and in consideration of Least Overall Harm factor 6, Option LS-6 would cause severe impacts to community resources, potentially resulting in the relocation of 547 properties. Implementing Option LS-6 would also impact the established land use patterns, and roadway infrastructure in multiple communities, potentially cutting off access to these areas. In consideration of Least Overall Harm factor 7, Option LS-6 would cost approximately \$2 billion, which is \$1.2 billion more than the Proposed Action along this portion of the project. In comparison to the Proposed Action, Option LS-6 would not be a reasonable public expenditure. Owing to the increase in the use of Section 4(f) property, severe impacts to community resources, and substantial difference in cost, Option LS-6 would result in more harm than the Proposed Action.

Table 5-9: Properties Avoided by Option LS-6

Section 4(f) Property	Section 4(f) Avoidance (in Acres)
Sligo Creek Parkway	4.1
South Four Corners Park	0.1
Blair Local Park	0.4
Montgomery Blair Senior High School Athletic Fields	1.4
Total Acreage of Section 4(f) Properties Avoided	6.0

Table 5-10: Properties Experiencing an Increase in Section 4(f) Use by Option LS-6

Section 4(f) Property	Increase in Section 4(f) Use (in Acres)
Indian Spring Club Estates and Indian Spring Country Club	18.0
Total Increase in Use of Section 4(f) Property	18.0

In consideration of Least Overall Harm Factor 3, Sligo Creek Stream Valley Park is a heavily used recreational facility in the lower portion of Montgomery County. It is also historically significant for its association with social history, recreation, transportation, and conservation during the first half of the twentieth century. Owing to its location, heavy use and historical significance, Sligo Creek Stream Valley Park is the most significant Section 4(f) property along this portion of the Study. Montgomery Blair High School Athletic Fields and Blair Local Park provide a diversity of recreational opportunities to the broader community and are also significant Section 4(f) properties.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation.

In consideration of Least Overall Harm Factor 5, Option LS-6 would maintain the same typical section as the Proposed Action and although longer in distance, would meet the Purpose and Need of the Study to a degree comparable to the Proposed Action.

Figure 5-19: Overview Map of Location Specific Option LS-6

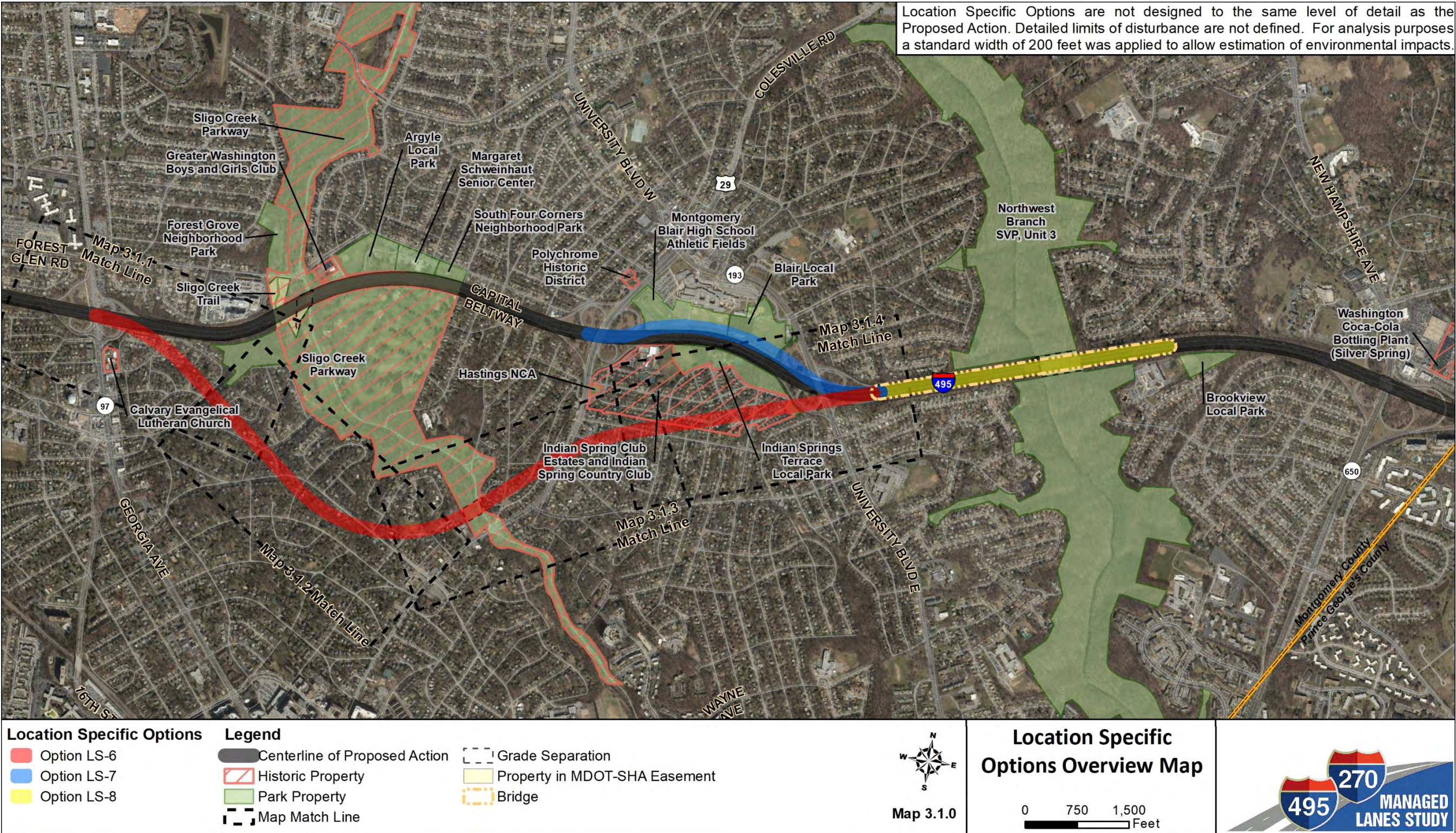


Figure 5-20: Detail of Location Specific Option LS-6 (Map 1 of 4)



Figure 5-21: Detail of Location Specific Option LS-6 (Map 2 of 4)

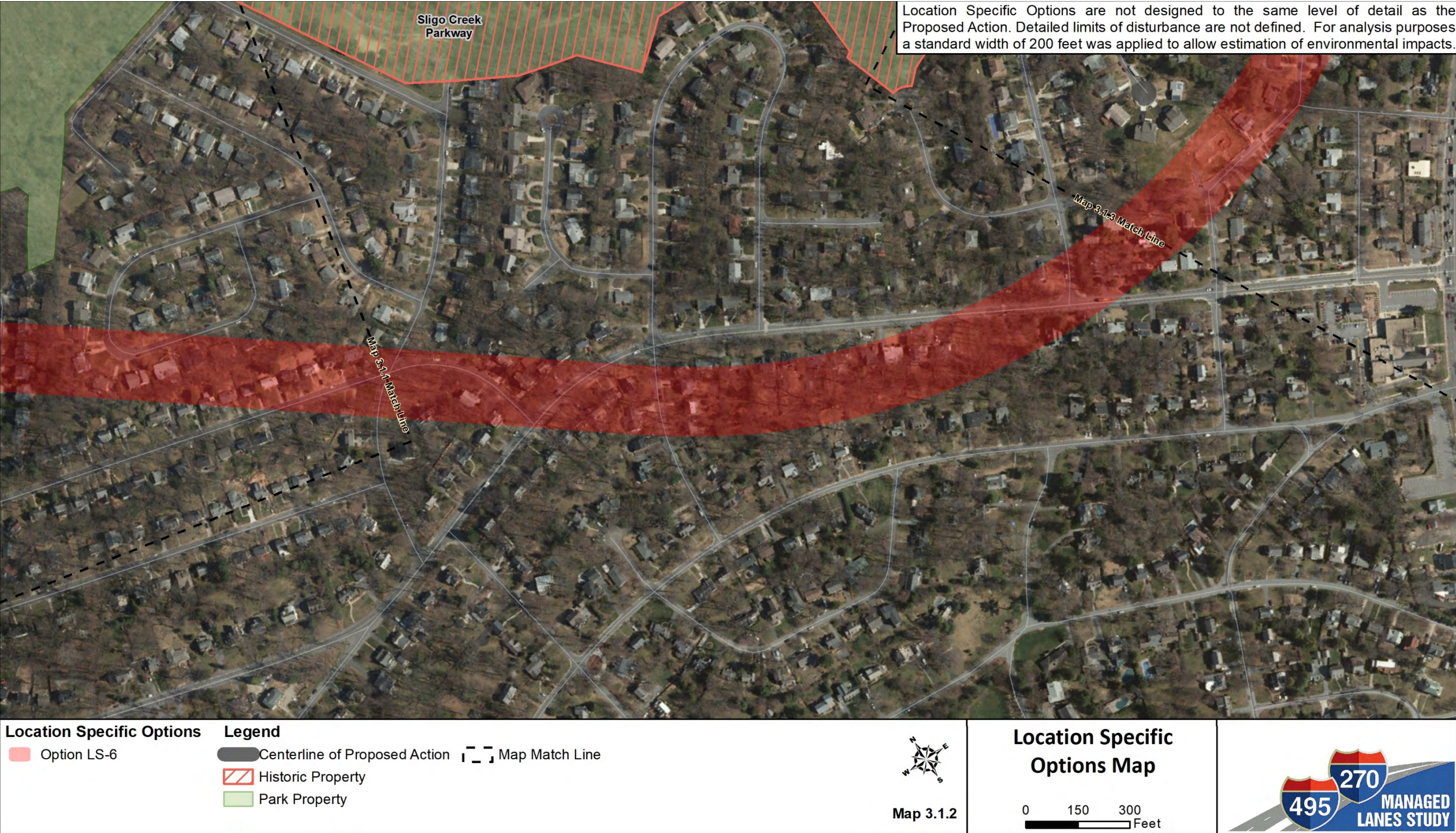


Figure 5-22: Detail of Location Specific Option LS-6 (Map 3 of 4)

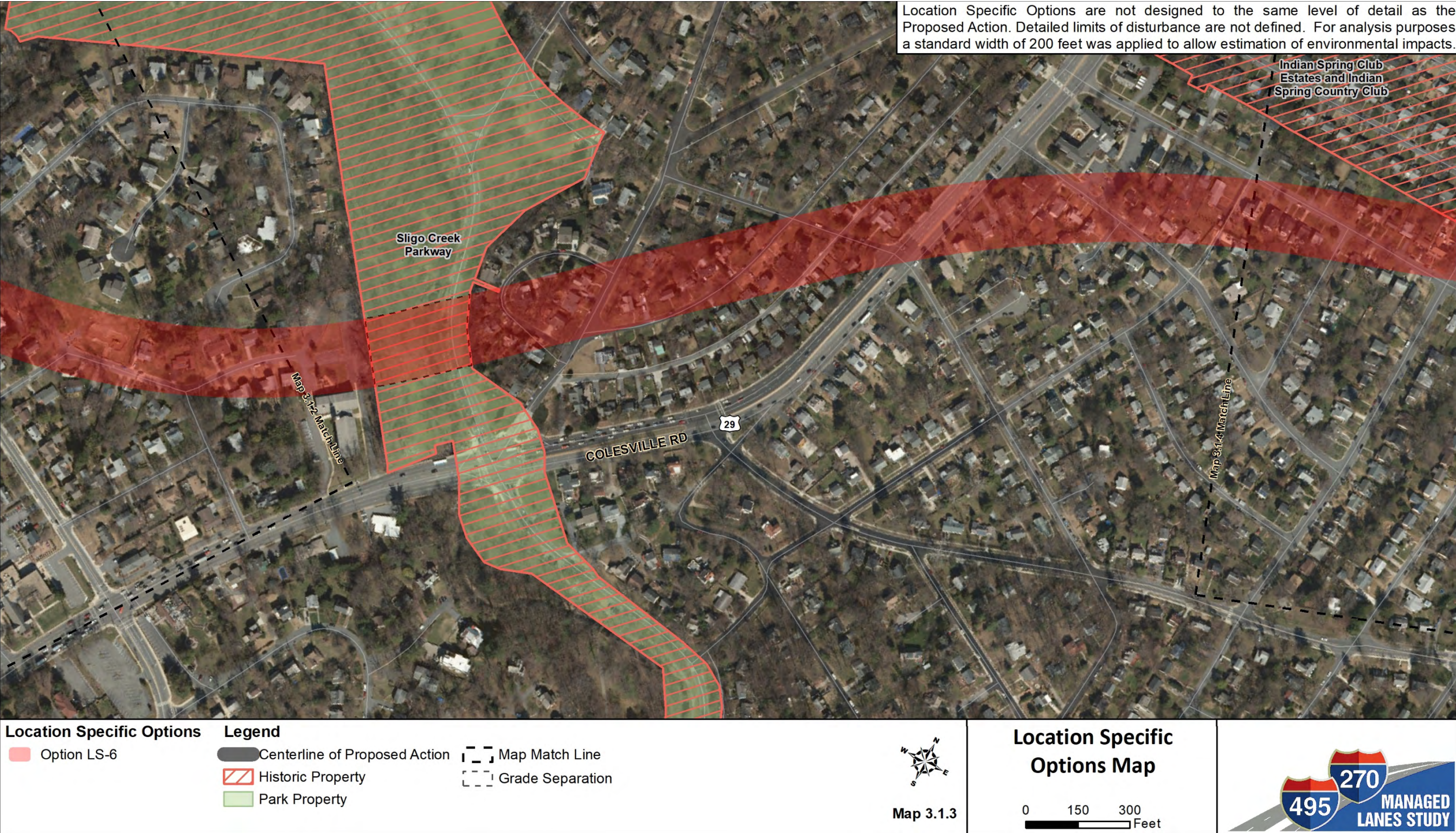
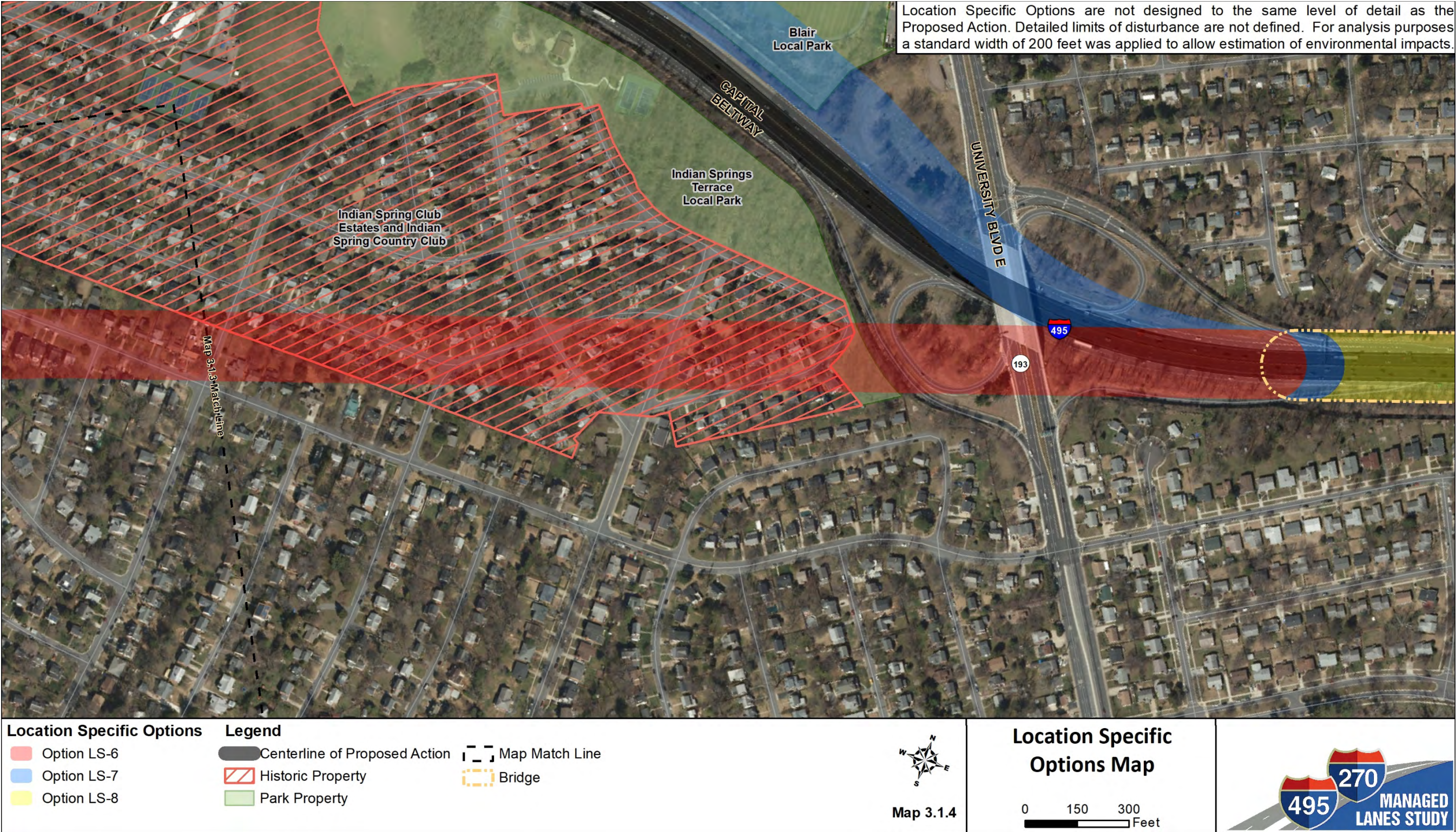


Figure 5-23: Detail of Location Specific Option LS-6 (Map 4 of 4)



5.1.7 Location Specific Option 7 (LS-7)

Section 4(f) Properties Avoided: Indian Spring Club Estates and Indian Spring Country Club and Indian Springs Terrace Local Park.

A. Description

The Proposed Action would widen I-495 on existing alignment at this location. The proposed improvements would result in impacts to Indian Spring Club Estates and Indian Spring Country Club (**Section 2.1.21**) and Indian Springs Terrace Local Park (**Section 2.1.22**). Option LS-7 would relocate I-495 approximately 65 feet to the north while maintaining the same typical section as the Proposed Action (**Figure 5-24** through **Figure 5-26**). Option LS-7 would eliminate impacts to two Section 4(f) properties: Indian Spring Club Estates and Indian Spring Country Club and Indian Springs Terrace Local Park.

B. Analysis

In consideration of Least Overall Harm Factor 1, when compared to the Proposed Action Option LS-7 would result in 0.9 acre of additional impacts to Section 4(f) properties. Despite eliminating the Section 4(f) use of the properties listed in **Table 5-11**, total use of Section 4(f) properties would increase owing to the use of the properties listed in **Table 5-12**. This would result in less ability to mitigate adverse impacts to Section 4(f) properties. Additionally, in consideration of Least Overall Harm Factor 2, Option LS-7 would result in greater remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

In consideration of Least Overall Harm Factor 6, Option LS-7 would cause severe impacts to community resources, potentially eliminating the Montgomery Blair High School Athletic Fields and a significant portion of the recreational facilities in Blair Local Park. The impacts to these parks would require the complete and challenging redesign of the athletic fields in order to provide adequate playing fields to support sports for both the broader community and high school students. The large area of impact to these athletic fields under Option LS-7 would require reconfiguring the site plan to convert the existing parking lot into athletic fields and realigning the exit and entry to the school to construct a new parking garage. In consideration of Least Overall Harm Factor 7, Option LS-7 would cost approximately \$410 million, which is \$250 million more than the Proposed Action along this portion of the project. Owing to the increase in the use of Section 4(f) property, severe impacts to community resources, and substantial difference in cost, Option LS-7 would result in more harm than the Proposed Action.

Table 5-11: Section 4(f) Properties Avoided by LS-7

Section 4(f) Property	Section 4(f) Avoidance (in Acres)
Indian Spring Club Estates and Indian Spring Country Club Historic District	1.2
Indian Spring Terrace Local Park	1.4
Total Section 4(f) Property Avoided	2.6

Table 5-12: Properties Experiencing an Increase in Section 4(f) Use by Option LS-7

Section 4(f) Property	Increase in Section 4(f) Use (in Acres)
Montgomery Blair High School Athletic Fields	1.7
Blair Local Park	1.8
Total Increase in Use of Section 4(f) Property	3.5

In consideration of Least Overall Harm Factor 3, Montgomery Blair High School Athletic Fields and Blair Local Park provide a diversity of recreational opportunities in densely populated lower Montgomery County. For this reason, these parks are the most significant Section 4(f) properties along this portion of the project. Indian Spring Club Estates and Indian Spring Country Club is historically significant as an example of pre-World War II middle class residential architecture. Significant examples of this type of suburban residential historic districts from this time period and that retain integrity are rare. For this reason, the historic district is more significant as a Section 4(f) property than Indian Springs Terrace Local Park.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation.

In consideration of Least Overall Harm Factor 5, Option LS-7 would maintain the same typical section as the Proposed Action and meet the Purpose and Need of the Study to a degree comparable to the Proposed Action.

Figure 5-24: Overview Map of Location Specific Option LS-7

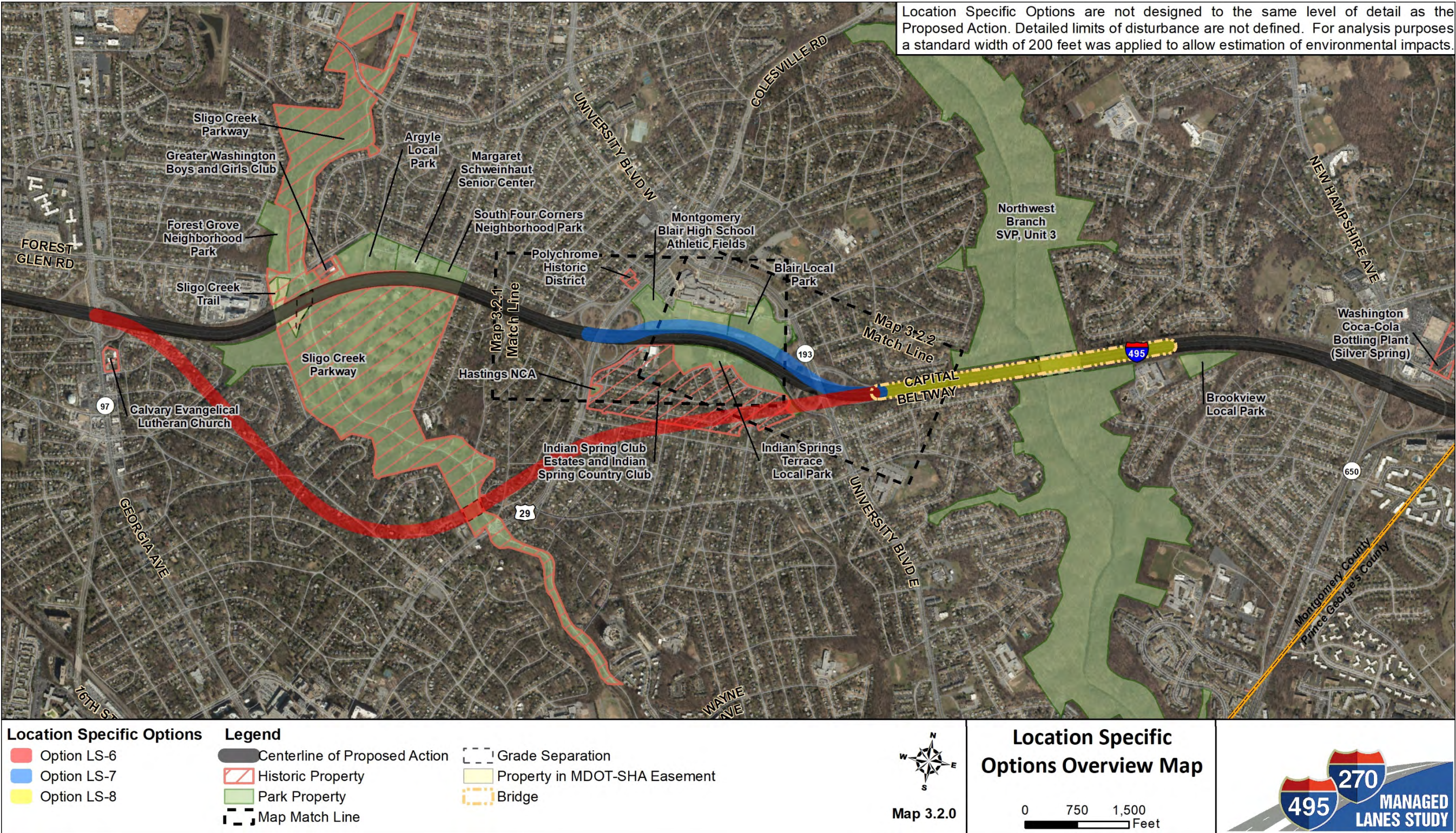
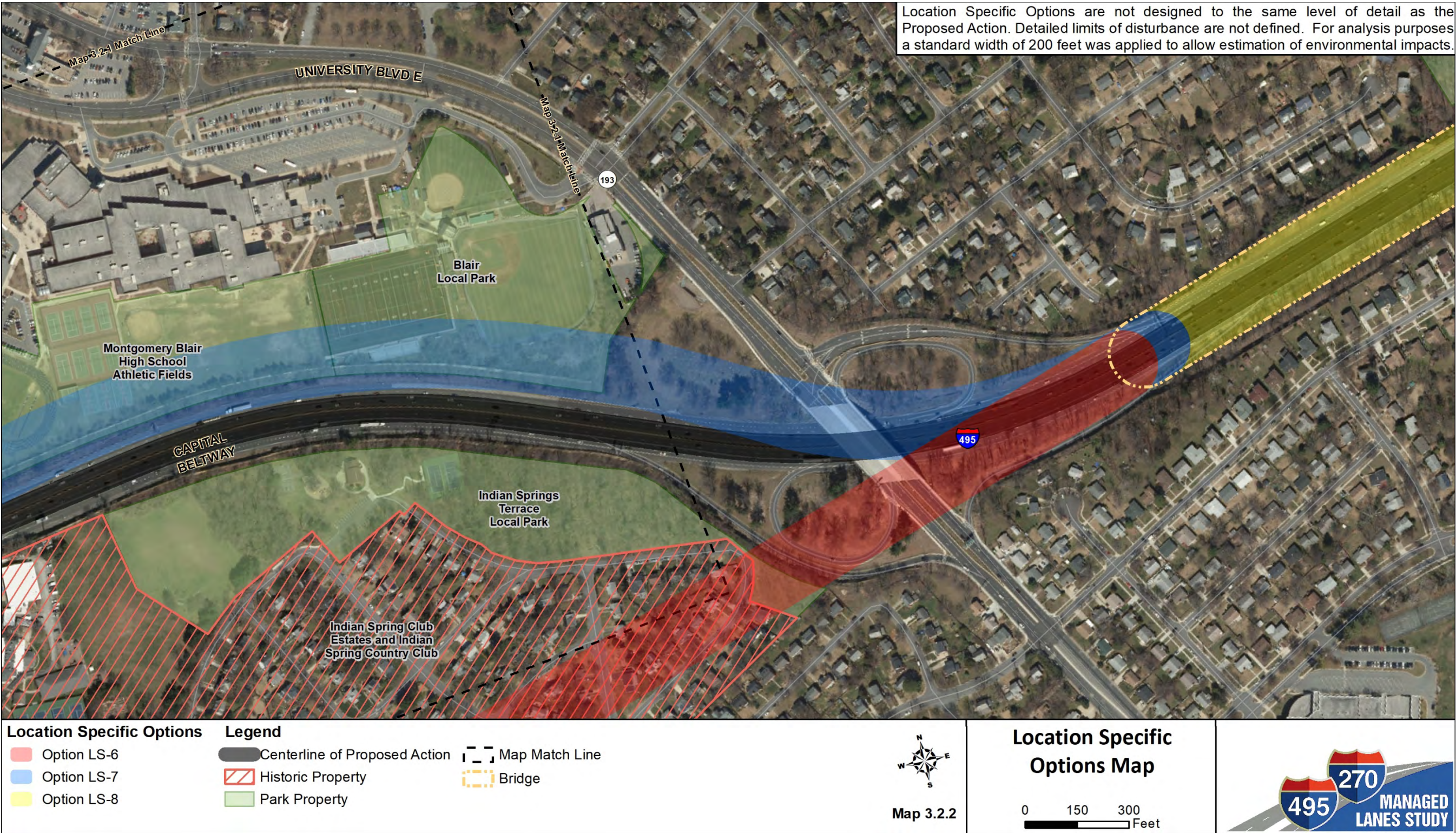


Figure 5-25: Detail of Location Specific Option LS-7 (Map 1 of 2)



Figure 5-26: Detail of Location Specific Option LS-7 (Map 2 of 2)



5.1.8 Location Specific Option 8 (LS-8)

Section 4(f) Property Avoided: Unit 3 of Northwest Branch Stream Valley Park

A. Description

The Proposed Action would replace the bridge carrying I-495 across Unit 3 of Northwest Branch Stream Valley Park. The proposed improvements would result in impacts to the park, as described in **Section 2.1.23**. Option LS-8 would involve constructing a longer bridge across Northwest Branch Stream Valley Park in order to avoid impacts to the Section 4(f) property (**Figure 5-27** through **Figure 5-29**). The bridge would be constructed on the existing alignment. Staging and stockpiling would take place offsite, outside the park boundary.

The greatest challenge would be maintaining operation of the existing highway while building the bridge from the surface of the roadway in a manner that does not result in permanent impacts to Northwest Branch Stream Valley Park. This would be accomplished through a lengthy and complicated maintenance of traffic plan that would shift traffic on I-495 to one bridge while construction takes place on the newly proposed span. This would result in significant congestion over a lengthy period of time. Under Option LS-8, to avoid a Section 4(f) use of the park, the existing bridges would be stabilized and remain in place.

B. Analysis

In consideration of Least Overall Harm Factor 7, implementing Option LS-8 would cost \$270 million, which is \$200 million more than the Proposed Action along this portion of the project. Stabilizing rather than removing the existing bridges would incur additional maintenance costs over time. Despite avoiding the Section 4(f) use of Northwest Branch Stream Valley Park, owing to the substantial difference in cost, Option LS-8 would result in greater harm than the Proposed Action.

In consideration of Least Overall Harm Factor 1, as it avoids the use of Northwest Branch Stream Valley Park when compared to the Proposed Action Option LS-8 would have greater ability to mitigate adverse impacts to Section 4(f) property. In consideration of Least Overall Harm Factor 2, Option LS-8 would result in less remaining harm to the protected activities, attributes, and features that qualify Section 4(f) property for protection. In consideration of Least Overall Harm Factor 3, Option LS-8 would avoid the use of Northwest Branch Stream Valley Park. There are no other Section 4(f) properties in the vicinity.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 5, Option LS-8 would meet the Purpose and Need to a degree that is comparable to the Proposed Action.

In consideration of Least Overall Harm Factor 6, by constructing the replacement bridge from the surface of the highway, Option LS-8 would avoid impacts to Northwest Branch and the associated flood plain and wetland systems, forest resources, as well as the flora and fauna within Northwest Branch Stream Valley Park. Construction would also be staged offsite. Impacts to Northwest Branch Stream Valley Park from the Proposed Action are largely related to constructability – both building the new structure and removing the current bridges. By comparison, implementing Option LS-8 would largely avoid ecological impacts



within Northwest Branch Stream Valley Park. Neither the Proposed Action nor Option LS-8 would result in any relocations along this portion of the project.

Figure 5-27: Overview Map of Location Specific Option LS-8

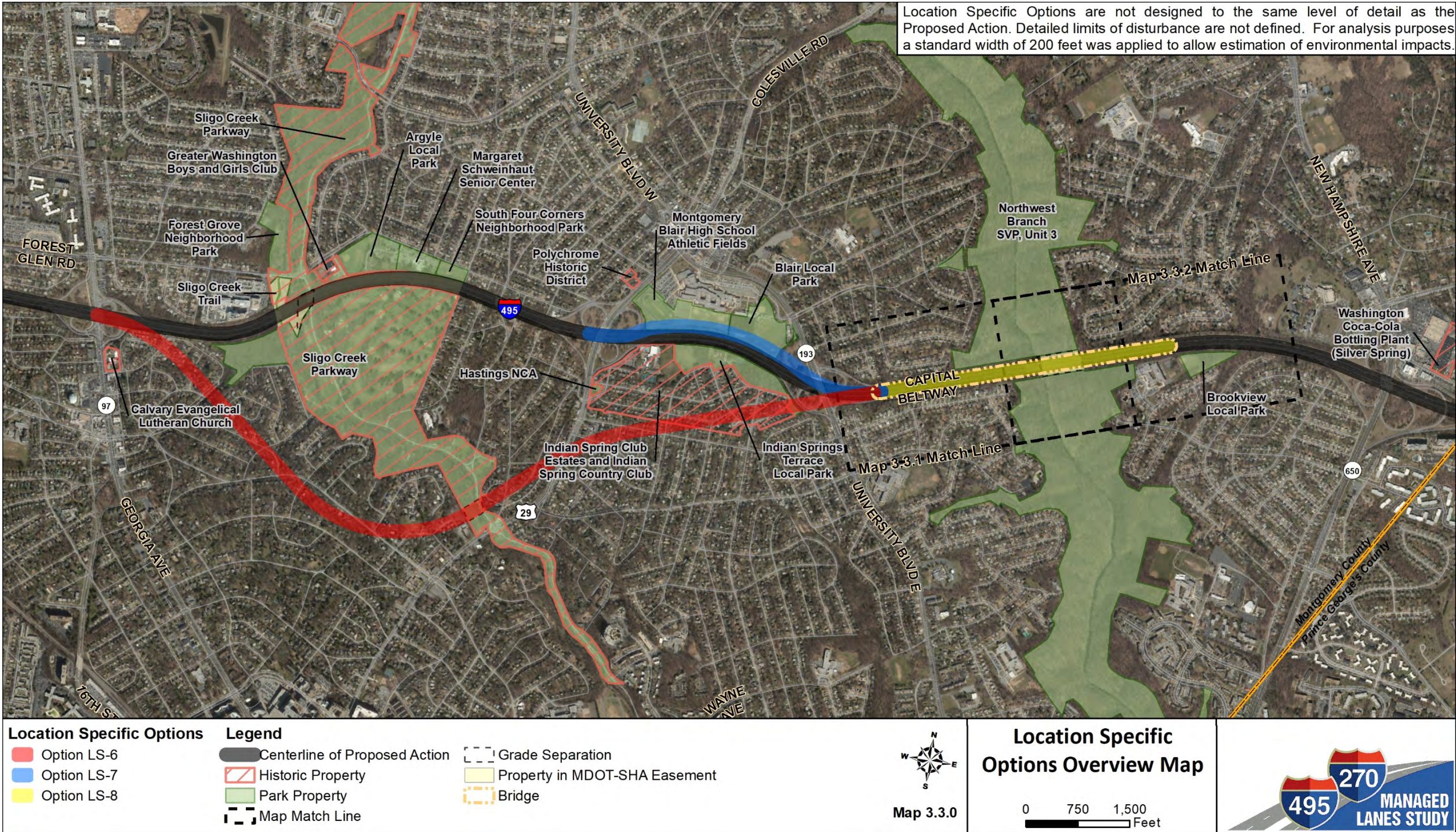


Figure 5-28: Detail of Location Specific Option LS-8 (Map 1 of 2)

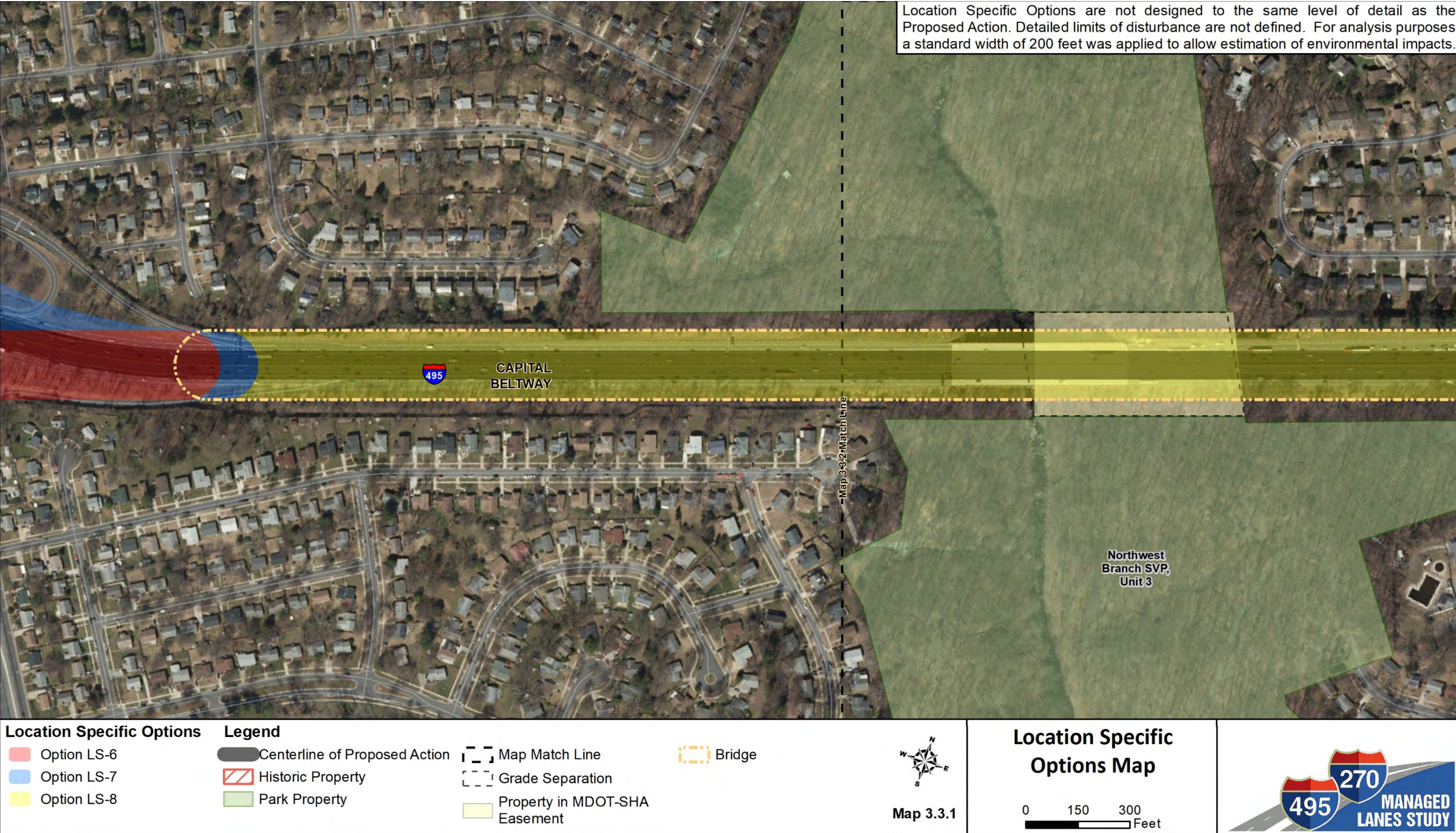
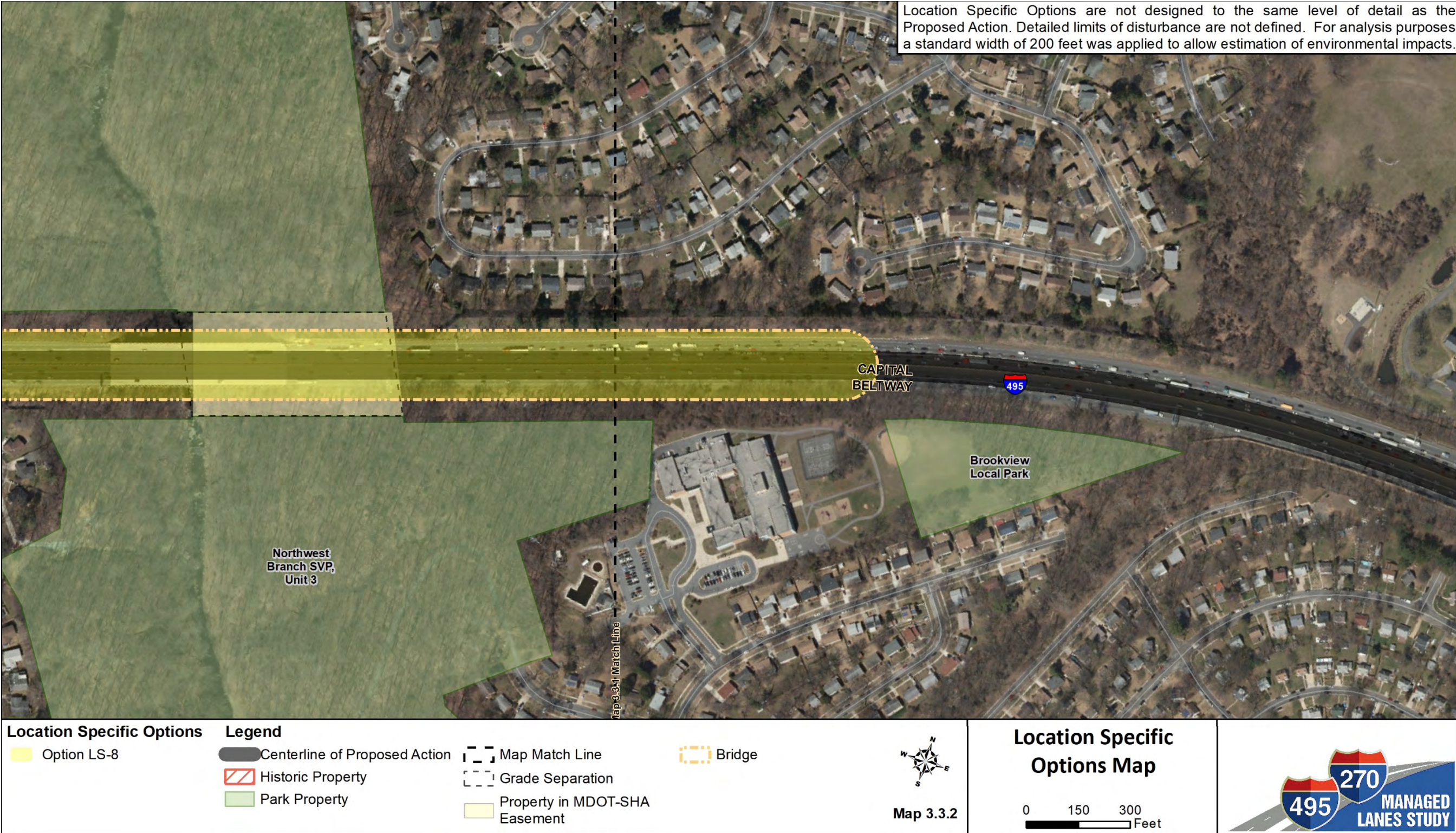


Figure 5-29: Detail of Location Specific Option LS-8 (Map 2 of 2)

Location Specific Options are not designed to the same level of detail as the Proposed Action. Detailed limits of disturbance are not defined. For analysis purposes a standard width of 200 feet was applied to allow estimation of environmental impacts.



5.1.9 Location Specific Option 9 (LS-9)

Section 4(f) Property Avoided: Cherry Hill Road Park

A. Description

The Proposed Action would widen I-495 on existing alignment at this location and result in a Section 4(f) use of 1.8 acres from Cherry Hill Park, as described in **Section 2.1.24**. Option LS-9 would avoid impacts to Cherry Hill Road Park by relocating I-495 approximately 85 feet to the north while maintaining the same typical section as the Proposed Action and eliminating stormwater management facilities on park property (**Figure 5-30** through **Figure 5-32**).

B. Analysis

In consideration of Least Overall Harm Factor 1, when compared to the Proposed Action Option LS-9 would result in 6.1 acres of additional impacts to BARC. The impacts to BARC would include an agricultural field that contributes to the historical significance of the Section 4(f) property. These impacts could be mitigated through documentation or reconfiguring the field, but historically significant activities would still be severely impacted. This would result in less ability to mitigate adverse impacts to Section 4(f) properties. Additionally, in consideration of Least Overall Harm Factor 2, Option LS-9 would result in greater remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection. In consideration of Least Overall Harm factor 7, Option LS-9 would cost approximately \$350 million or \$88 million more than the Proposed Action along this portion of the project. Owing to the increase in the use of Section 4(f) property and substantial difference in cost, Option LS-9 would result in more harm than the Proposed Action.

BARC is historically significant for its association with the history and development of agricultural research and the New Deal. It is also historically significant for being associated with the landscape architecture of A.D. Taylor. As a unique historic site and in consideration of Least Overall Harm Factor 3, it possesses greater significance as a Section 4(f) property than Cherry Hill Road Park.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation.

In consideration of Least Overall Harm Factor 5, Option LS-9 would maintain the same typical section as the Proposed Action and although longer in distance, would meet the Purpose and Need of the Study to a degree comparable to the Proposed Action. In consideration of Least Overall Harm Factor 6, impacts to resources not protected by Section 4(f) would be comparable to the Proposed Action.

Figure 5-30: Overview Map of Location Specific Option LS-9

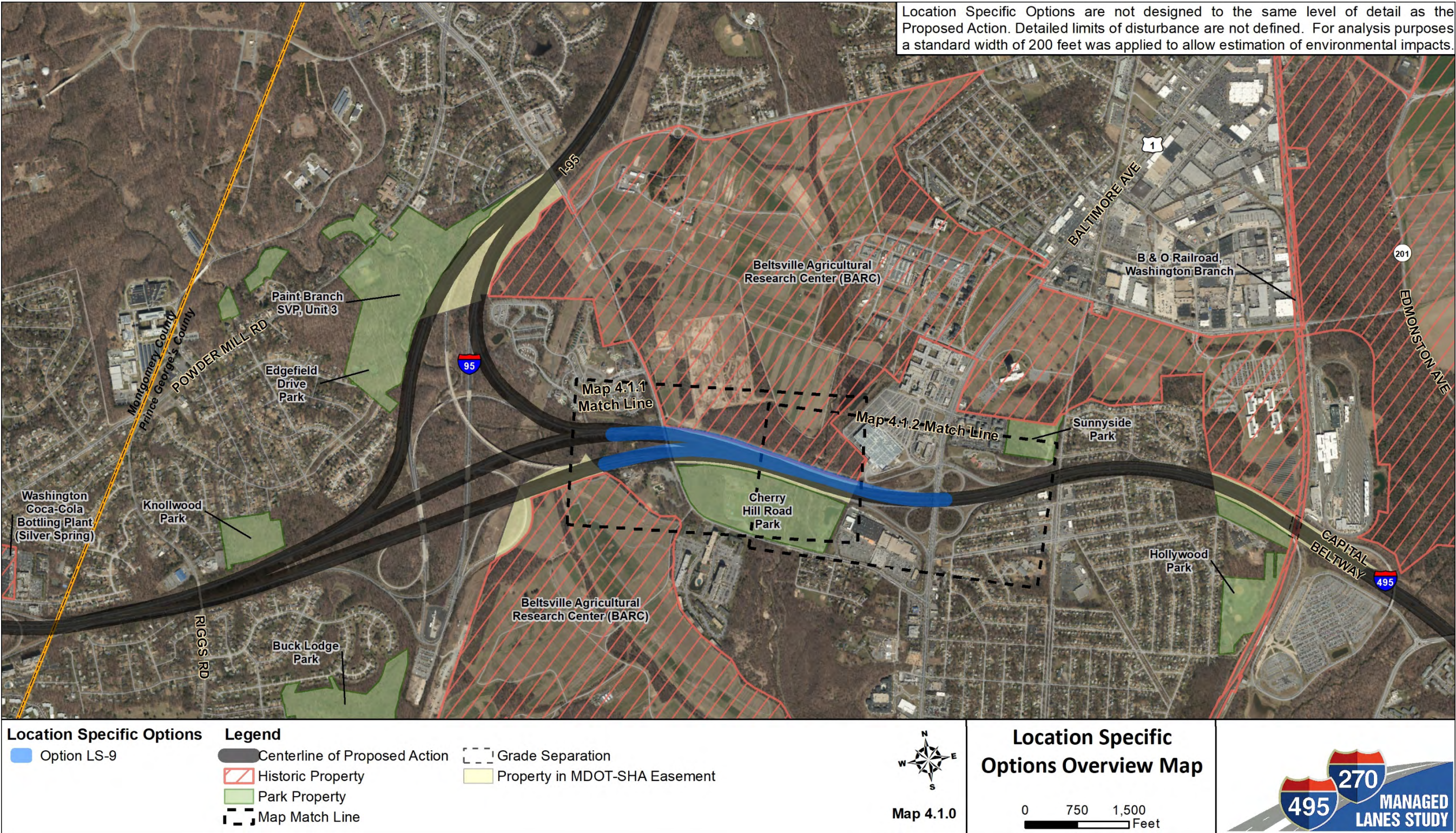


Figure 5-31: Detail of Location Specific Option LS-9 (Map 1 of 2)

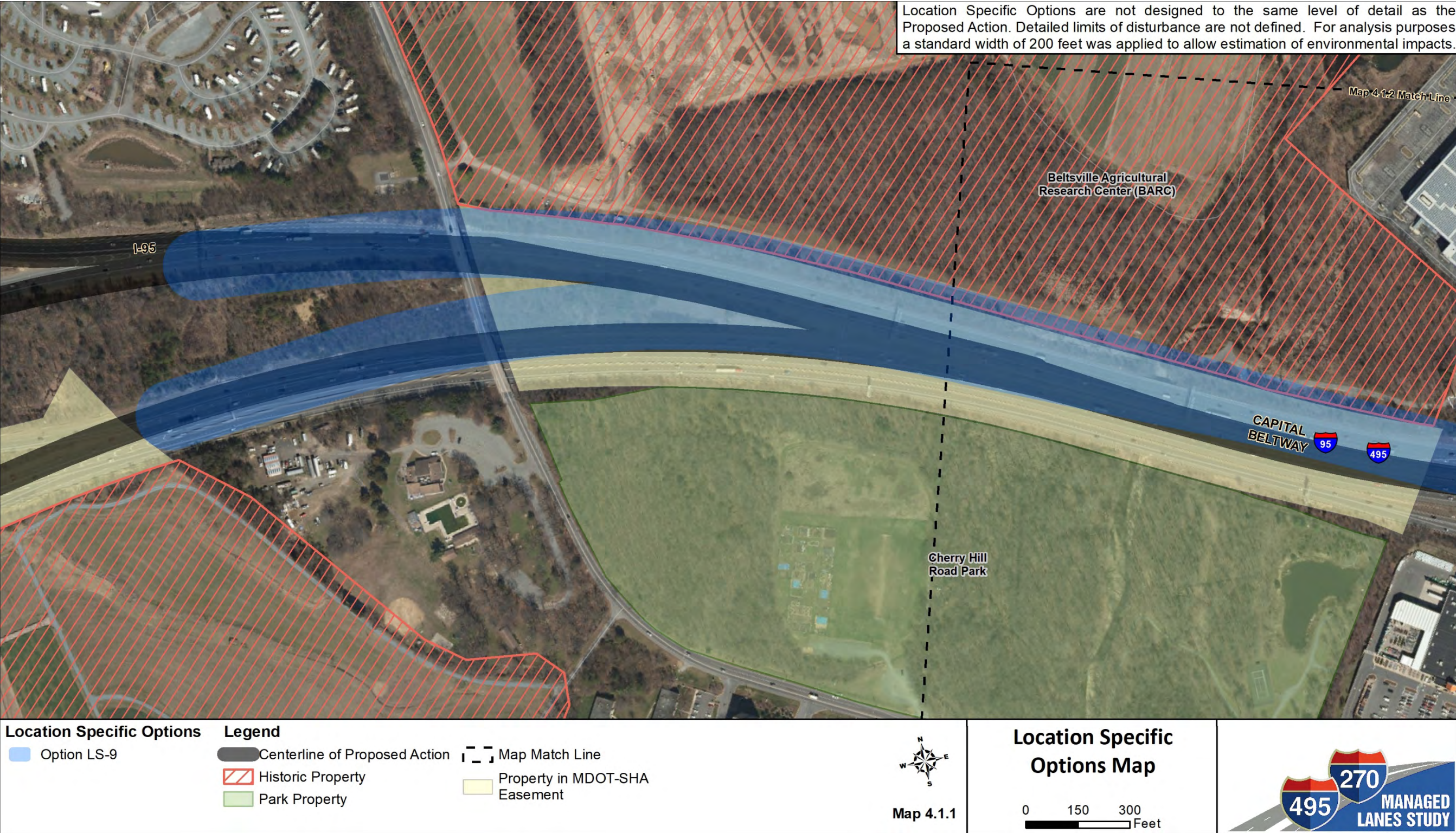
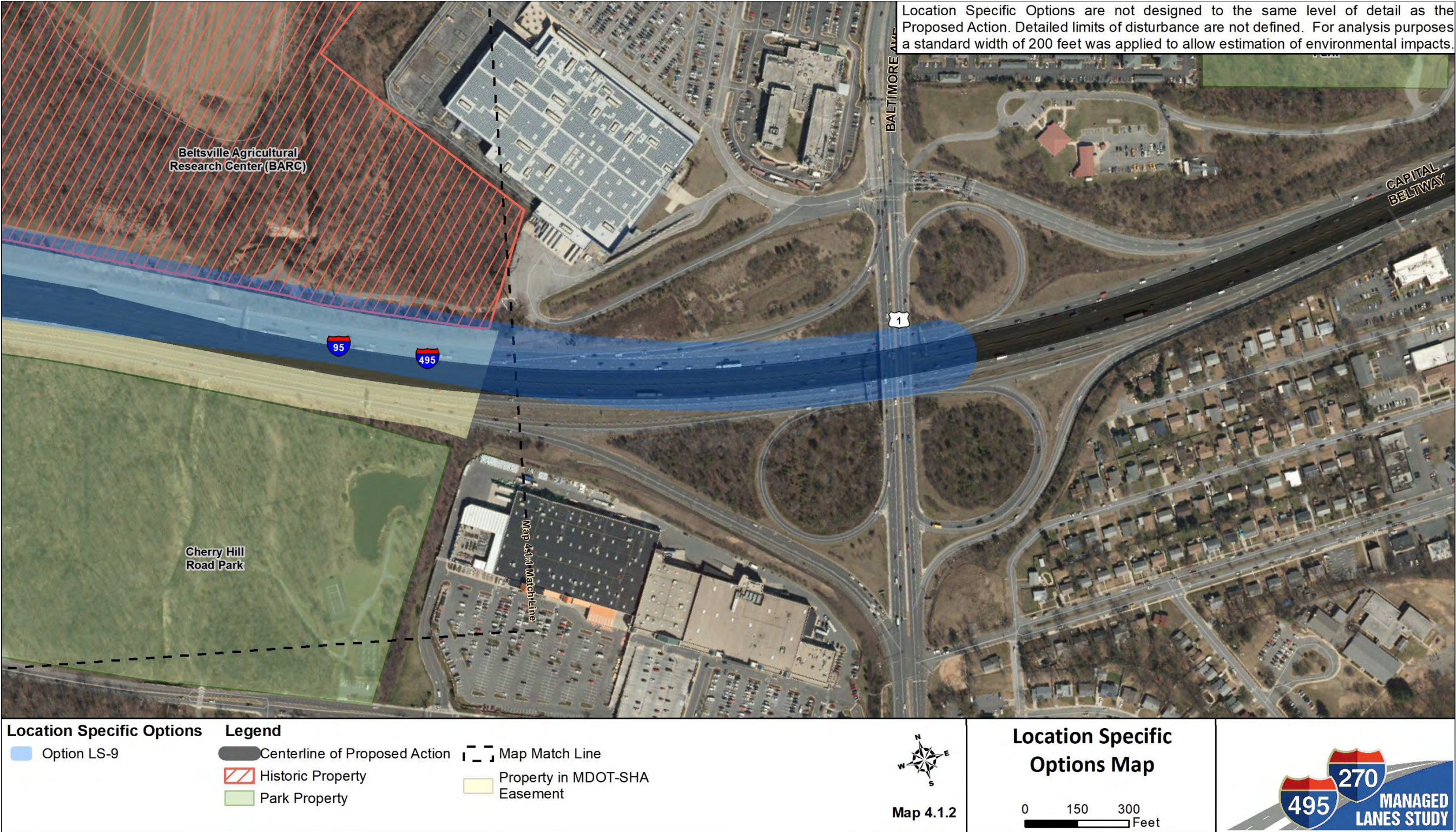


Figure 5-32: Detail of Location Specific Option LS-9 (Map 2 of 2)



5.1.10 Location Specific Option 10 (LS-10)

Section 4(f) Properties Avoided: Greenbelt Park, Baltimore Washington Parkway, and McDonald Field.

A. Description

The Proposed Action would widen I-495 on alignment, replace the existing bridges over the Baltimore Washington Parkway and construct a new direct access interchange that would accommodate both the GP and managed lanes. These improvements would result in impacts to Greenbelt Park (**Section 2.1.30**) and Baltimore Washington Parkway (**Section 2.1.31**). Option LS-10 would retain the existing interchange configuration for the GP lanes. The managed lanes would be constructed on a new, parallel tunnel south of existing I-495 (**Figure 5-33** through **Figure 5-37**). Option LS-10 would eliminate direct access to Baltimore Washington Parkway from the managed lanes. The alignment of the managed lanes would diverge south from I-495 east of Kenilworth Avenue and continue southeast, tunneling underneath Greenbelt Park and Baltimore Washington Parkway. The second tunnel portal would be placed east of Greenbelt Park and intersect with mainline I-495 east of Good Luck Road.

B. Analysis

In consideration of Least Overall Harm Factor 7, Option LS-10 would cost \$1.6 billion, which is approximately \$500 million more than the Proposed Action along this portion of the project. . The method for constructing the tunnel (bore versus open trench) has not been determined as part of this analysis, and complex construction risks would be high, thus costs could be higher. In consideration of Least Overall Harm Factor 5, implementing Option LS-10 would compromise the ability of the Study to meet the Purpose and Need by adding significant risk to financial viability through removing direct access to the managed lanes at Baltimore Washington Parkway Even though it avoids the Section 4(f) use of the three Section 4(f) properties listed in **Table 5-13**, owing to the substantial difference in cost and compromised ability to meet the Purpose and Need, Option LS-10 would result in more harm than the Proposed Action.

In consideration of Least Overall Harm Factor 1, because it avoids the use of three Section 4(f) properties – despite the increased use of the Section 4(f) properties listed in **Table 5-14** – when compared to the Proposed Action Option LS-10 would result in greater ability to mitigate adverse impacts to Section 4(f) property. In consideration of Least Overall Harm Factor 2, Option LS-10 would also result in less remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

Table 5-13: Section 4(f) Properties Avoided by LS-10

Section 4(f) Property	Avoidance of Section 4(f) Property (in Acres)
Greenbelt Park	0.6
Baltimore Washington Parkway	69.3
McDonald Field	< 0.1
Total Section 4(f) Property Avoided	69.9

Table 5-14: Properties Experiencing an Increase in Section 4(f) Use by Option LS-10

Section 4(f) Property	Increase in Section 4(f) Use (in Acres)
Buddy Attick Lake Park (part of Greenbelt Historic District)	0.3
Indian Springs Park (part of Greenbelt Historic District)	1.1
Good Luck Estates Park	4.2
Youth Sports Memorial Park	< 0.1
Robert Frost Park	1.0
Total Increase in Use of Section 4(f) Property	6.7

In consideration of Least Overall Harm Factor 3, both Baltimore Washington Parkway and Greenbelt Park are NPS properties that qualify for Section 4(f) protection as public parks and historic sites. Baltimore Washington Parkway is a significant public parkway with gentle hills and modest vistas significant for its landscape architecture and design. Greenbelt Park features a campground, trails, and picnic areas. The park is historically significant for its association with the NPS Mission 66 program and providing recreational opportunities in suburban Washington, DC. These two properties are the most significant Section 4(f) properties along this portion of the project.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. In consideration of Least Overall Factor 6, impacts to resources not protected by Section 4(f) would be comparable to the Proposed Action.

Figure 5-33: Overview Map of Location Specific Option LS-10

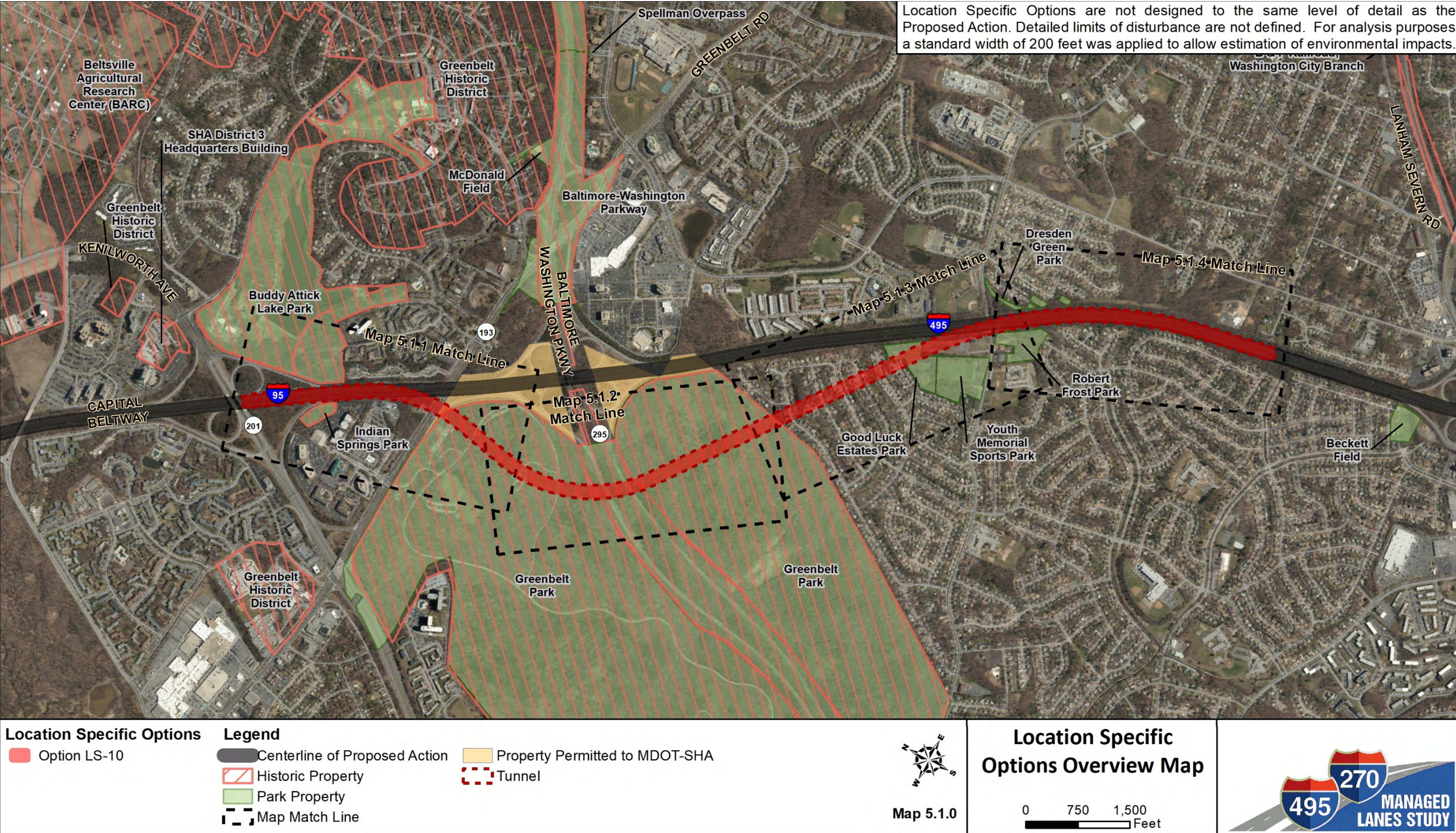


Figure 5-34: Detail of Location Specific Option LS-10 (Map 1 of 4)

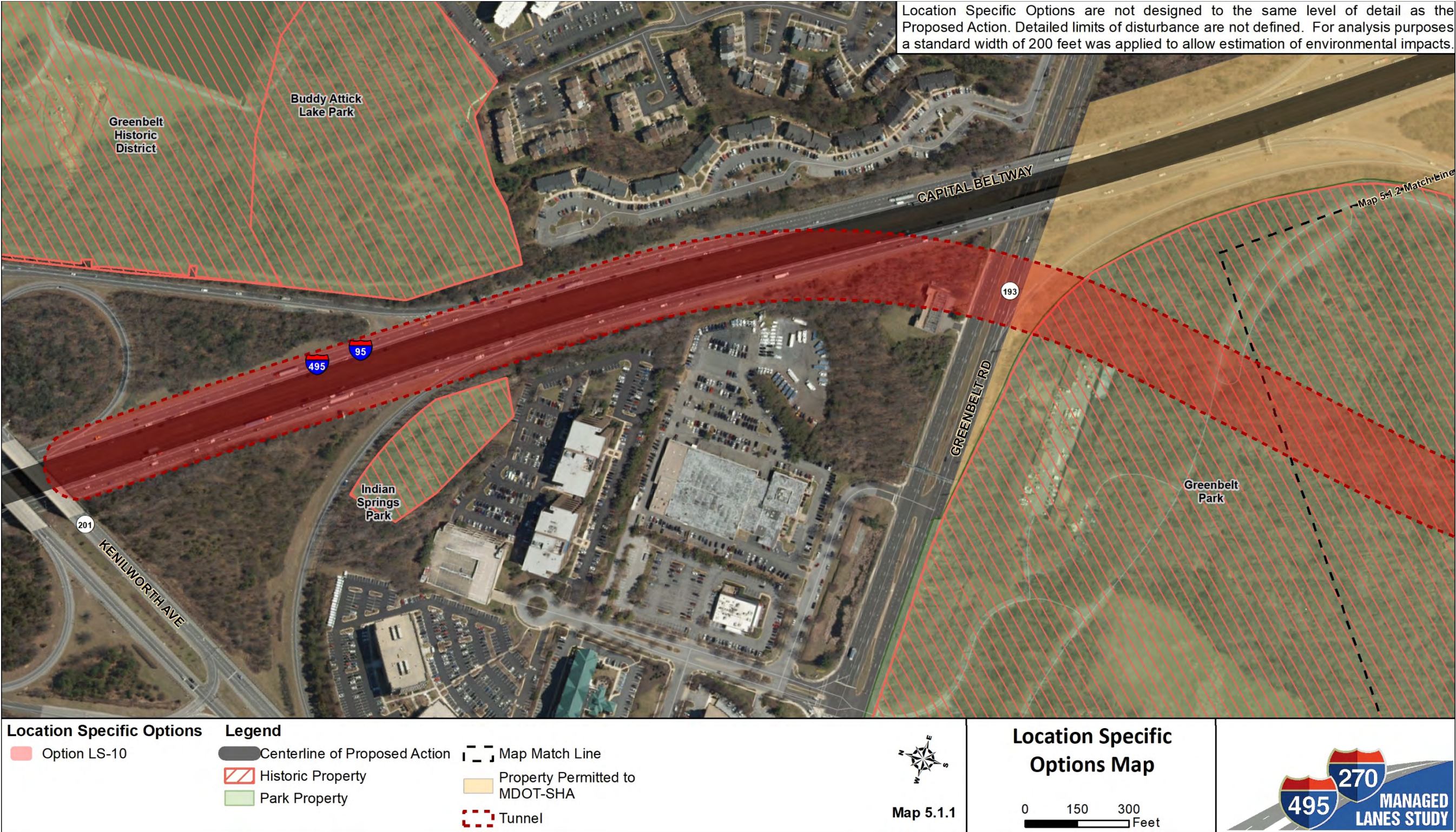


Figure 5-35: Detail of Location Specific Option LS-10 (Map 2 of 4)

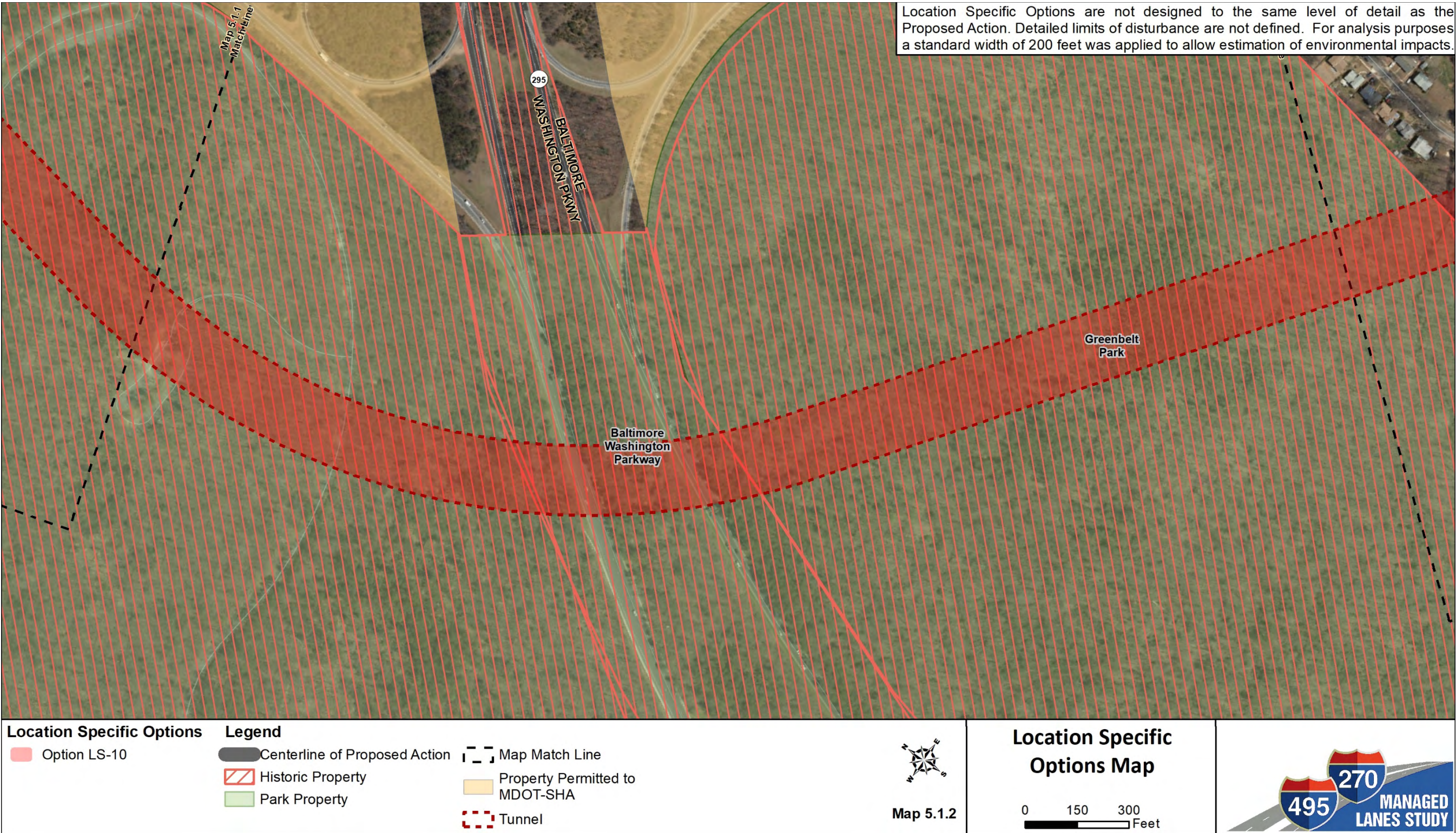


Figure 5-36: Detail of Location Specific Option LS-10 (Map 3 of 4)

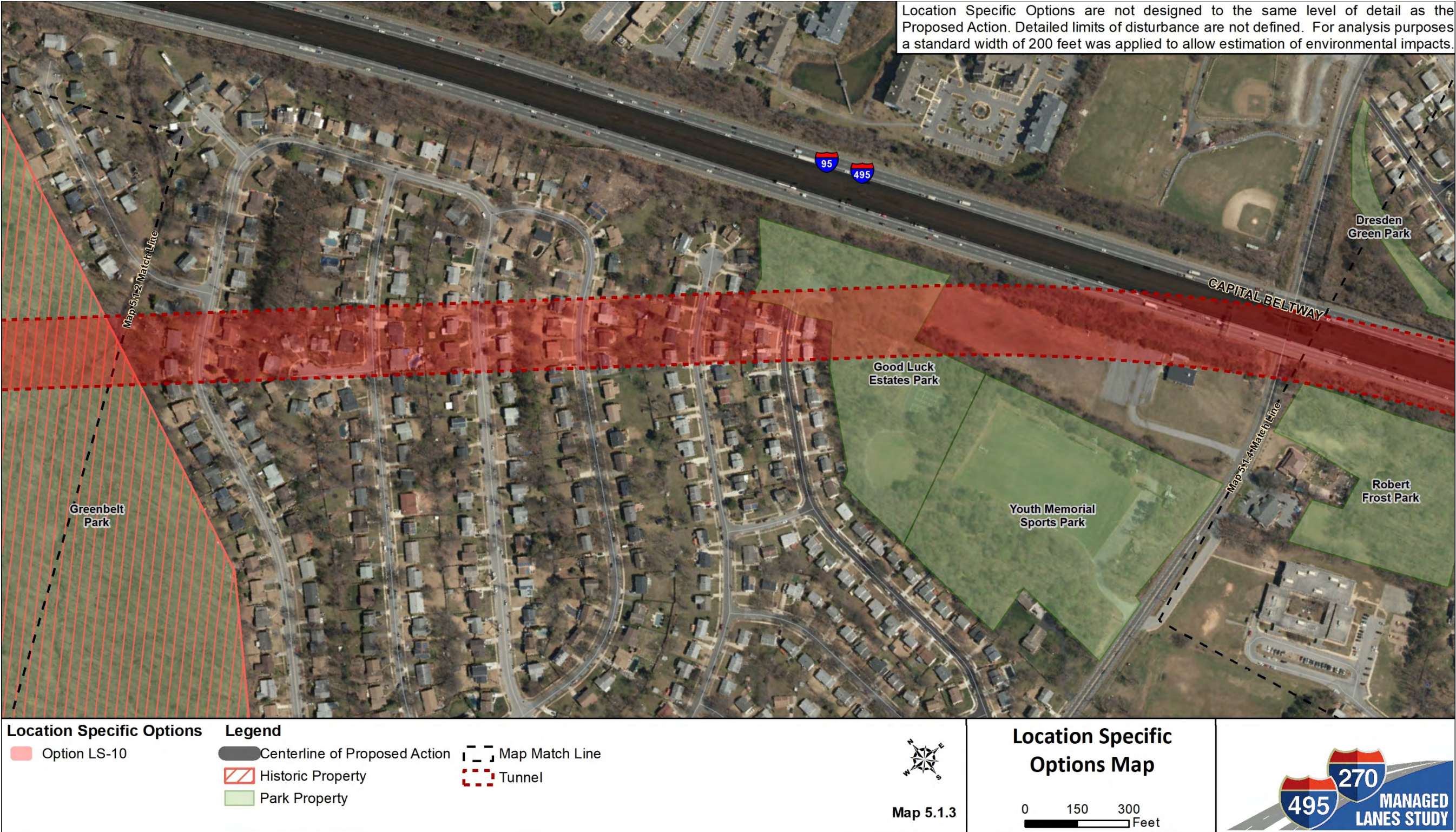
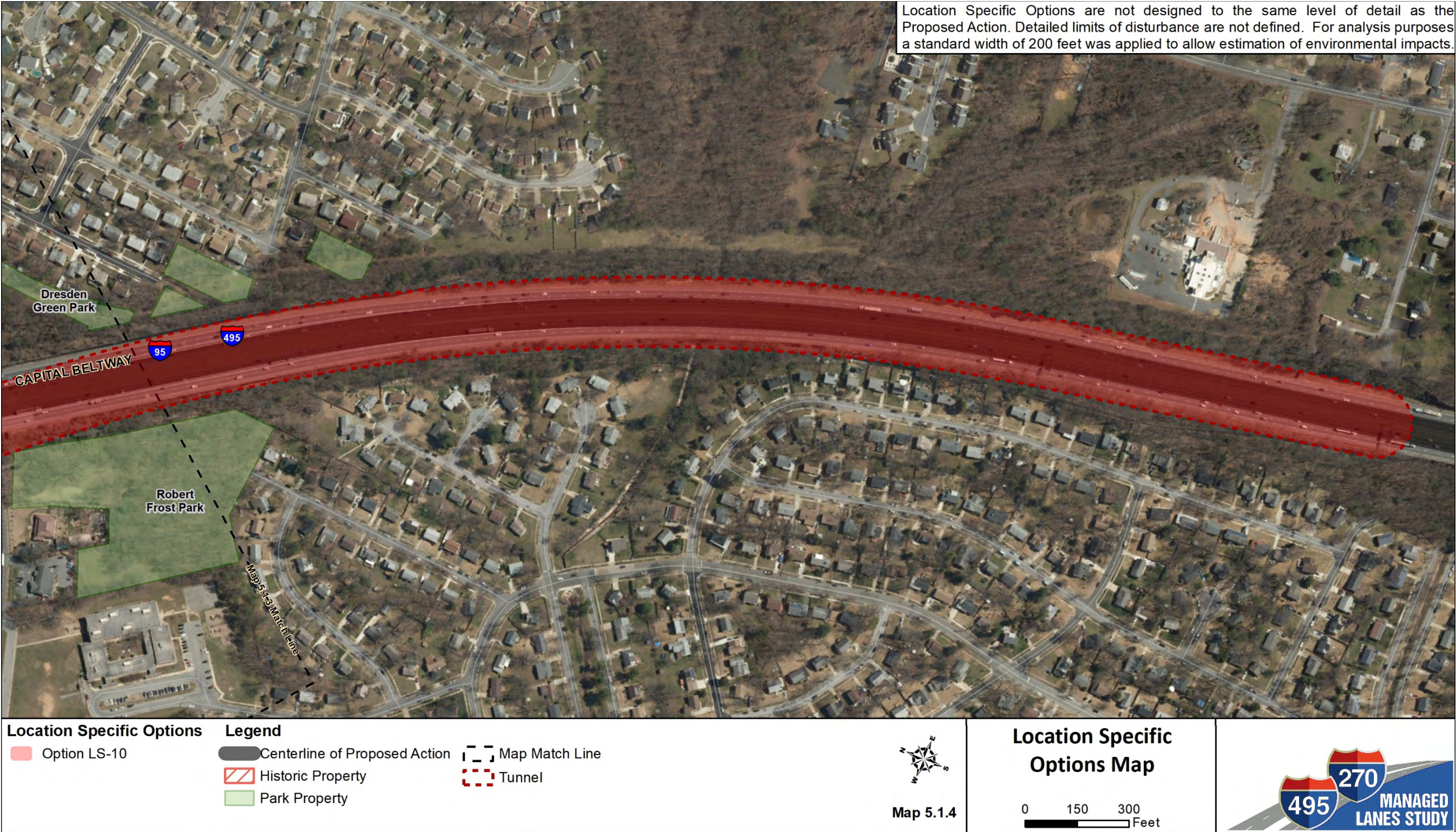


Figure 5-37: Detail of Location Specific Option LS-10 (Map 4 of 4)



5.1.11 Location Specific Option 11 (LS-11)

Section 4(f) Property Avoided: Carsondale

A. Description

The Proposed Action would widen I-495 on existing alignment at this location. The improvements would involve reconfiguring the interchange with US 50. In order to accommodate the new interchange, the Proposed Action would result in impacts of 0.1 acre to Carsondale, as described in **Section 2.1.34**. On March 12, 2020 MHT concurred that no effect determination could be made and additional consultation is required. Under 23 CFR 774.17, Section 4(f) requires a Section 106 finding of no adverse effect or no historic properties affected to apply a *de minimis* impact. This analysis assumes Carsondale would be adversely affected. Based on these assumptions, the evaluation of avoidance alternatives is required.

Option LS-11 would relocate US 50 approximately 18 feet to the north of its existing alignment east of the interchange with I-495 (**Figure 5-38** through **Figure 5-40**). Option LS-11 would hold the existing southern edge of pavement along US 50 eastbound, where the highway borders the northern boundary of Carsondale. Option LS-11 additionally requires realigning both the GP and managed lane ramps connecting I-495 and US 50.

B. Analysis

In consideration of Least Overall Harm Factor 6, Option LS-11 would result in two residential relocations in the middle of a subdivision, resulting in negative impacts to community cohesion. The Proposed Action would not require any relocations along this portion of the project. Owing to the impacts to community resources, Option LS-11 would result in more harm than the Proposed Action.

Under the Proposed Action, impacts to Carsondale would involve demolishing a detached garage and potentially filling-in a backyard pool from two contributing properties. Even with the adverse impacts to two contributing properties, the larger historic district would retain its historical significance. Option LS-11 would avoid the use of 0.1 acre of Carsondale. In consideration of Least Overall Harm Factor 1, Option LS-11 has a greater ability to mitigate for adverse impacts. However, because mitigation would significantly reduce the harm to Carsondale caused by the Proposed Action, in consideration of Least Overall Harm Factor 2, the Proposed Action and Option LS-11 would both result in minimal remaining harm.

In consideration of Least Overall Harm Factor 3, Option LS-11 would avoid the use of Carsondale and the use of additional Section 4(f) properties in the vicinity would not change. In consideration of Least Overall Harm Factor 4, OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 5, Option LS-11 would maintain the same typical section as the Proposed Action and meet the Purpose and Need of the Study to a degree comparable to the Proposed Action. In consideration of Least Overall Harm factor 7, Option LS-11 would cost approximately \$216 million, which is \$1 million less than the Proposed Action.

Figure 5-38: Overview Map of Location Specific Option LS-11

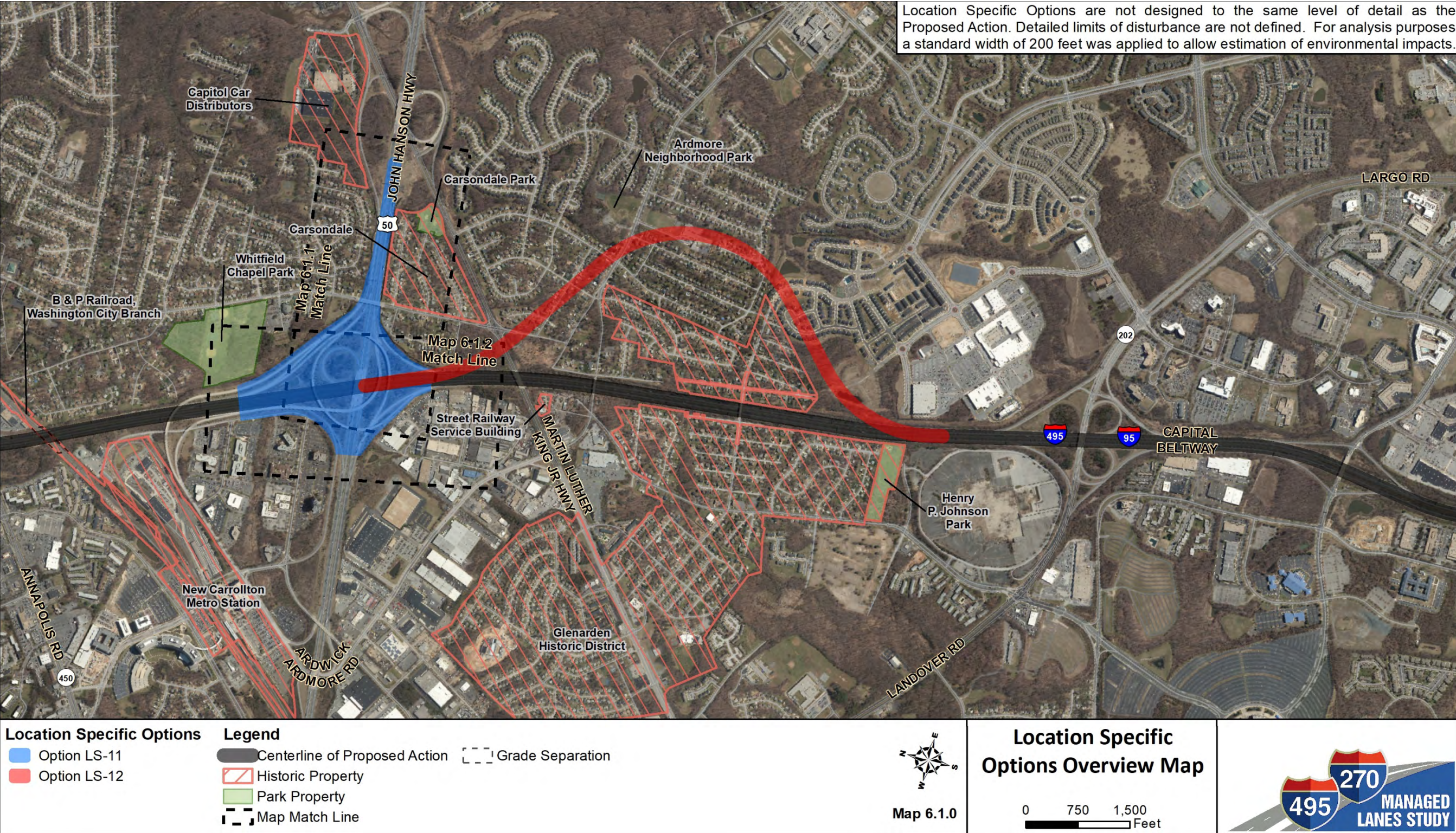


Figure 5-39: Detail of Location Specific Option LS-11 (Map 1 of 2)

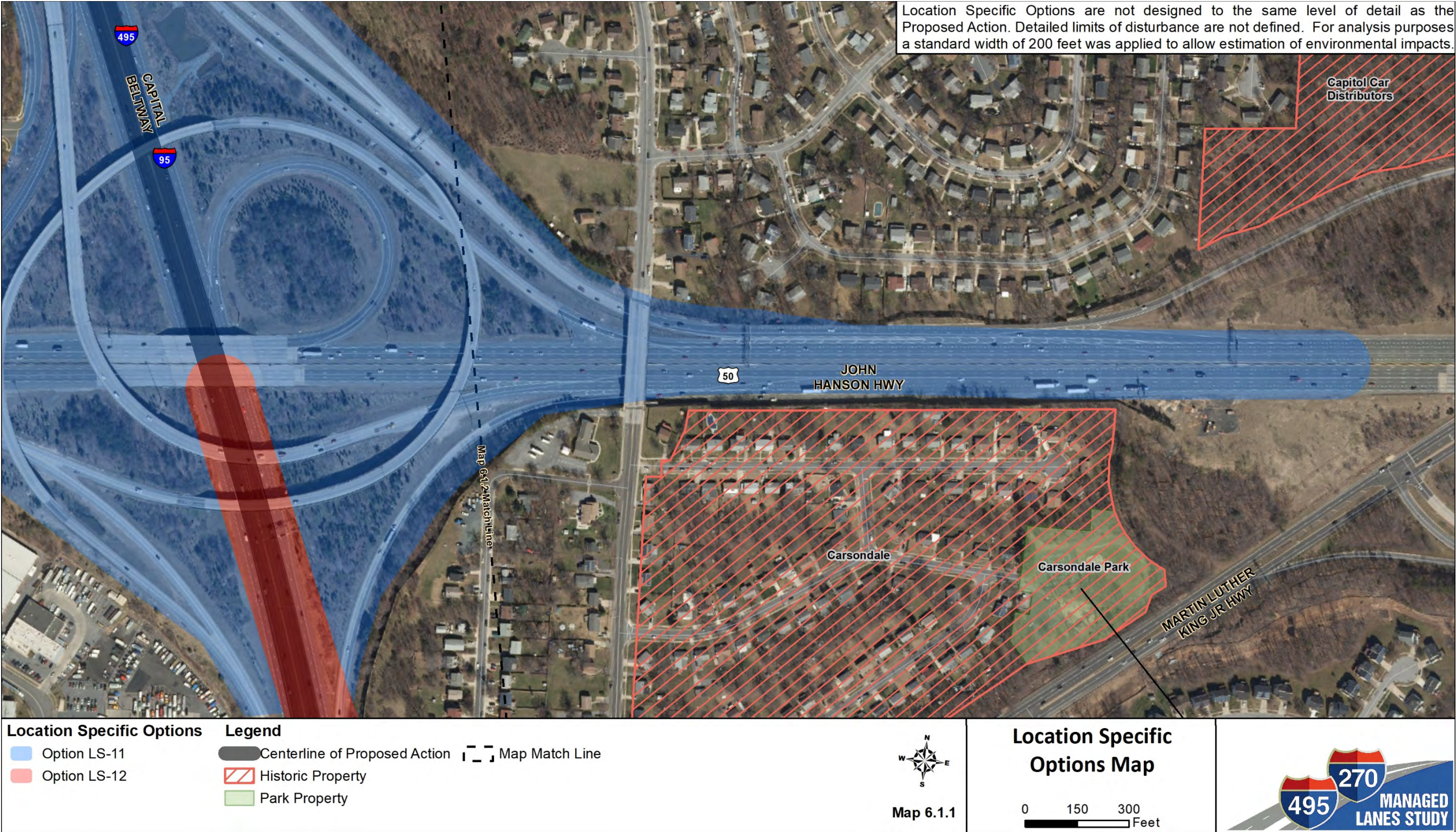
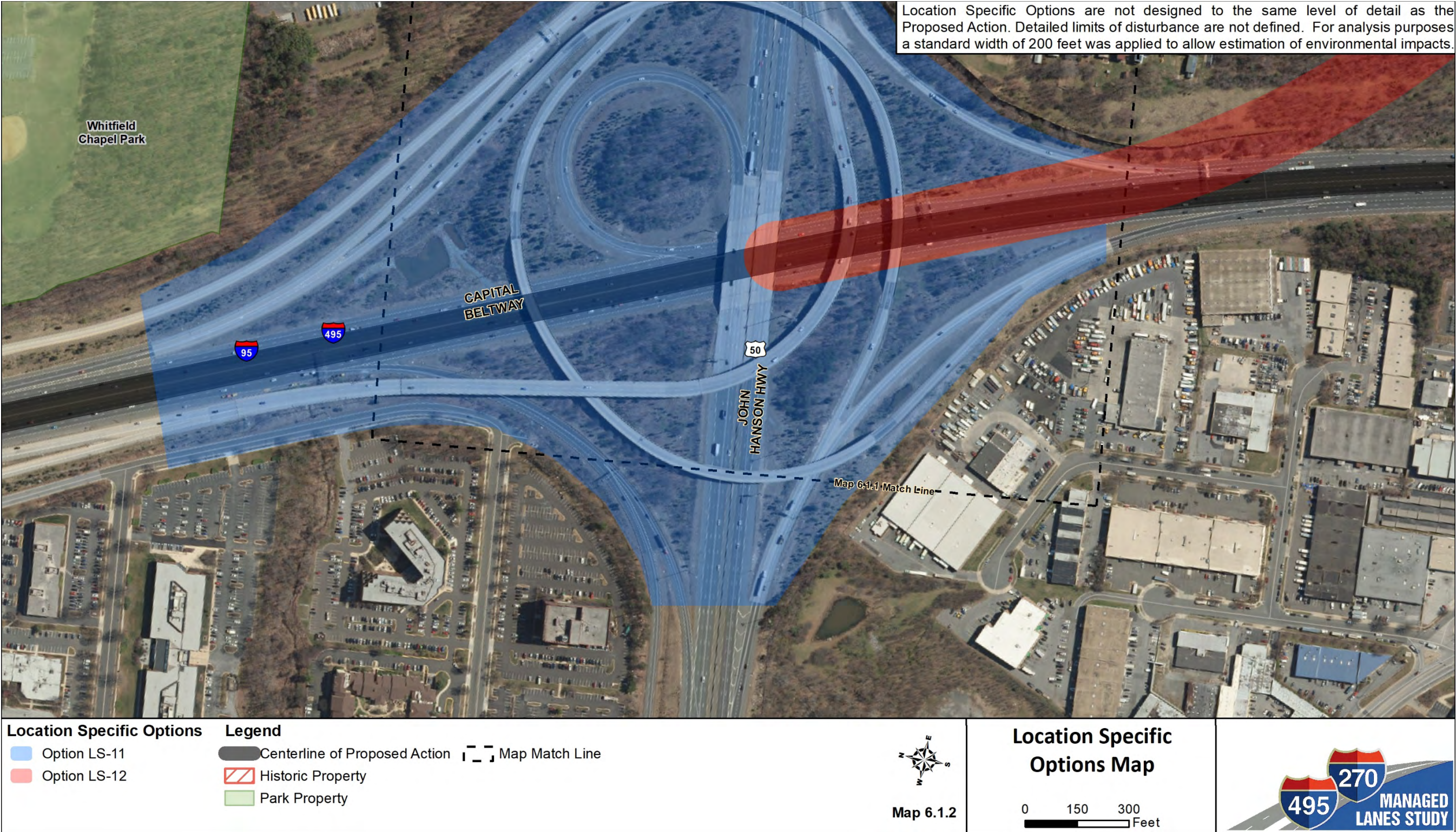


Figure 5-40: Detail of Location Specific Option LS-11 (Map 2 of 2)



5.1.12 Location Specific Option 12 (LS-12)

Section 4(f) Properties Avoided: Glenarden Historic District and Henry P. Johnson Park

A. Description

The Proposed Action would widen I-495 on alignment in the vicinity of Glenarden Historic District and Henry P. Johnson Park resulting in the Section 4(f) use of both properties (**Sections 2.1.35 and 2.1.36**). Option LS-12 would relocate I-495 approximately a half mile to the east to avoid impacts to Section 4(f) properties (**Figure 5-41 through Figure 5-44**). A shift this far from the existing alignment is due to the size of Glenarden Historic District, which is situated on either side of I-495. Option LS-12 would result in impacts to one Section 4(f) property outside the Corridor Study Boundary: Ardmore Neighborhood Park.

B. Analysis

In consideration of Least Overall Harm Factor 6, Option LS-12 would cause severe impacts to community resources, potentially resulting in the relocation of 166 properties, including Ardmore Elementary School. By comparison, the Proposed Action may cause one residential displacement along this portion of the project. In consideration of Least Overall Harm factor 7, Option LS-12 would cost approximately \$1 billion, which is \$400 million more than the Proposed Action along this portion of the project.

Option LS-12 would eliminate the 0.8 acre use of the two Section 4(f) properties listed in **Table 5-15** and result in 0.8 acres of impact to Ardmore Neighborhood Park. Under the Proposed Action, impacts to Glenarden Historic District would consist of demolishing outbuildings and grading the landscaped areas. Option LS-12 would result in impacts to basketball courts, a playground, and access to Ardmore Neighborhood Park. In consideration of Least Overall Harm Factor 1, Option LS-12 has a greater ability to mitigate for adverse impacts. However, because mitigation would significantly reduce the harm to Glenarden Historic District caused by the Proposed Action and given the nature of the potential impacts to Ardmore Neighborhood Park by Option LS-12, in consideration of Least Overall Harm Factor 2, Option LS-12 would cause more severe remaining harm than the Proposed Action.

Table 5-15: Properties Avoided by Option LS-12

Section 4(f) Property	Section 4(f) Avoidance (in Acres)
Glenarden Historic District	0.8
Henry P. Johnson Park	<0.1
Total Section 4(f) Properties Avoided	0.8

In consideration of Least Overall Harm Factor 3, Glenarden Historic District is significant as a middle-class African American community in the DC suburbs. This property type is underrepresented on the NRHP. For this reason, Glenarden Historic District is the most significant Section 4(f) property along this portion of the project.

In consideration of Least Overall Harm Factor 4, OWJ have not provided views regarding least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 5, Option LS-12 would maintain the same typical section as the Proposed Action. However, owing to the length of the Option LS-12 and substantial difference in cost, it would meet the Purpose and Need of the Study to a slightly lesser degree than the Proposed Action.

Figure 5-41: Overview Map of Location Specific Option LS-12

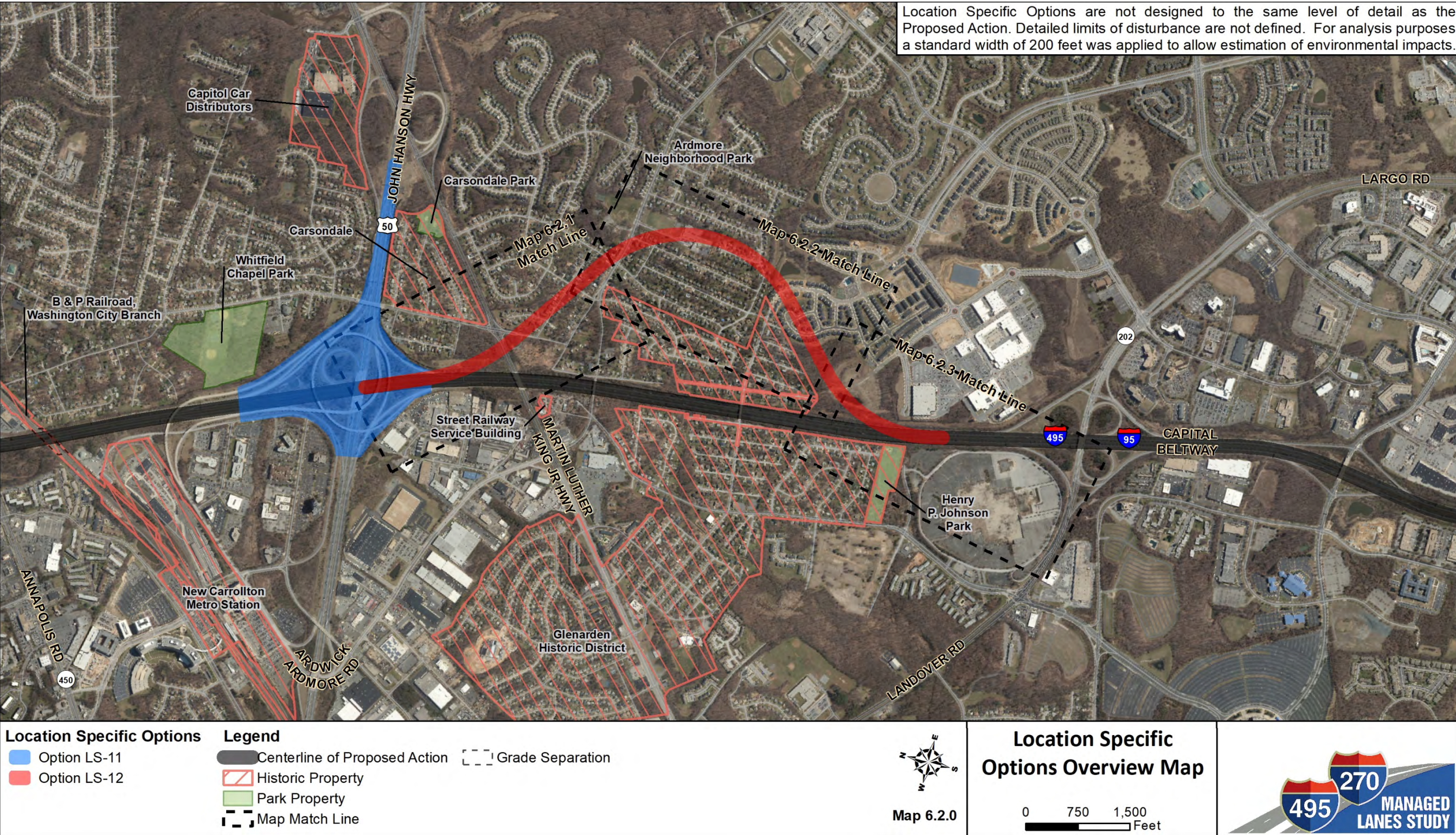


Figure 5-42: Detail of Location Specific Option LS-12 (Map 1 of 3)

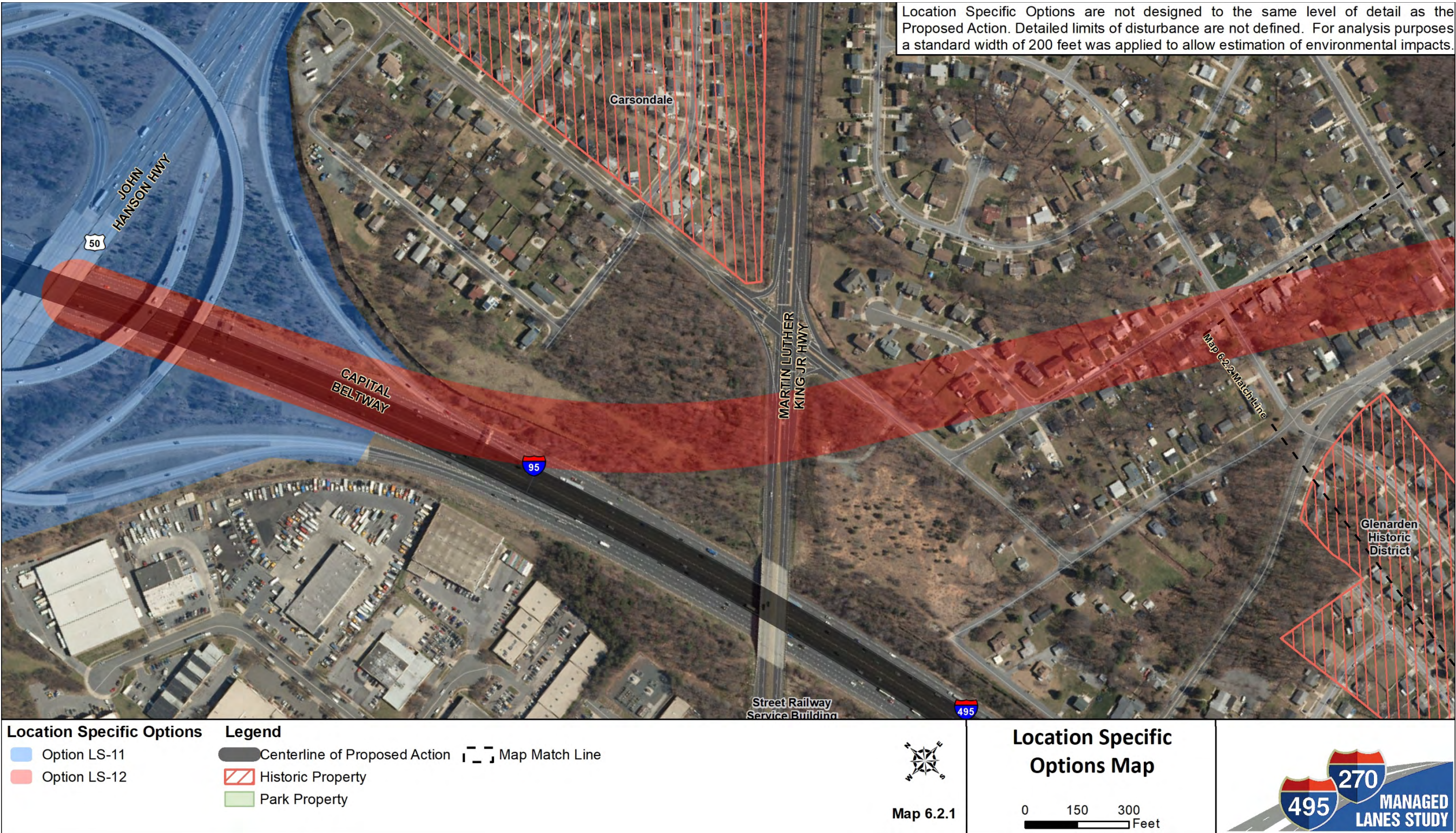


Figure 5-43: Detail of Location Specific Option LS-12 (Map 2 of 3)

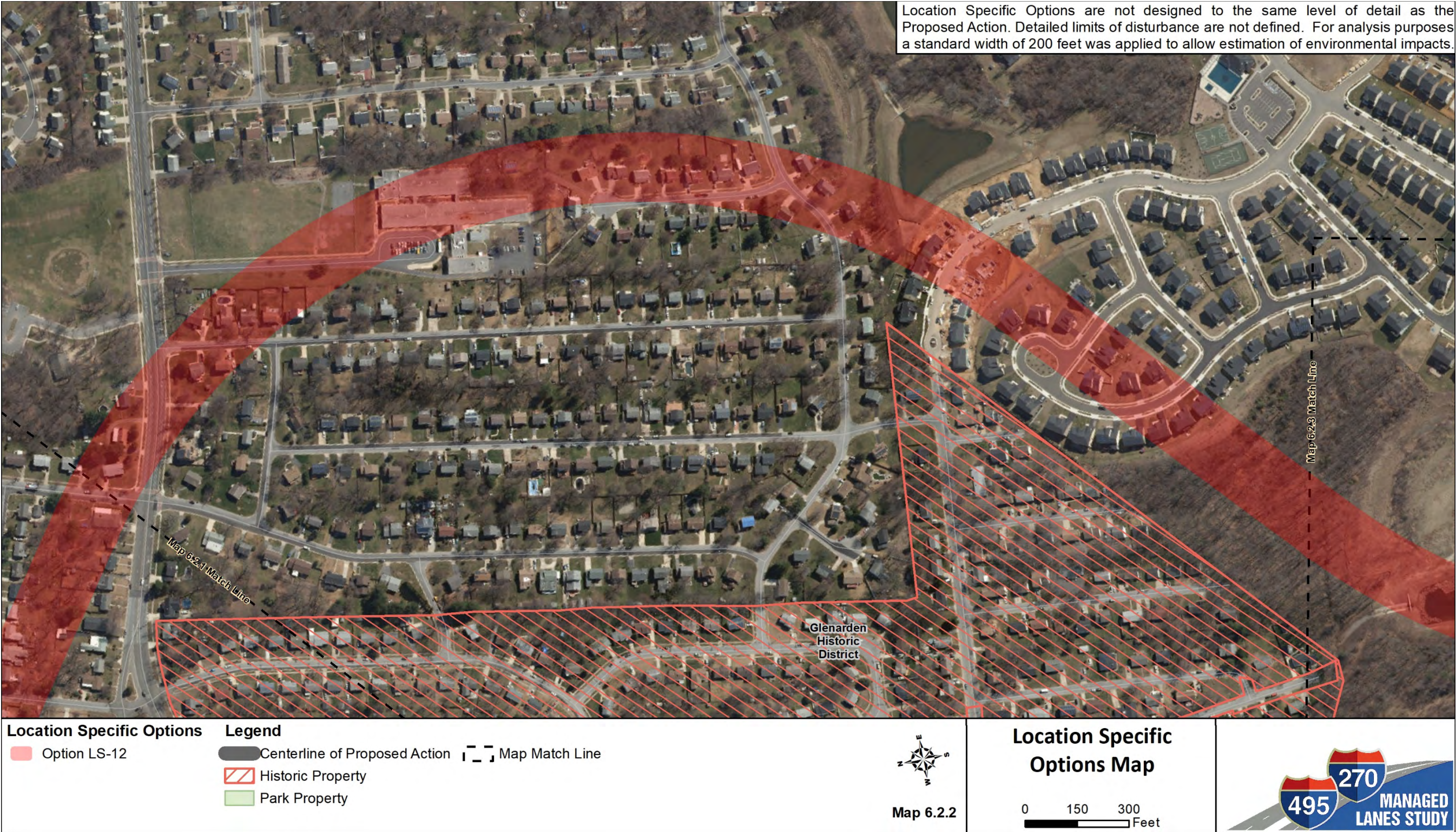
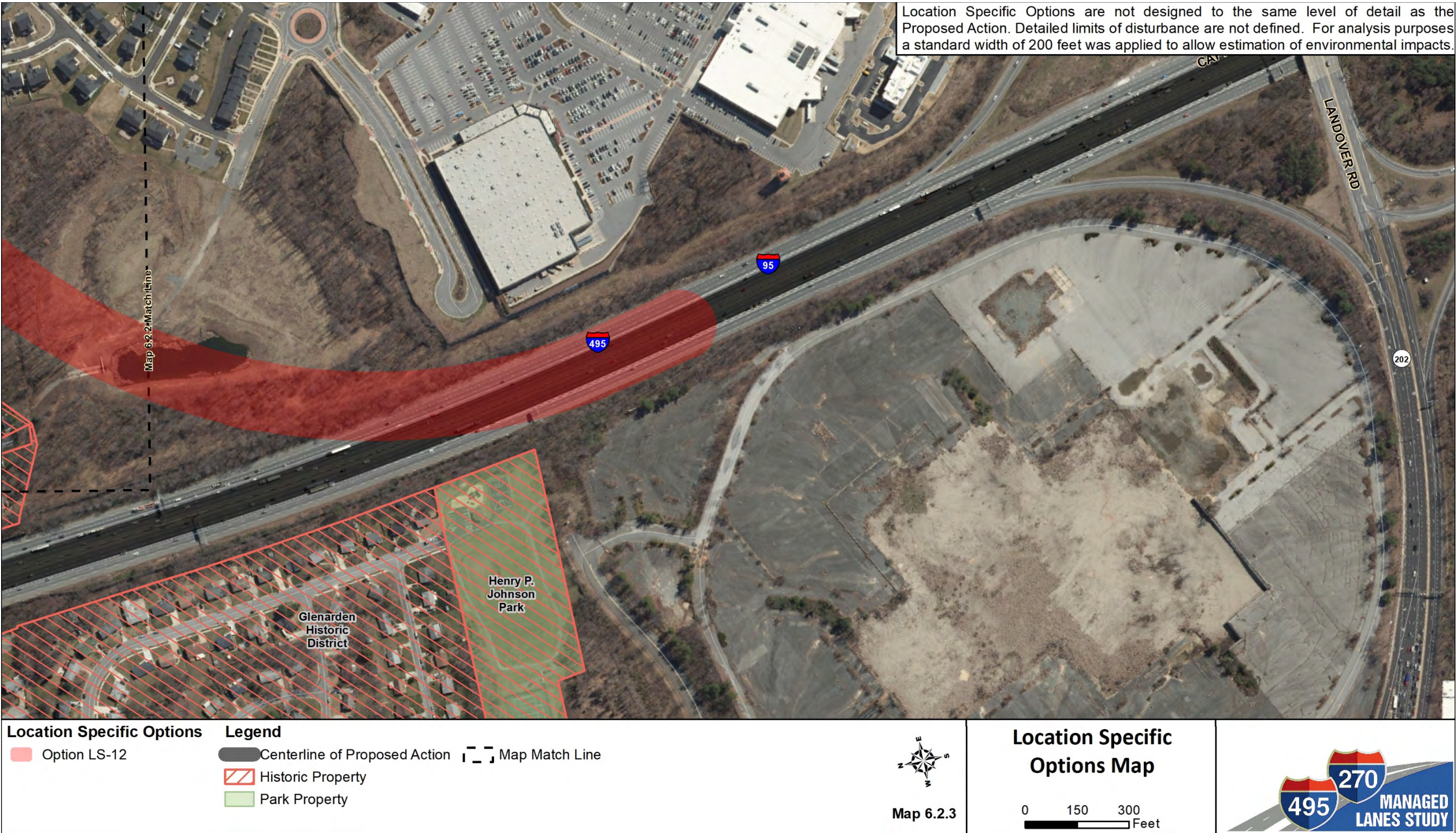


Figure 5-44: Detail of Location Specific Option LS-12 (Map 3 of 3)



5.1.13 Location Specific Option 13 (LS-13)

Section 4(f) Property Avoided: Suitland Parkway

A. Description

The Proposed Action would widen I-495 on existing alignment at this location. The improvements would involve replacing or widening the bridges that carry I-495 over Suitland Parkway and result in impacts of 0.3 acre to Suitland Parkway. This impact that may require transfer of lands out of federal ownership, as described in **Section 2.1.39**. Under 36 CFR 800.5(a)(2)(vii), the transfer of land out of federal ownership is identified as a Section 106 adverse effect. Not enough information is known about the design of the Proposed Action for MDOT SHA to determine a Section 106 effect finding for Suitland Parkway. On March 12, 2020 MHT concurred that no effect determination could be made and additional consultation is required. Under 23 CFR 774.17, Section 4(f) requires a Section 106 finding of no adverse effect or no historic properties affected to apply a *de minimis* impact. This analysis assumes Suitland Parkway would be adversely affected. Based on these assumptions, the evaluation of avoidance alternatives is required.

Option LS-13 would involve spanning Suitland Parkway to avoid a Section 4(f) use (**Figure 5-45** and **Figure 5-46**). Any structure that would span Suitland Parkway would need to be precast segmental or cast-in-place, post-tensioned and balanced cantilever. The main span of the structure would be approximately 575 feet in length over Suitland Parkway with 200-foot approach spans at either side for a total length of approximately 975 feet. The width of the structure would be approximately 100 feet with approximately 20-feet between the inner loop and outer loop structures.

B. Analysis

In consideration of Least Overall Harm factor 7, implementing Option LS-13 would cost approximately \$244 million, which is \$125 million more than the Proposed Action along this portion of the project. In consideration of Least Overall Harm Factor 6, when compared to the Proposed Action, Option LS-13 would result in additional impacts to 0.6 acre of additional forest resources and 0.1 acre of wetlands. Despite avoiding the Section 4(f) use of Suitland Parkway, owing to the substantial difference in cost and additional impacts to resources not protected by Section 4(f), Option LS-13 would result in greater harm than the Proposed Action.

In consideration of Least Overall Harm Factor 1, because it avoids the use of Suitland Parkway when compared to the Proposed Action Option LS-13 would have greater ability to mitigate adverse impacts to Section 4(f) property. Additionally, in consideration of Least Overall Harm Factor 2, Option LS-13 would result in less remaining harm to the protected activities, attributes, and features that qualify Section 4(f) property for protection. In consideration of Least Overall Harm Factor 3, Option LS-13 would avoid the use of Suitland Parkway. There are no additional Section 4(f) properties in the vicinity.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 5, Option LS-13 would meet the Purpose and Need to a degree that is comparable to the Proposed Action.

Figure 5-45: Overview Map of Location Specific Option LS-13

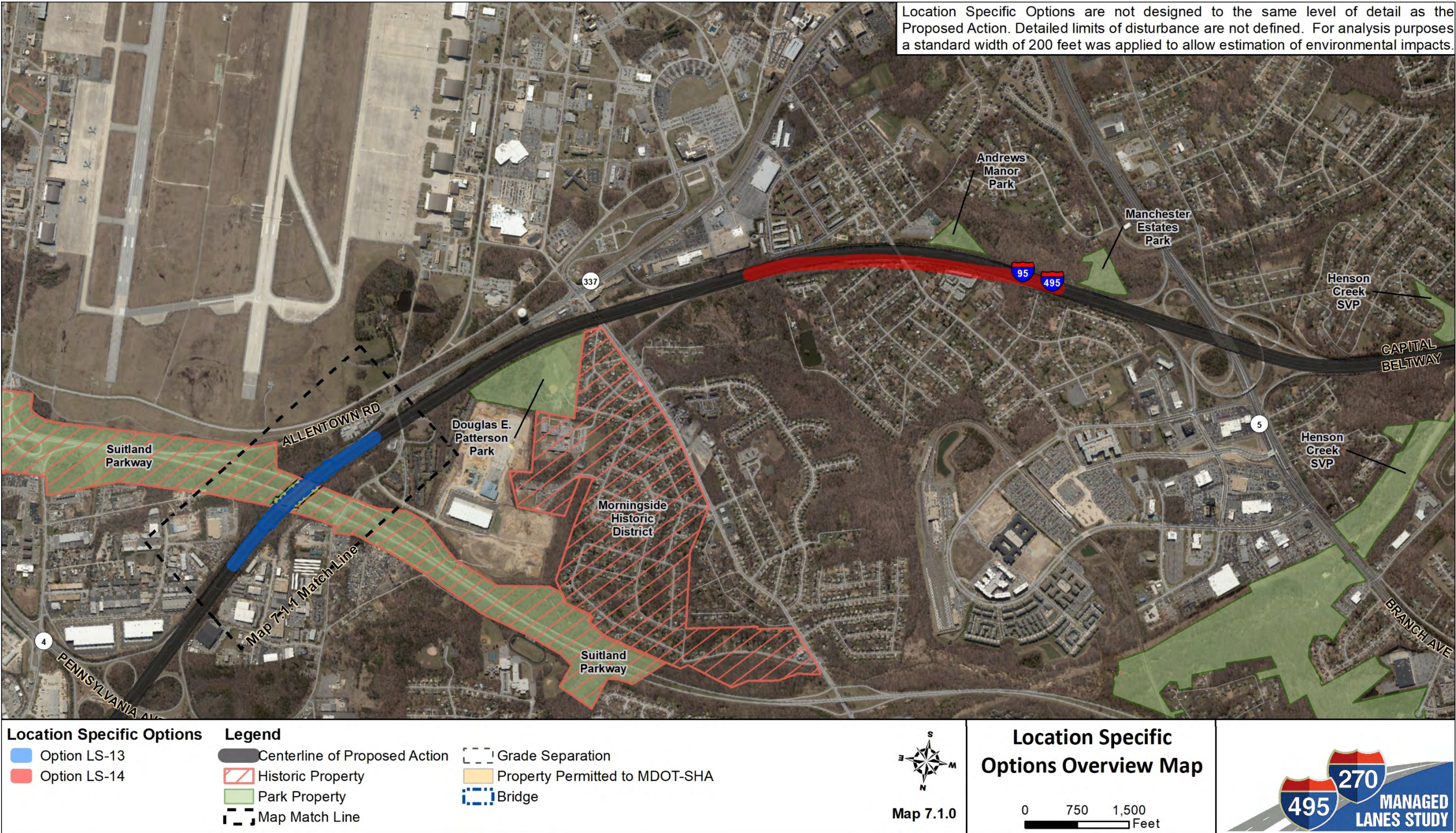
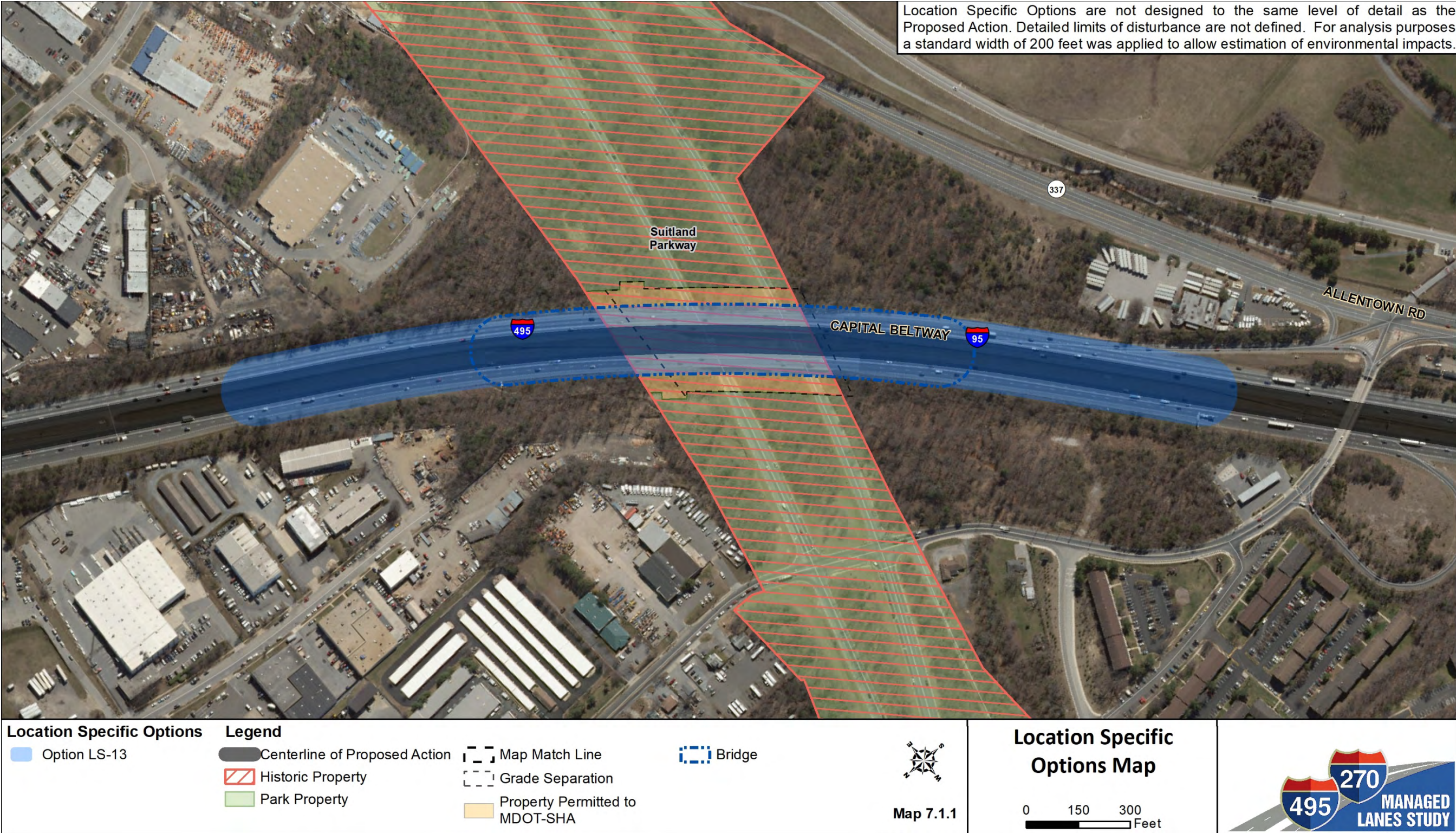


Figure 5-46: Detail of Location Specific Option LS-13

Location Specific Options are not designed to the same level of detail as the Proposed Action. Detailed limits of disturbance are not defined. For analysis purposes a standard width of 200 feet was applied to allow estimation of environmental impacts.



5.1.14 Location Specific Option 14 (LS-14)

Section 4(f) Property Avoided: Andrews Manor Park

A. Description

The Proposed Action would widen I-495 on existing alignment at this location. The improvements would result in impacts to Andrews Manor Park as described in **Section 2.1.41**. Option LS-14 would involve shifting the I-495 mainline approximately 85 feet north to avoid the Section 4(f) use of the park (**Figure 5-47** through **Figure 5-49**). The stormwater management facility would be relocated to the existing alignment of I-495 that would be vacated under the design of Option LS-14. No additional Section 4(f) property would experience a use from Option LS-14.

B. Analysis

In consideration of Least Overall Harm Factor 6, Option LS-14 would cause severe impacts to community resources, potentially resulting in the relocation of 41 properties. The Proposed Action would not result in any relocations along this portion of the Study. In consideration of Least Overall Harm Factor 7, Option LS-14 would cost approximately \$193 million or \$25 million more than the Proposed Action along this portion of the project. Owing to the severe impacts to community resources and substantial difference in cost, Option LS-14 would result in more harm than the Proposed Action.

In consideration of Least Overall Harm Factor 1, because it avoids the use of Andrews Manor Park when compared to the Proposed Action Option LS-14 would have greater ability to mitigate adverse impacts to Section 4(f) property. Additionally, in consideration of Least Overall Harm Factor 2, Option LS-14 would result in less remaining harm to the protected activities, attributes, and features that qualify Section 4(f) property for protection. In consideration of Least Overall Harm Factor 3, Option LS-14 would avoid the use of Andrews Manor Park. There are no additional Section 4(f) properties in the vicinity.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 5, Option LS-14 would meet the Purpose and Need to a degree that is comparable to the Proposed Action.

Figure 5-47: Overview Map of Location Specific Option LS-14

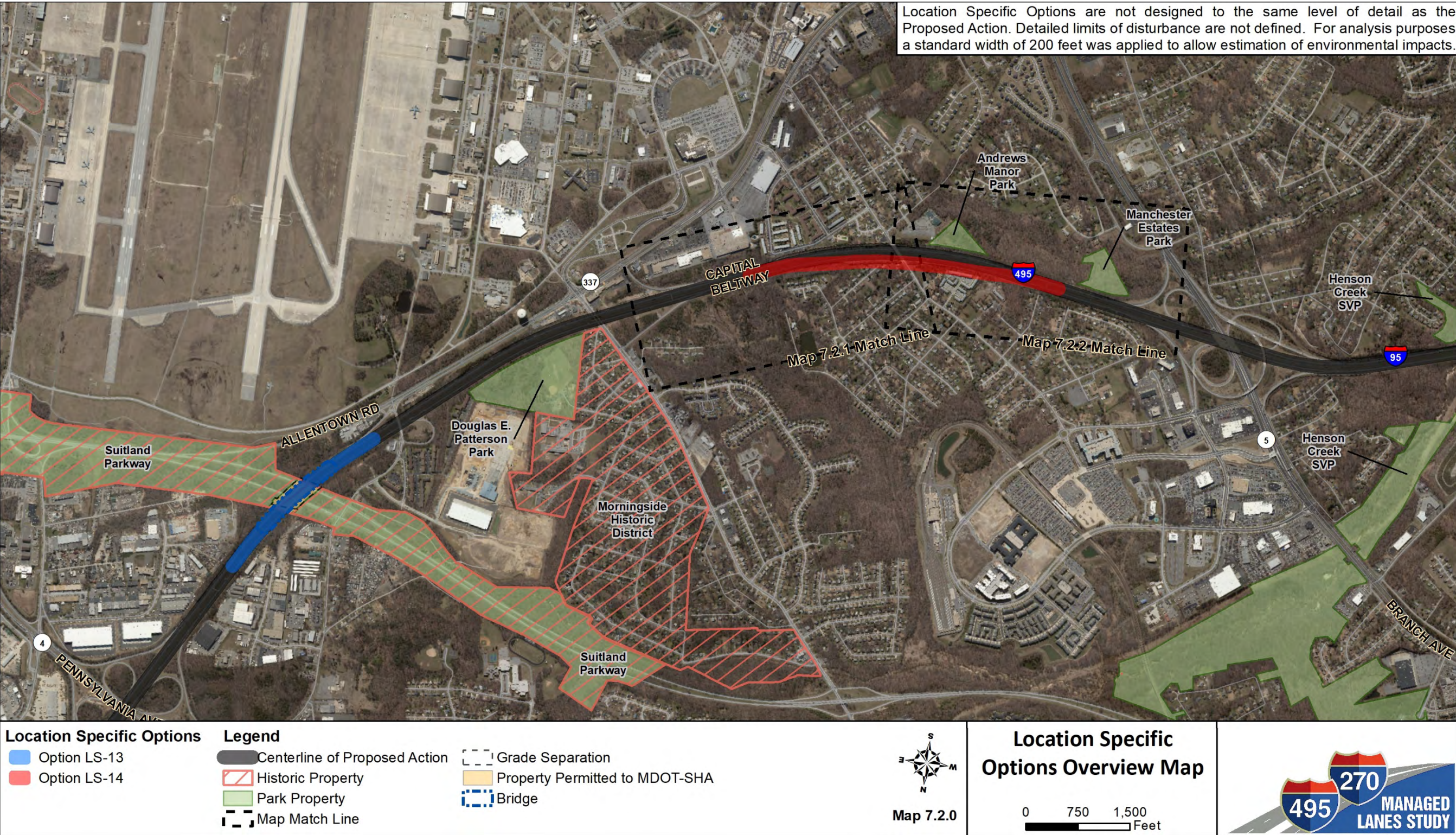
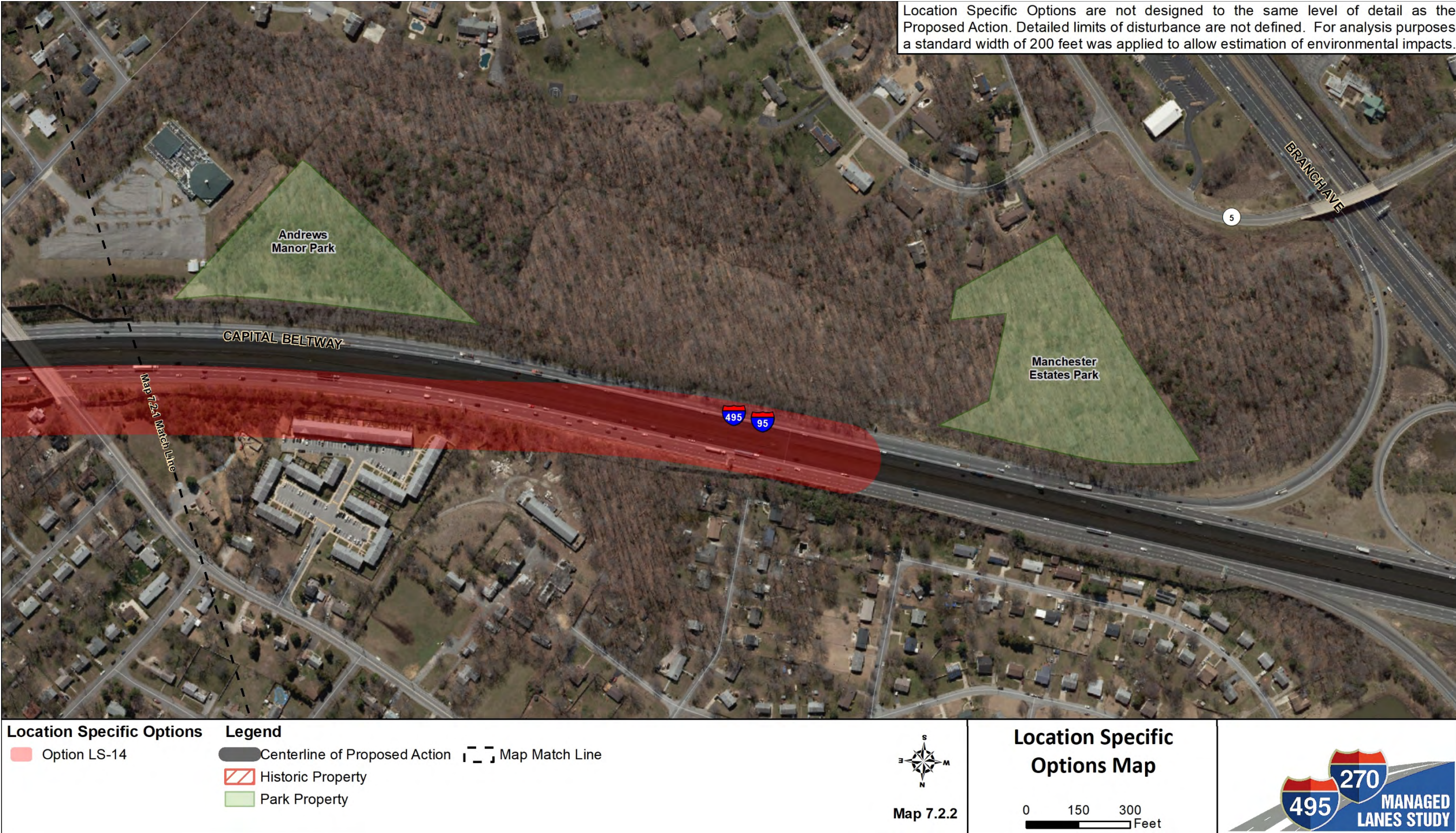


Figure 5-48: Detail of Location Specific Option LS-14 (Map 1 of 2)



Figure 5-49: Detail of Location Specific Option LS-14 (Map 2 of 2)

Location Specific Options are not designed to the same level of detail as the Proposed Action. Detailed limits of disturbance are not defined. For analysis purposes a standard width of 200 feet was applied to allow estimation of environmental impacts.



5.1.15 Location Specific Option 15 (LS-15)

Section 4(f) Properties Avoided: Cabin John Regional Park, Tilden Woods Stream Valley Park, Old Farm Neighborhood Conservation Area, and Cabin John Stream Valley Park, Unit 6.

A. Description

The Proposed Action would widen I-270 on alignment at this location. The widening would result in impacts to Cabin John Regional Park as described in **Section 2.2.2**, Tilden Woods Stream Valley Park (**Section 2.2.3**), Old Farm Neighborhood Conservation Area (**Section 2.2.4**) and Unit 6 of Cabin John Stream Valley Park (**Section 2.2.5**).

Option LS-15 would relocate the west spur of I-270 up to 1.6 miles to the west, avoiding the four Section 4(f) properties (**Figure 5-50** through **Figure 5-56**). The wide westerly shift is necessary because Cabin John Regional Park is a contiguous resource that extends over a mile to the west of I-270. The arc of Option LS-15 was designed to avoid Section 4(f) property, minimize property relocations, and connect to I-495 near the existing interchange. Existing I-270 would be removed from service between the west spur interchange with I-495 and the Montrose Road interchange.

B. Analysis

In consideration of Least Overall Harm Factor 6, Option LS-15 would cause severe impacts to community resources, potentially resulting in the relocation of 700 properties. Option LS-15 would also impact the roadway infrastructure of several existing communities, potentially cutting off access to these areas. In consideration of Least Overall Harm Factor 7, Option LS-15 would cost an estimated \$2.5 billion or \$1.6 billion more than the Proposed Action along this portion of the project. Owing to the severe impacts to community resources and substantial difference in cost, Option LS-15 would result in more harm than the Proposed Action.

In consideration of Least Overall Harm Factor 1, because it avoids the Section 4(f) use of the four properties listed in **Table 5-16**, when compared to the Proposed Action Option LS-15 would have greater ability to mitigate adverse impacts to Section 4(f) property. Additionally, in consideration of Least Overall Harm Factor 2, Option LS-15 would result in less remaining harm to the protected activities, attributes, and features that qualify Section 4(f) property for protection. In consideration of Least Overall Harm Factor 3, Cabin John Regional Park is a large, heavily used, multi-function recreational facility that provides opportunities to a wide segment of densely populated lower Montgomery County in a location where no comparable facilities exist. It is the most significant Section 4(f) property along this portion of the Study.

Table 5-16: Properties Avoided by Option LS-15

Section 4(f) Property	Section 4(f) Avoidance (in Acres)
Cabin John Regional Park	5.7
Tilden Woods Stream Valley Park	0.2
Old Farm Neighborhood Conservation Area	0.1
Cabin John Stream Valley Park, Unit 6	0.4
Total Section 4(f) Property Avoided	6.4



In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 5, Option LS-15 would maintain the same typical section as the Proposed Action, but owing to the length and significant disruption to established communities would meet the Purpose and Need of the Study to a lesser degree than the Proposed Action.

Figure 5-50: Overview Map of Location Specific Option LS-15

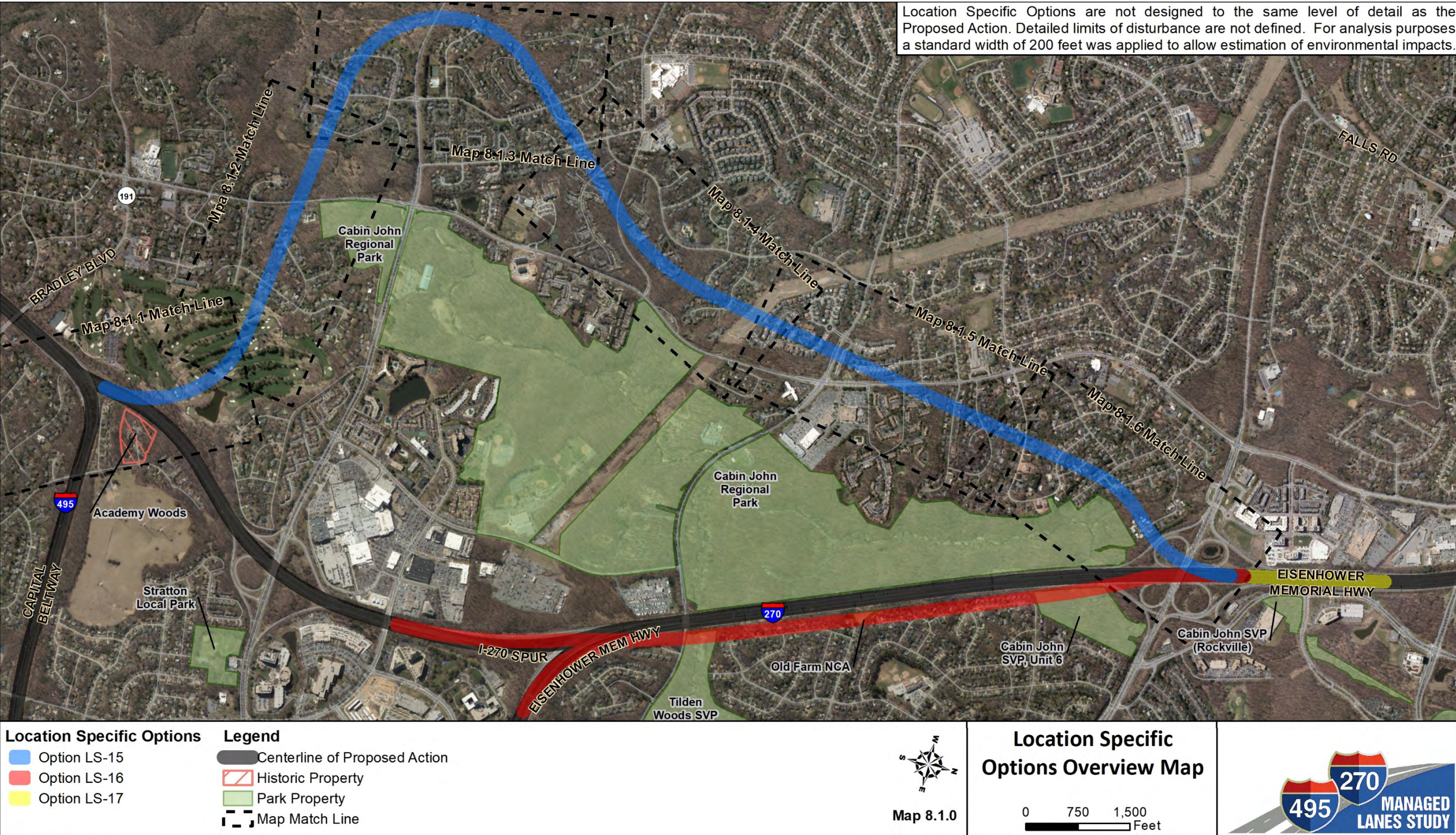


Figure 5-51: Detail of Location Specific Option LS-15 (Map 1 of 6)

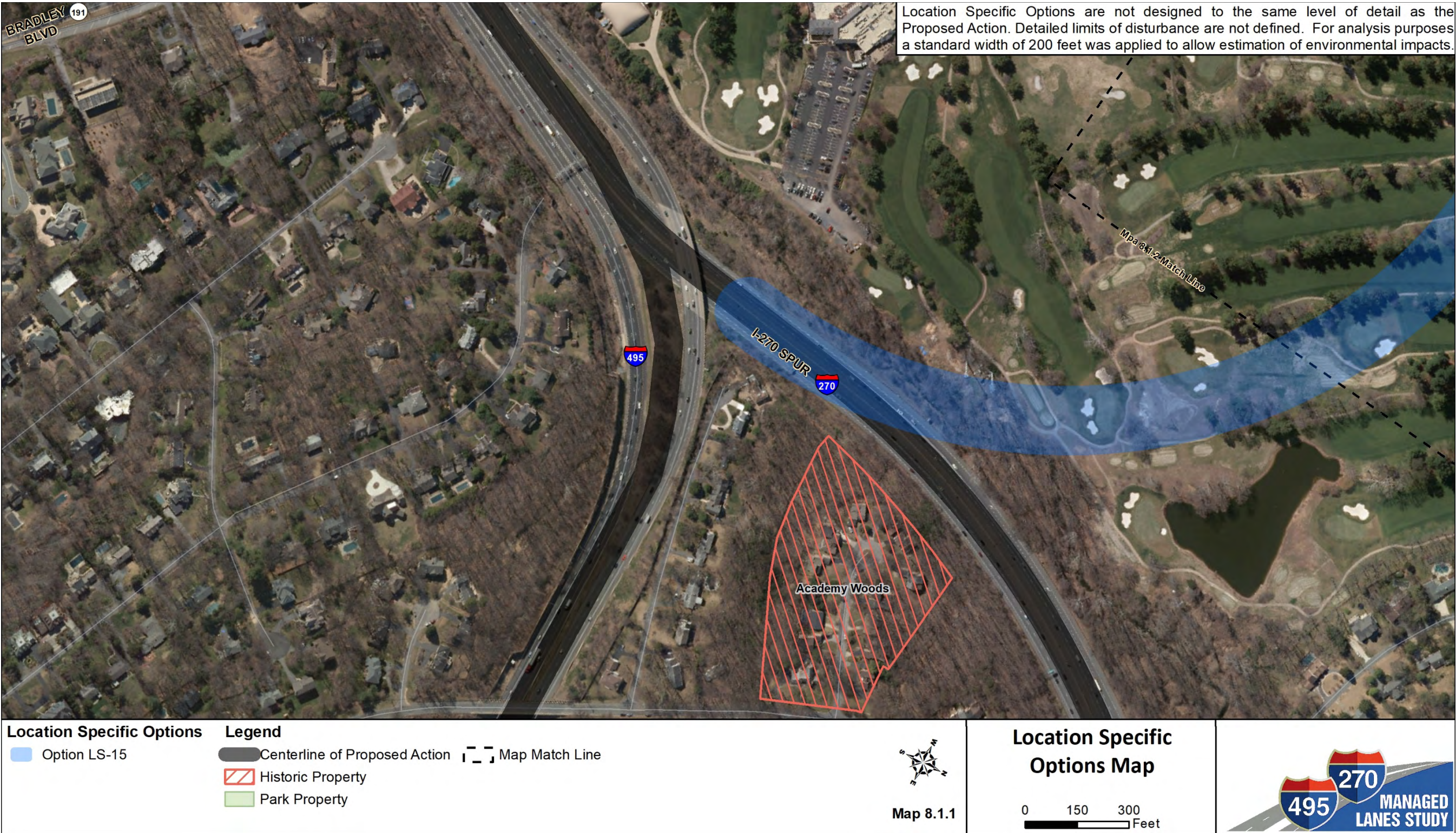


Figure 5-52: Detail of Location Specific Option LS-15 (Map 2 of 6)



Figure 5-53: Detail of Location Specific Option LS-15 (Map 3 of 6)

Location Specific Options are not designed to the same level of detail as the Proposed Action. Detailed limits of disturbance are not defined. For analysis purposes a standard width of 200 feet was applied to allow estimation of environmental impacts.

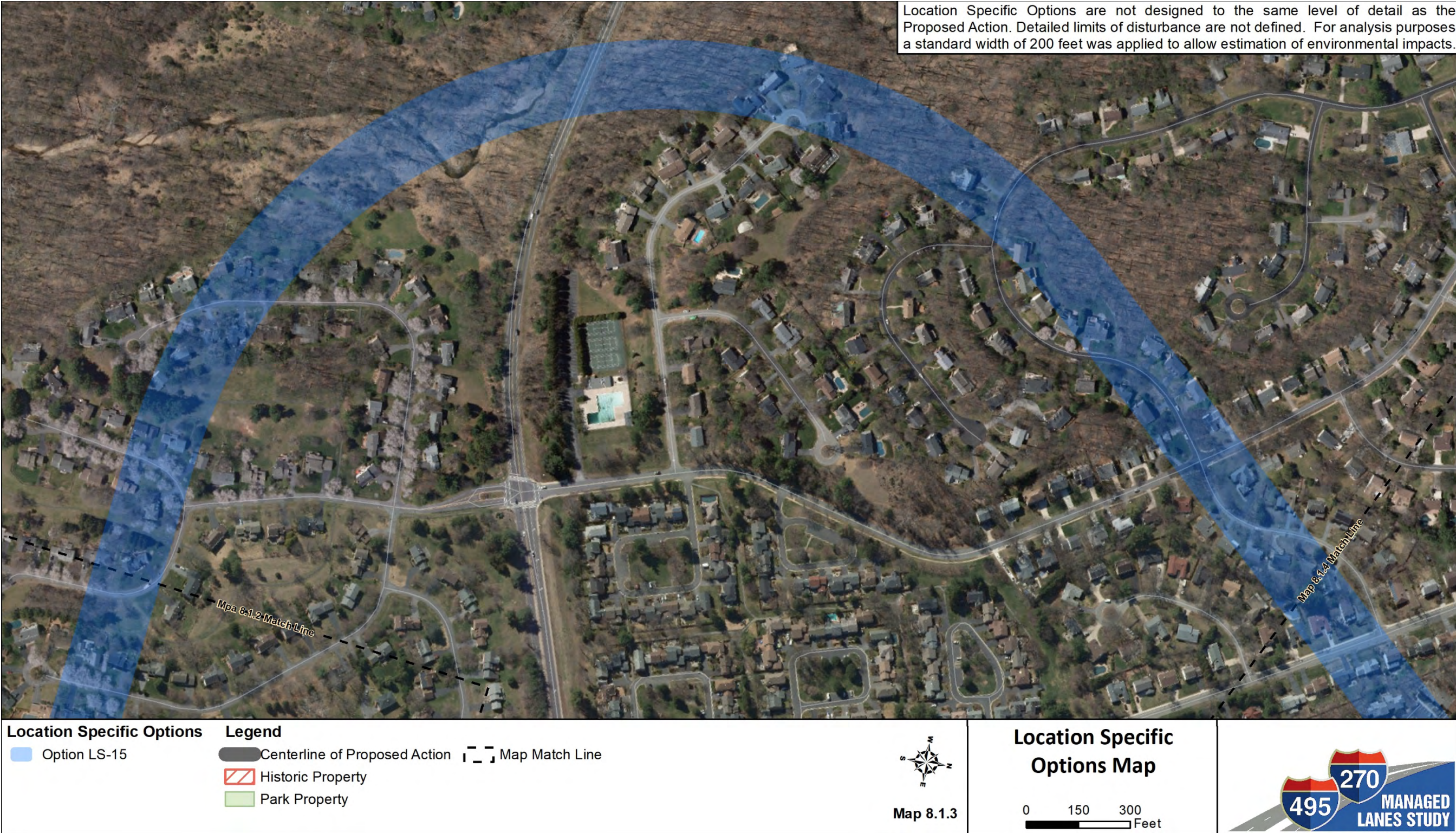


Figure 5-54: Detail of Location Specific Option LS-15 (Map 4 of 6)

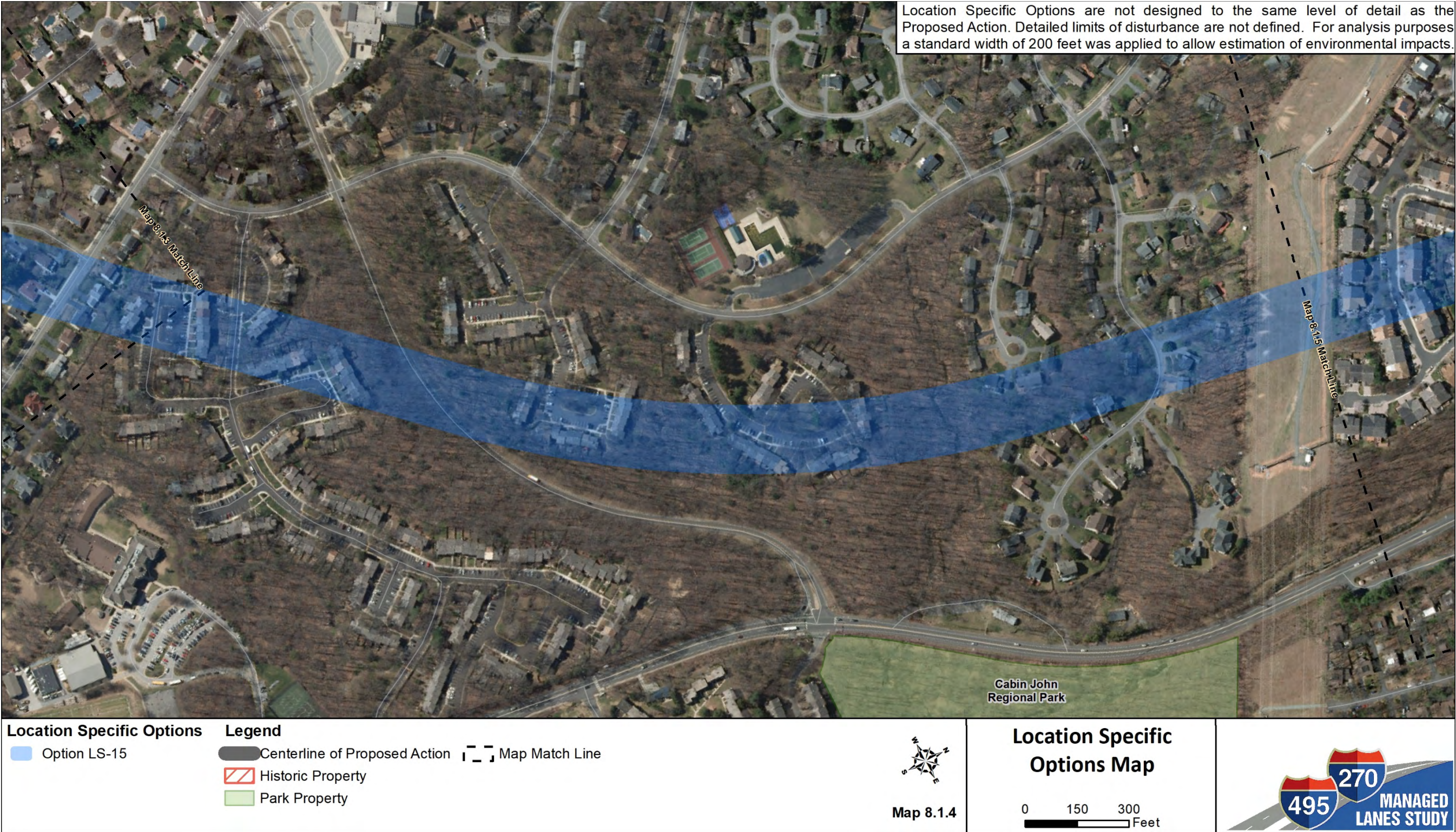


Figure 5-55: Detail of Location Specific Option LS-15 (Map 5 of 6)

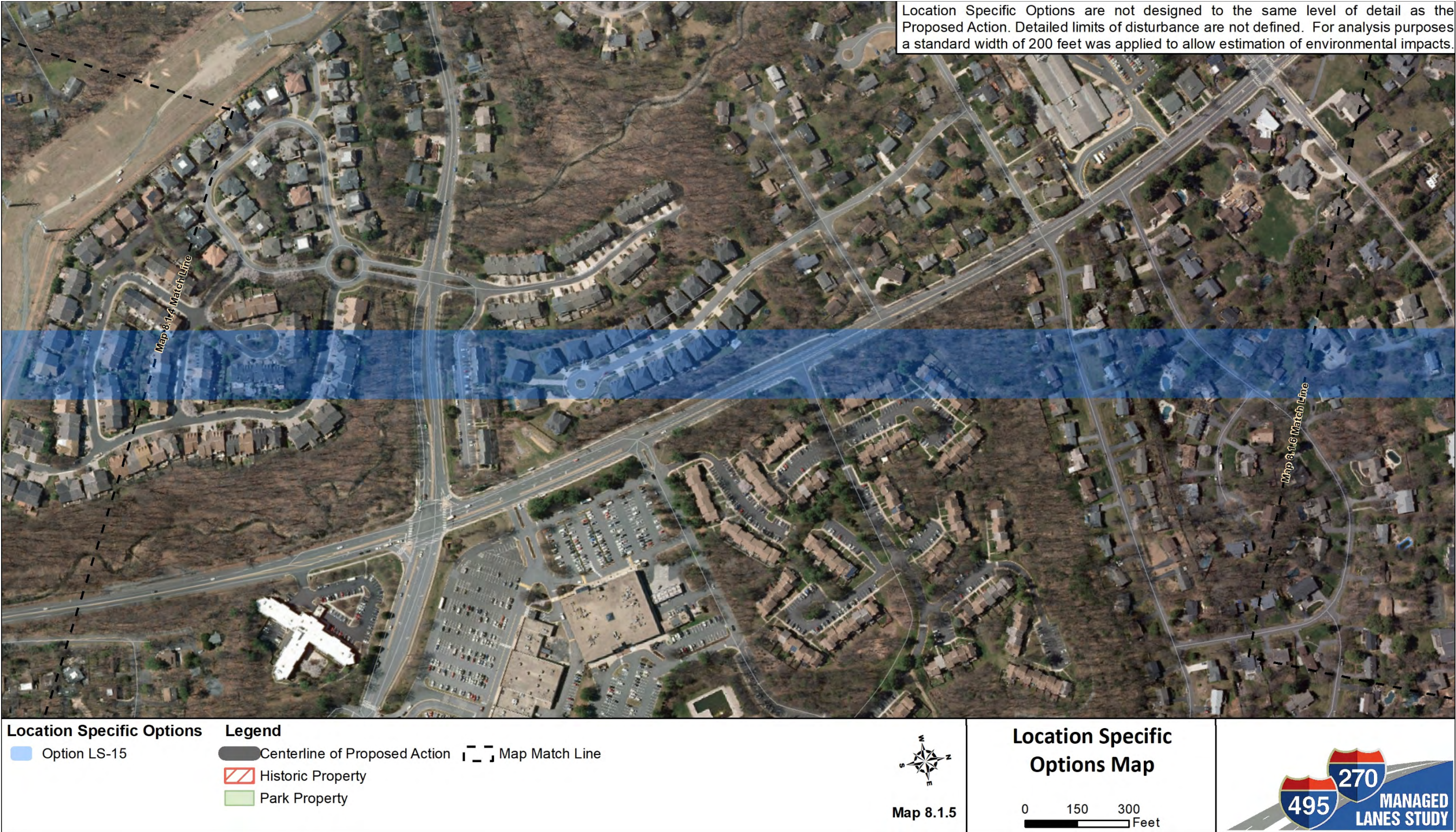


Figure 5-56: Detail of Location Specific Option LS-15 (Map 6 of 6)



5.1.16 Location Specific Option 16 (LS-16)

Section 4(f) Property Avoided: Cabin John Regional Park

A. Description

The Proposed Action would widen I-270 on existing alignment at this location. The widening would result in impacts to Cabin John Regional Park as described in **Section 2.2.2**. Option LS-16 would shift the I-270 mainline approximately 160 feet to the east while maintaining the same typical section as the Proposed Action (**Figure 5-57** through **Figure 5-61**). The design of Option LS-16 would realign the I-270 split into the east and west spurs.

B. Analysis

In consideration of Least Overall Harm Factor 6, Option LS-16 would cause severe impacts to community resources, potentially resulting in the relocation of 60 properties. In consideration of Least Overall Harm Factor 7, Option LS-16 would cost an estimated \$920 million or \$270 million more than the Proposed Action along this portion of the project. Owing to the severe impacts to community resources and substantial difference in cost, Option LS-16 would result in more harm than the Proposed Action.

Table 5-17: Property Avoided by Option LS-16

Section 4(f) Property	Section 4(f) Avoidance (in Acres)
Cabin John Regional Park	5.7
Total Section 4(f) Property Avoided	5.7

Table 5-18: Properties Experiencing an Increase in Section 4(f) Use by Option LS-16

Section 4(f) Property	Increase in Section 4(f) Use (in Acres)
Tilden Woods Stream Valley Park	0.9
Old Farm Neighborhood Conservation Area	0.6
Cabin John Stream Valley Park, Unit 6	2.4
Total Section 4(f) Property Avoided	3.9

In consideration of Least Overall Harm Factor 1, Option LS-16 would avoid the use of Cabin John Regional Park (**Table 5-17**) and increase the Section 4(f) use of the four properties listed in **Table 5-18**. The net result is when compared to the Proposed Action, Option LS-16 would reduce use of Section 4(f) properties by 1.8 acres. When compared to the Proposed Action Option LS-16 would have greater ability to mitigate adverse impacts to Section 4(f) property. However, the Proposed Action would primarily result in impacts to the edges and boundaries of the Section 4(f) properties where they meet the existing transportation facility. By comparison, Option LS-16 would result in significant impacts to the protected activities, attributes and features of the Section 4(f) properties listed in **Table 5-18**. Therefore, in consideration of Least Overall Harm Factor 2, Option LS-16 would result in greater harm to Section 4(f) properties than the Proposed Action.

In consideration of Least Overall Harm Factor 3, Cabin John Regional Park is a large, heavily used, multi-function recreational facility that provides opportunities to a wide segment of densely populated lower Montgomery County in a location where no comparable facilities exist. It is the most significant Section 4(f) property along this portion of the Study. In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 5, Option LS-16 would maintain the same typical section as the Proposed Action and would meet the Purpose and Need of the Study to a degree comparable to the Proposed Action.

5.1.17 Location Specific Option 17 (LS-17)

Section 4(f) Property Avoided: Cabin John Stream Valley Park (Rockville)

A. Description

The Proposed Action would widen I-270 on-alignment. The widening would result in impacts to Cabin John Stream Valley Park (Rockville) as a result of the construction of a stormwater management facility as described in **Section 2.2.6**. Option LS-17 would similarly widen I-270 on alignment, but would avoid the use of Cabin John Regional Park (Rockville) by eliminating the proposed stormwater management facility (**Figure 5-57** and **Figure 5-61**).

B. Analysis

In consideration of Least Overall Harm Factor 6, Option LS-17 would reduce impacts to forest resources by approximately 2 acres. However it would also eliminate a stormwater management facility and result in a quantity treatment deficit that would affect the ability of the project to secure a state permit. A stormwater management facility is required at this location to address a quantity treatment deficit along this portion of the project. Engineering studies determined no additional suitable locations for stormwater treatment are along this portion of the project. As a result, in consideration of Least Overall Harm Factor 5, Option LS-17 would meet the Purpose and Need to a lesser degree than the Proposed Action because MDOT SHA would not be able to deliver the project in an environmentally responsible manner. Owing the compromised ability to meet the Purpose and Need and adverse impacts to the treatment of stormwater runoff, Option LS-17 would result in more harm than the Proposed Action.

In consideration of Least Overall Harm Factor 1, because it avoids the Section 4(f) use of Cabin John Stream Valley Park (Rockville), Option LS-17 would have greater ability than the Proposed Action to mitigate adverse impacts. Additionally, in consideration of Least Overall Harm Factor 2, Option LS-17 would result in less remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

In consideration of Least Overall Harm Factor 3, Option LS-17 would avoid the use Cabin John Stream Valley Park (Rockville). The use of additional Section 4(f) properties in the vicinity would not change. In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of this Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 7, Option LS-17 would cost \$35 million, approximately \$3 million less than the Proposed Action.

Figure 5-57: Overview Map of Location Specific Options LS-16 and LS-17

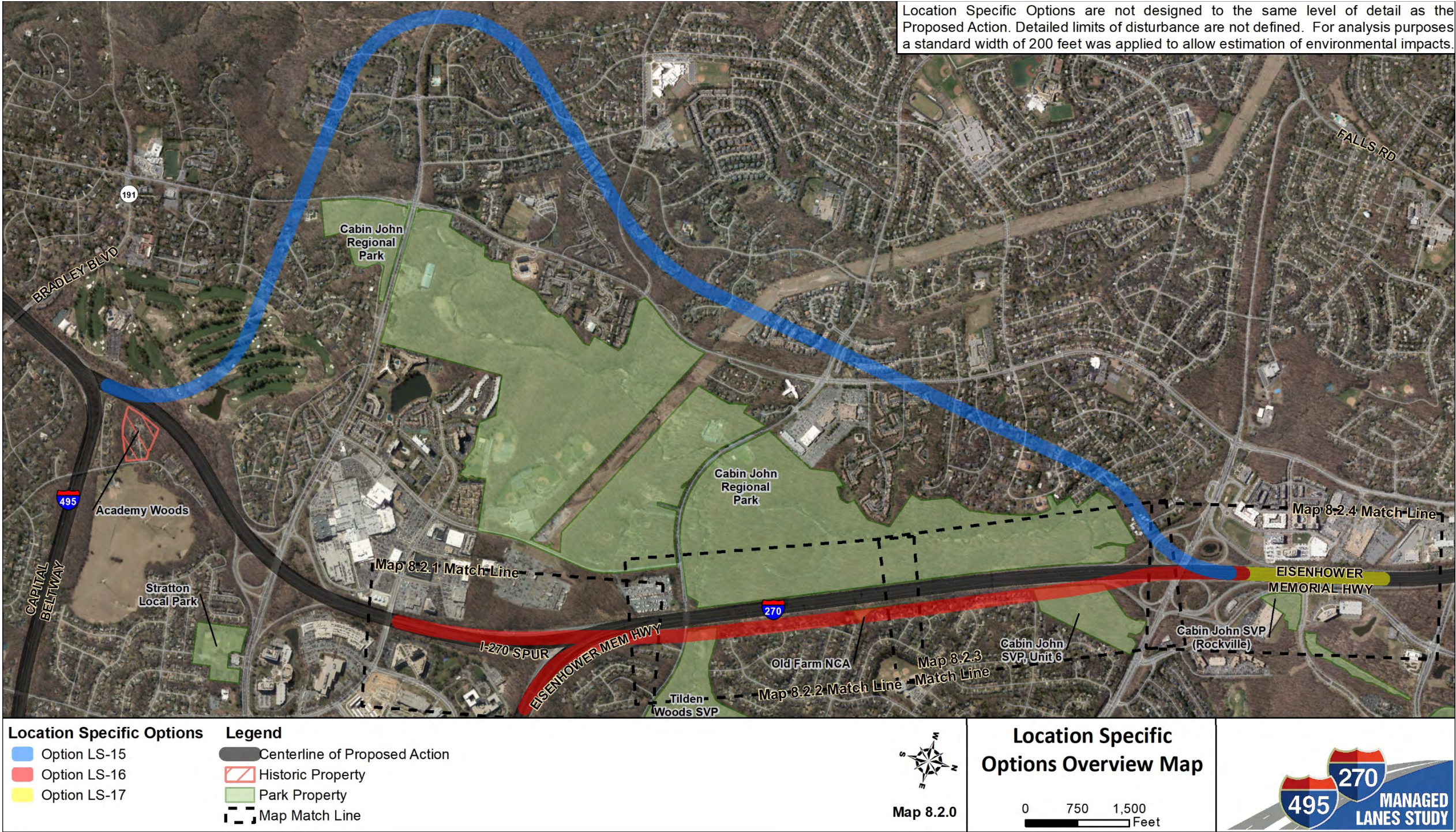


Figure 5-58: Detail of Location Specific Option LS-16 (Map 1 of 4)

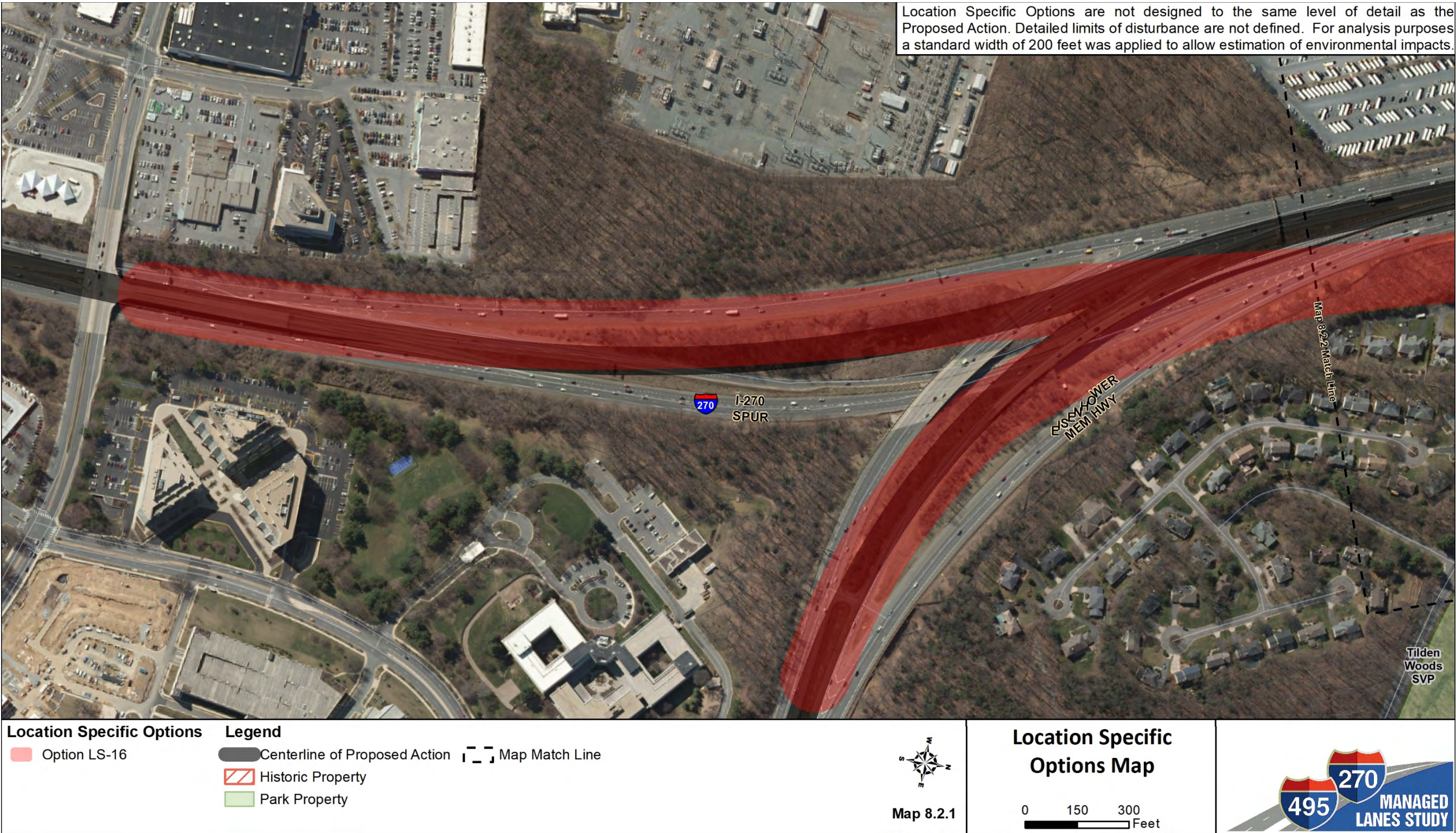


Figure 5-59: Detail of Location Specific Option LS-16 (Map 2 of 4)

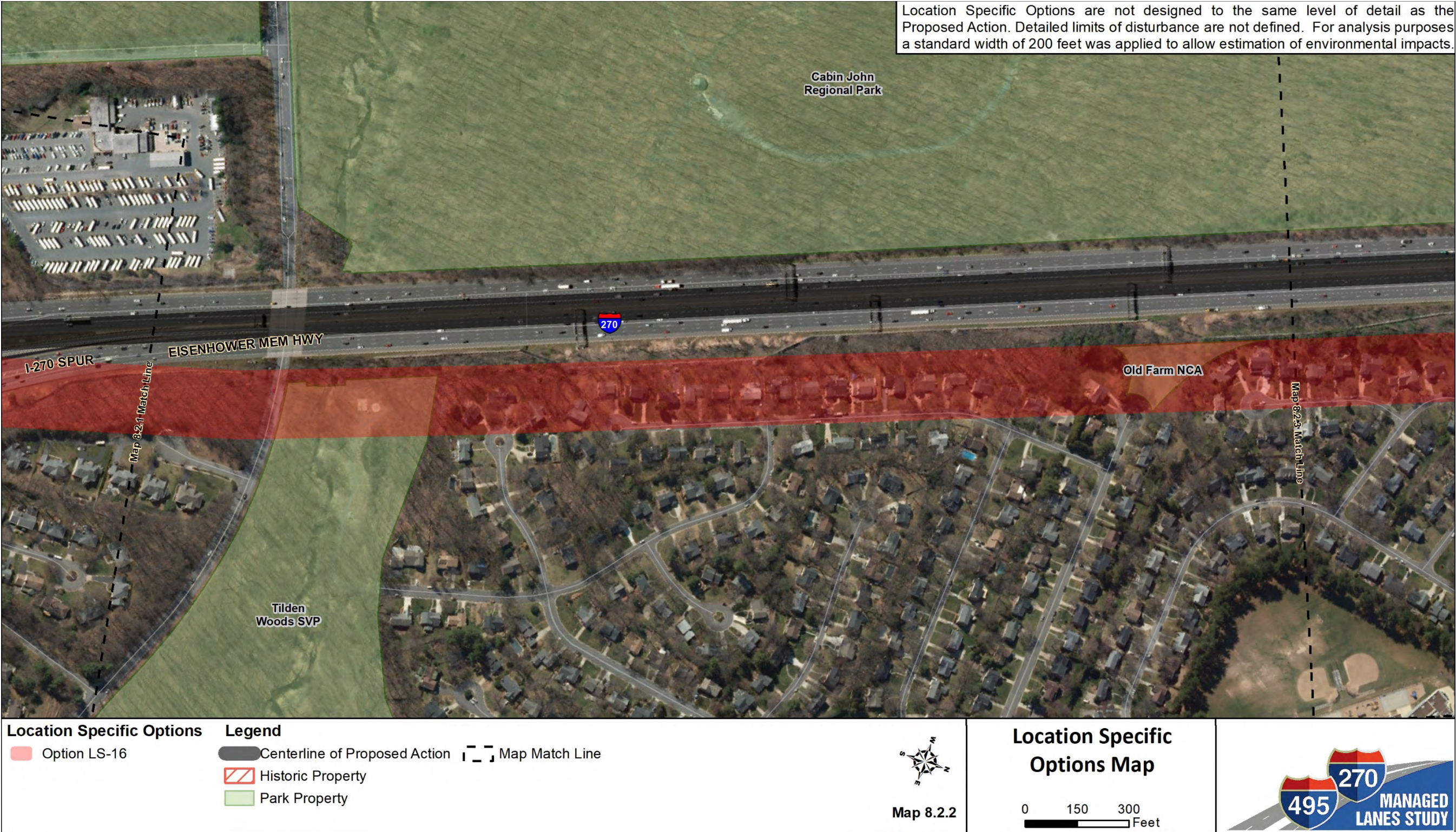


Figure 5-60: Detail of Location Specific Option LS-16 (Map 3 of 4)

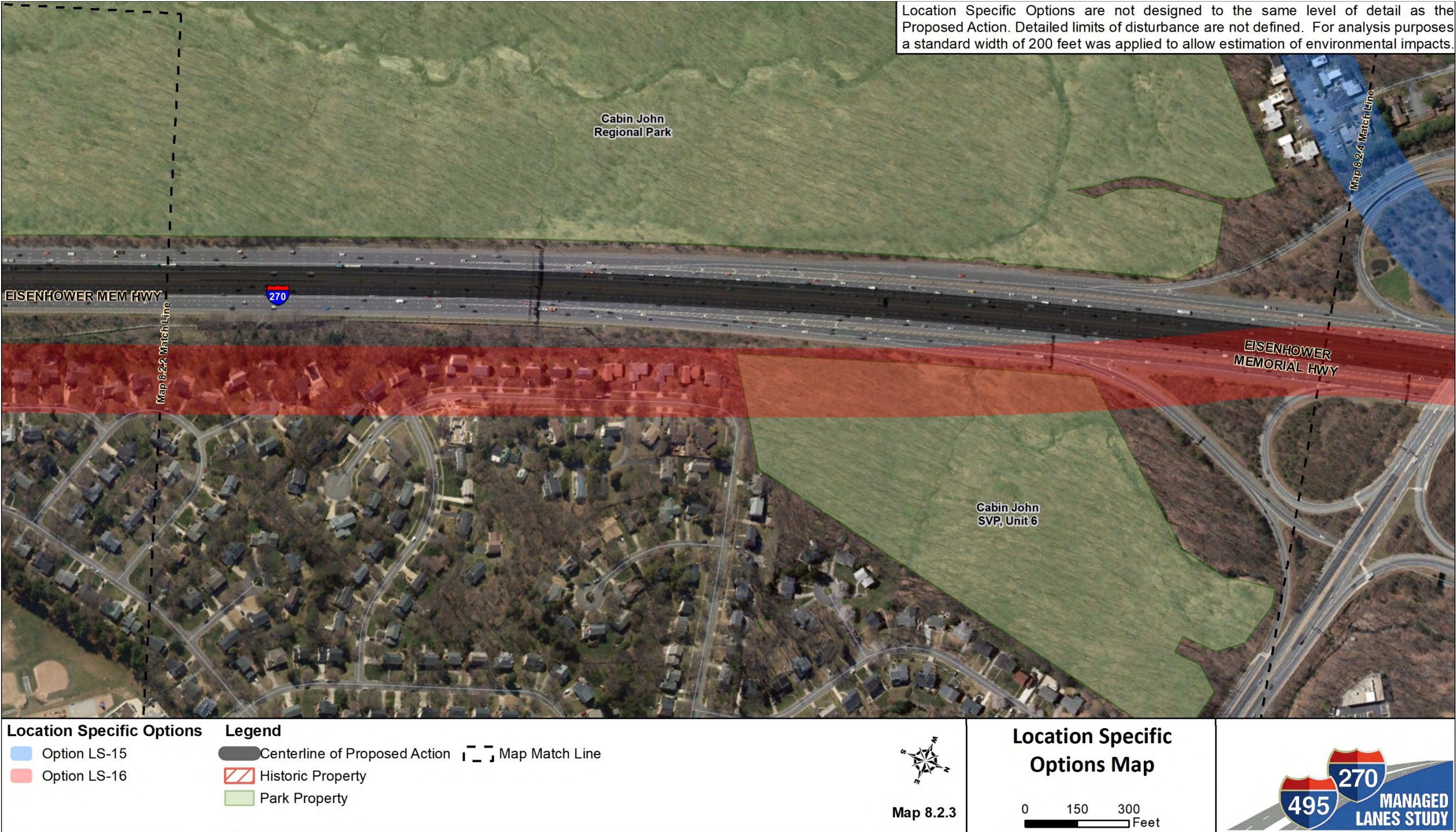
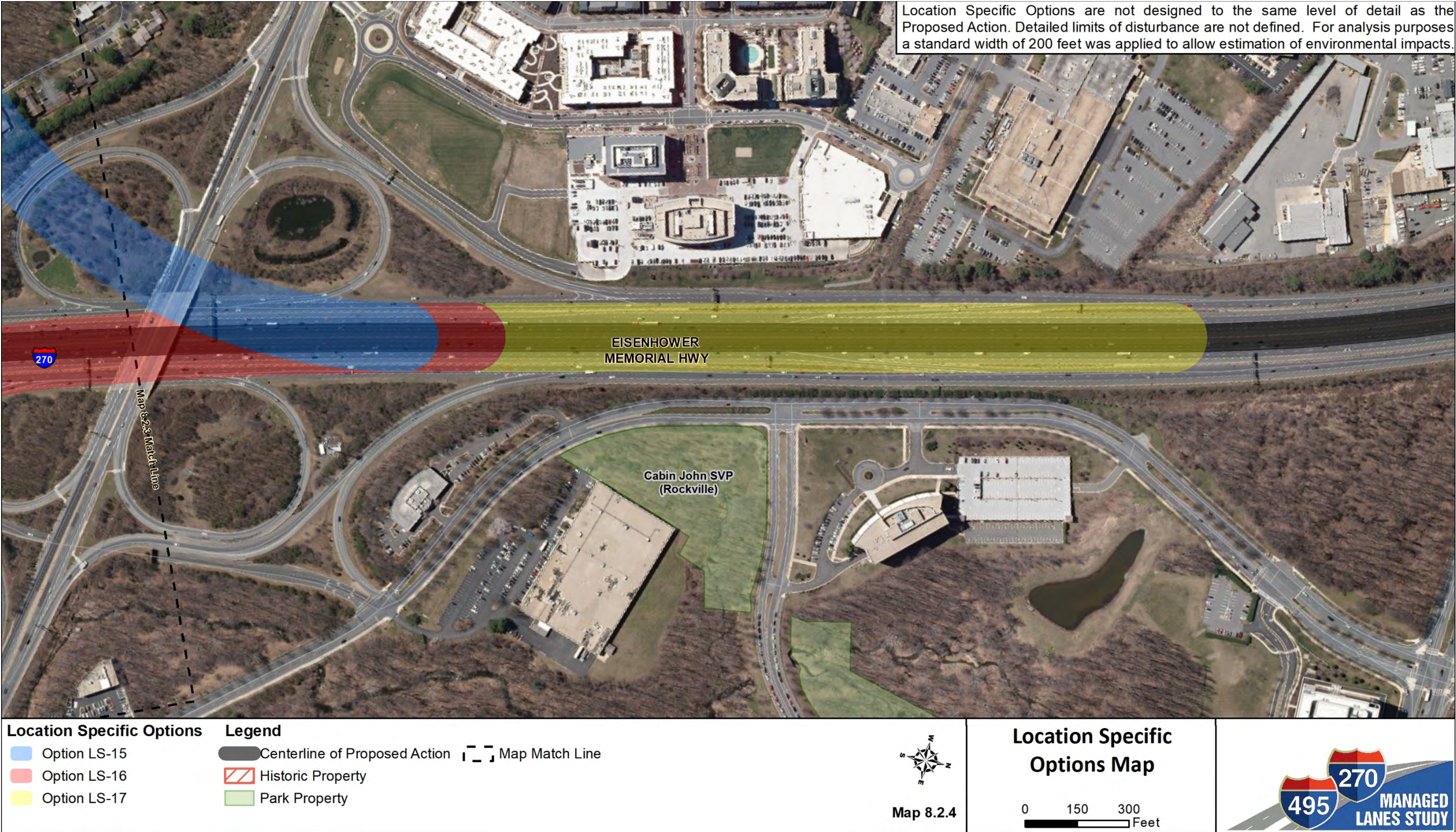


Figure 5-61: Detail of Location Specific Option LS-16 (Map 4 of 4) and Location Specific Option LS-17



5.2 Other Minimization Alternatives Considered

5.2.1 Alternative 5: 1-Lane, High-Occupancy Toll Managed Lane Network

A. Description

This alternative consists of adding one HOT managed lane in each direction on I-495. On I-270, Alternative 5 would convert the one existing HOV lane in each direction to an HOT managed lane (**Figure 5-62**). Buses would be permitted to use the managed lanes.

B. Analysis

In consideration of Least Overall Harm Factor 5, Alternative 5 would not meet the Purpose and Need of the Study owing to deficiencies in addressing the existing traffic and long-term traffic growth and trip reliability. Detailed analysis, including a full comparison of impacts and financial information in relation to the other Proposed Action, is found in the **Chapter 2** of the DEIS and the *Alternatives Technical Report* attached as **Appendix B** of the DEIS. Alternative 5 would perform the worst for most metrics used to evaluate existing traffic and long-term traffic growth and trip reliability and would perform the worst amongst the Screened Alternatives in system-wide delay, corridor travel time, density/level of service and travel time (GP lanes). For this reason, Alternative 5 would result in more harm than the Proposed Action.

Table 5-19: Difference in Use of Section 4(f) Properties among the Proposed Action and Alternative 5

Section 4(f) Property	Section 4(f) Use from Alt 5 (Acres)	Section 4(f) Use from Proposed Action (Acres)					
		Alt 8	Alt 9	Alt 9M	Alt 10	Alt 13B	Alt 13C
BARC	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Montgomery Blair High School Athletic Fields	1.1	1.4	1.4	1.1	1.4	1.4	1.4
Blair Local Park	0.3	0.4	0.4	0.3	0.4	0.4	0.4
Burning Tree Club	0.5	0.8	0.8	0.8	0.8	0.8	0.8
Cabin John Regional Park	4.4	5.7	5.7	5.7	7.2	4.5	5.2
Forest Glen Historic District	0.1	0.2	0.2	0.1	0.2	0.2	0.2
Glenarden Historic District	0.6	0.8	0.8	0.8	0.8	0.8	0.8
Indian Spring Club Estates Historic District	1.1	1.2	1.2	1.1	1.2	1.2	1.2
C&O Canal NHP	14.8	15.4	15.4	15.4	15.4	15.4	15.4
George Washington Memorial Parkway	12.1	12.2	12.2	12.2	12.2	12.2	12.2
Greenbelt Park	0.3	0.6	0.6	0.6	0.6	0.6	0.6
Henry P. Johnson Park	0.0 (Avoided)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Locust Hill Neighborhood Park	0.2	0.3	0.3	0.2	0.3	0.3	0.3
Manchester Estates Park	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Rock Creek Stream Valley Park, Unit 2	0.2	0.4	0.4	0.2	0.4	0.4	0.4
Rock Creek Stream Valley Park, Unit 3	2.5	3.3	3.3	2.5	3.3	3.3	3.3
Sligo Creek Parkway	3.3	4.1	4.1	3.3	4.1	4.1	4.1
Impacts to Section 4(f) Properties (Ac)	42.4	47.9	47.9	45.4	49.4	46.7	47.4

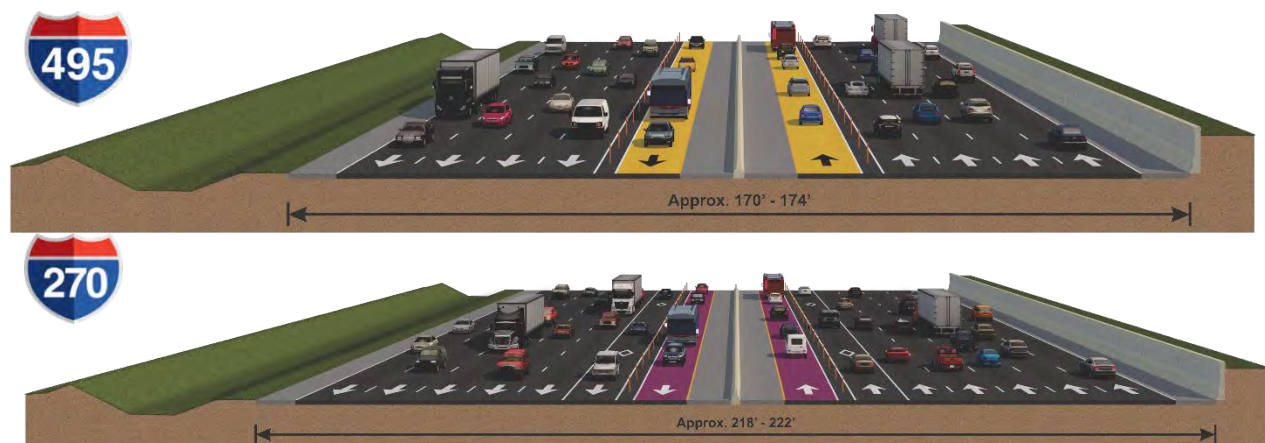
When compared to the Proposed Action, Alternative 5 would result in less use to the 16 Section 4(f) properties listed in **Table 5-19**. Alternative 5 would also impact one fewer Section 4(f) property than the Proposed Action: Henry P. Johnson Park. For the remaining Section 4(f) properties that would experience a use, there is no difference in the area of impacts between the Proposed Action and Alternative 5. In consideration of Least Overall Harm Factor 1, because Alternative 5 would result in less use of Section 4(f) property through the length of the Study, there would be greater ability to mitigate adverse impacts when compared to the Proposed Action. Additionally in consideration of Least Overall Harm Factor 2, Option LS-1 would result in less remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

In consideration of Least Overall Harm Factor 3, the most significant Section 4(f) property along the length of the Study is Greenbelt Historic District, owing to its status as a National Historic Landmark. Additional Section 4(f) properties of elevated significance are scattered along the length of the Study, and include: George Washington Memorial Parkway (**Section 2.1.1**), Chesapeake and Ohio NHP (**2.1.2**), Clara Barton Parkway (**Section 2.1.3**), both units of Rock Creek Stream Valley Park (**Sections 2.1.9** and **2.1.11**), Sligo Creek Parkway (**Section 2.1.17**), Greenbelt Park (**Section 2.1.30**), Baltimore Washington Parkway (**Section 2.1.31**), Glenarden Historic District (**Section 2.1.35**), Suitland Parkway (**Section 2.1.39**), and Cabin John Regional Park (**Section 2.2.2**). When compared to the Proposed Action, Alternative 5 would result in less Section 4(f) use of each of these properties, save Baltimore Washington Parkway.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of the Draft Section 4(f) Evaluation.

In consideration of Least Overall Harm Factor 6, owing to a narrower typical section, when compared to Proposed Action, Alternative 5 would result in fewer impacts to wetlands, waterways, and forest resources. It would also result in fewer relocations. In consideration of Least Overall Harm Factor 7, Alternative 5 would cost between \$ 7.7 billion and \$8.6 billion, which compares to between \$8.2 Billion and \$9.9 Billion for the Proposed Action.

Figure 5-62: Alternative 5 Typical Sections



5.2.2 MD 200 Diversion Alternative

Through the agency coordination process supporting the development of the DEIS, a few cooperating and participating agencies requested that MDOT SHA evaluate an alternative that would provide an alternate route for travelers to use MD 200 (Intercounty Connector) instead of the top side of I-495 between I-270 and I-95. The alternative was born out of a desire of the agencies to avoid or reduce impacts to significant, regulated resources and residential displacements.

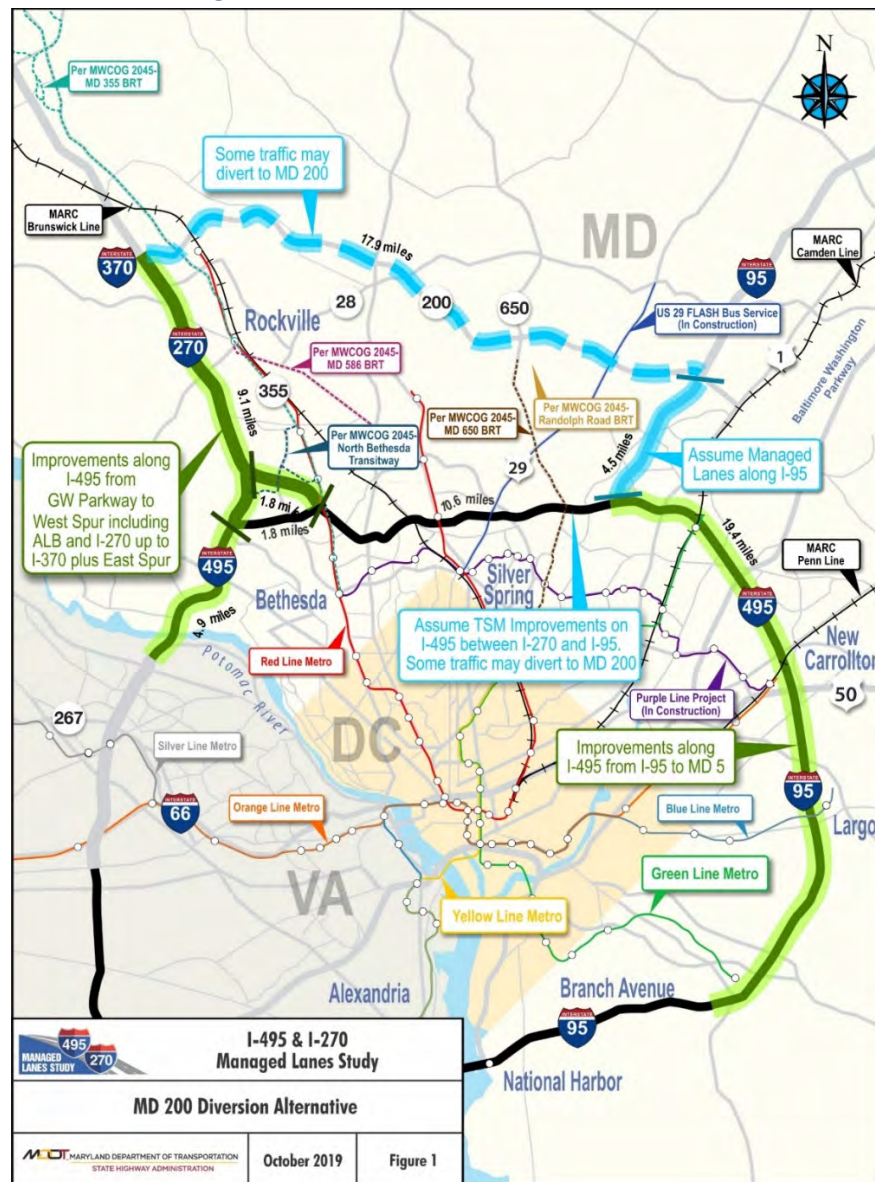
A. Description

From a traffic standpoint, the MD 200 Diversion Alternative would provide an alternative route by directing travelers to use MD 200 instead of the top side of I-495 between I-270 and I-95 (**Figure 5-63**). MD 200 Diversion Alternative would consist of the following elements:

- No widening or capacity improvements along I-495 between the I-270 West Spur and I-95.
- Consideration of TSM/TDM improvements along I-495 between the I-270 East Spur and I-95.
- Two managed lanes added in each direction on I-495 between the Study limits south of George Washington Parkway, at the Virginia Department of Transportation HOT lane extension south of the American Legion Bridge, and the I-270 West Spur.
- Two managed lanes added in each direction on I-495 between I-95 and the Study limits west of MD 5.
- Conversion of the one existing HOV lane in each direction to a HOT managed lane on I-270 and the addition of one HOT managed lane in each direction on I-270, resulting in a two-lane managed lanes network on I-270.
- Two managed lanes added in each direction of I-95 between the MD 200 and I-495.

In general, the MD 200 Diversion Alternative would result in fewer environmental impacts than the Proposed Action. This is the result of no widening or capacity improvements for approximately 10.5 miles along the top side of I-495. Under the MD 200 Diversion Alternative because there are no impacts along the top side of I-495, 13 Section 4(f) properties would be avoided with this alternative compared to the Proposed Action. Specifically, this alternative would avoid four Section 4(f) properties under the authority of the Capper-Cramton Act: Units 2 and 3 of Rock Creek Stream Valley Park, Sligo Creek Parkway, and Unit 3 of Northwest Branch Stream Valley Park. No new Section 4(f) properties along I-95 would be impacted by the MD 200 Alternative.

Figure 5-63: MD 200 Diversion Alternative



B. Analysis

In consideration of Least Overall Harm Factor 5, the MD 200 Diversion Alternative would not address the Study's Purpose and Need of accommodating long-term traffic growth, enhancing trip reliability or improving the movement of goods and services. MD 200 will not have adequate capacity to accommodate the projected traffic by design year 2040 and the viable TSM/TDM solutions would not provide adequate congestion relief on I-495. The MD 200 Diversion Alternative Analysis Results Paper is included as an attachment to the *Alternatives Technical Report* enclosed as **Appendix B**. As the MD 200 Diversion Alternative would not meet the Purpose and Need of the Study, it would cause more harm than the Proposed Actions.

In consideration of Least Overall Harm Factor 1, when compared to the Proposed Action, the MD 200 Diversion Alternative avoids the Section 4(f) use (between 14.9 and 17.9 acres) of the 15 properties listed in **Table 5-19**. Because of this avoidance, the MD 200 Diversion Alternative would have greater ability to mitigate adverse impacts than the Proposed Action. Additionally, inconsideration of Least Overall Harm Factor 2, the MD 200 Diversion Alternative would result in less remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

Table 5-20: Section 4(f) Properties Avoided by MD 200 Diversion Alternative

Section 4(f) Property	Avoided Potential Use under MD 200 Diversion Alternative from the Proposed Action
Fleming Local Park	0.1 Acre
Grosvenor Estate	0.1 Acre to 0.2 Acre (Alt 10)
Rock Creek Stream Valley Park, Unit 3	2.5 Acres (Alts 5 and 9M) to 3.3 Acres
Rock Creek Stream Valley Park, Unit 2	0.2 Acre (Alts 5 and 9M) to 0.4 Acre
Locust Hill Neighborhood Park	0.2 Acre (Alts 5 and 9M) to 0.4 Acre
Metropolitan Branch, B&O Railroad	8.8 Acres
National Park Seminary Historic District/ Forest Glen	1.2 Acres
Forest Glen Historic District	0.1 Acre (Alts 5 and 9M) to 0.2 Acre
Forest Glen Neighborhood Park	0.2 Acre (Alts 5 and 9M) to 0.3 Acre
Sligo Creek Parkway	3.3 Acres (Alts 5 and 9M) to 4.1 Acres
South Four Corners Neighborhood Park	< 0.1 Acre (Alts 5 and 9M) to 0.1 Acre
Indian Spring Club Estates	1.1 Acres (Alts 5 and 9M) to 1.2 Acres
Indian Springs Terrace Local Park	1.2 Acres (Alts 5 and 9M) to 1.4 Acres
Montgomery Blair High School Athletic Fields	1.1 Acres (Alts 5 and 9M) to 1.4 Acres
Blair Local Park	0.3 Acres (Alts 5 and 9M) to 0.4 Acres
Northwest Branch Stream Valley Park	3.2 Acres

In consideration of Least Overall Harm Factor 3, the most significant Section 4(f) property along the length of the Study is Greenbelt Historic District, owing to its status as a National Historic Landmark. Additional Section 4(f) properties of elevated significance are scattered along the length of the Study, and include: George Washington Memorial Parkway (**Section 2.1.1**), Chesapeake and Ohio NHP (**2.1.2**), Clara Barton Parkway (**Section 2.1.3**), both units of Rock Creek Stream Valley Park (**Sections 2.1.9** and **2.1.11**), Sligo Creek Parkway (**Section 2.1.17**), Greenbelt Park (**Section 2.1.30**), Baltimore Washington Parkway (**Section 2.1.31**), Glenarden Historic District (**Section 2.1.35**), Suitland Parkway (**Section 2.1.39**), and Cabin John Regional Park (**Section 0**). When compared to the Proposed Action, the MD 200 Diversion Alternative would result in less Section 4(f) use of Units 2 and 3 of Rock Creek Stream Valley Park and Sligo Creek Parkway.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of the Draft Section 4(f) Evaluation.

In consideration of Least Overall Harm Factor 6, owing to a narrower typical section along I-495 between the I-270 east spur and the I-95 interchange, when compared to Proposed Action, the MD 200 Diversion Alternative would result in fewer impacts to wetlands, waterways, and forest resources. It would also

result in fewer relocations. In consideration of Least Overall Harm Factor 7, the MD 200 Diversion Alternative would cost between \$6.7 billion and \$8.1 billion, which compares to between \$8.2 Billion and \$9.9 Billion for the Proposed Action. However, the MD 200 Diversion Alternative would require a subsidy of public funding, which means that even with toll revenue, the State would have to pay approximately \$310 million over the life of the project.

5.3 Proposed Action

There are six Build Alternatives that are being retained for detailed study in the DEIS. These alternatives include managed lanes that differ in the manner in which the proposed travel lanes would be designated and configured. The six Build Alternatives were summarized in **Section 1.4.3** of this document and are described in detail in the DEIS. The total impacts to Section 4(f) property are listed in **Table 5-21**. Because the No Build would not result in the use of any Section 4(f) property, it is evaluated as an avoidance alternative in **Section 3.1.1**.

Table 5-21: Total Potential Impacts to Section 4(f) properties by Build Alternative

Alternative	Potential Impact in Acres to Section 4(f) Properties
8	146.8
9	146.8
9M	144.7
10	149.0
13B	145.5
13C	146.7

5.3.1 Alternative 8: Two-Lane, ETL Managed Lane Network on I-495 and One-Lane ETL and One-Lane HOV Managed Lane Network on I-270

A. Description

This alternative consists of adding two ETL managed lanes in each direction on I-495, retaining one existing HOV lane in each direction on I-270, and adding one ETL managed lane in each direction on I-270 (**Figure 5-64**). Buses would be permitted to use the managed lanes.

B. Analysis

In consideration of Least Overall Harm Factor 5, Alternative 8 would meet the Purpose and Need of the Study to a lesser degree than the other Build Alternatives that comprise the Proposed Action. Alternative 8 provides the least benefit compared to the other Build Alternatives in several metrics used to evaluate each alternative's ability to accommodate existing and long-term traffic growth, including average speed in the GP lanes, overall network delay during the AM peak period, and average annual travel time savings per commuter. Additionally, because Alternative 8 only provides a single ETL along I-270, slow-moving vehicles can reduce trip reliability in the managed lanes under Alternative 8 compared to the other Build Alternatives, which all provide two-lane systems. Owing to the compromised ability to meet the Purpose and Need, Alternative 8 would result in more harm than other Build Alternatives in the Proposed Action.

In consideration of Least Overall Harm Factor 1, Alternative 8 would result in 146.8 acres of impacts to Section 4(f) properties when compared to the range of impacts for the other Build Alternatives – 144.7 to 149.0. Alternative 9 would result in the same area of impact to Section 4(f) properties. Each of the Build

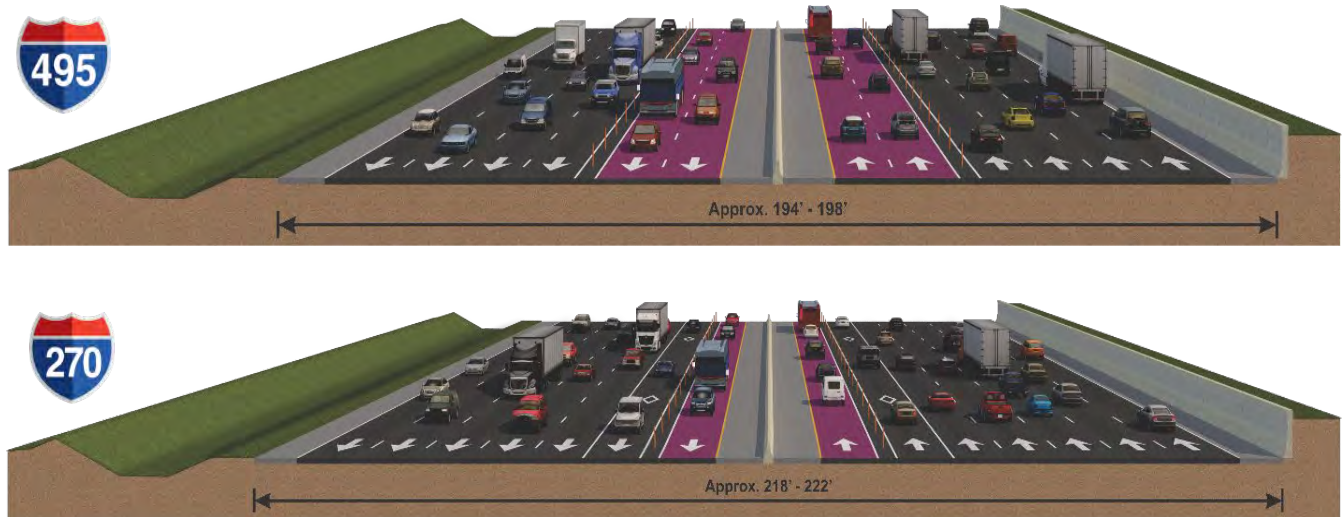
Alternatives in the Proposed Action would impact the same number of Section 4(f) properties. Differences between the Build Alternatives are limited to areas at the boundaries and edges of Section 4(f) properties, where they meet the existing transportation facility. Despite the minor difference in the acreage of Section 4(f) use between Alternative 8 and the other Build Alternatives, the quality and features of the impacted lands for all Build Alternatives would be very similar. The ability to mitigate adverse impacts caused by Alternative 8 would be substantially equal to the other Build Alternatives that comprise the Proposed Action. In consideration of Least Overall Harm Factor 2, when compared to the Build Alternatives that comprise the Proposed Action, Alternative 8 would result in substantially equal harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

In consideration of Least Overall Harm Factor 3, the most significant Section 4(f) property along the length of the Study is Greenbelt Historic District, owing to its status as a National Historic Landmark. Additional Section 4(f) properties of elevated significance are scattered along the length of the Study, and include: George Washington Memorial Parkway (**Section 2.1.1**), Chesapeake and Ohio NHP (**2.1.2**), Clara Barton Parkway (**Section 2.1.3**), both units of Rock Creek Stream Valley Park (**Sections 2.1.9** and **2.1.11**), Sligo Creek Parkway (**Section 2.1.17**), Greenbelt Park (**Section 2.1.30**), Baltimore Washington Parkway (**Section 2.1.31**), Glenarden Historic District (**Section 2.1.35**), Suitland Parkway (**Section 2.1.39**), and Cabin John Regional Park (**Section 2.2.2**). When compared to the Proposed Action, Alternative 8 would result in substantially equal use of these Section 4(f) properties.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of the Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 6, the number of potential relocations as well as impacts to wetlands, waterways and forest resources are substantially equal across all Build Alternatives.

In consideration of Least Overall Harm Factor 7, the anticipated construction and right-of-way cost of Alternative 8 is approximately \$8.7 Billion to \$9.6 Billion, which compares to the other Build Alternatives which range from \$8.2 Billion to \$9.9 Billion. Alternative 8 cashflow estimates indicate a more positive financial self-sufficient position (requiring no public subsidy) than several other Build Alternatives. Results for the baseline scenario indicated net payments to the state of approximately \$833 million over the lifetime of the concessionaire's stake in the roadway. Under a lower construction price and lower interest rate scenario, the positive cashflows would be estimated at \$2,627 million. Conversely, a higher construction cost and higher interest rate scenario would result in a negative cashflow estimate where the state may be required to provide a subsidy of approximately \$584 million.

Figure 5-64: Alternative 8 Typical Sections



5.3.2 Alternative 9: Two Lane, High-Occupancy Toll Managed Lanes Network

A. Description

Alternative 9 consists of adding two HOT managed lanes in each direction on I-495, converting the one existing HOV lane in each direction on I-270 to a HOT managed lane, and adding one HOT managed lane in each direction on I-270, resulting in a two-lane, managed lane network on both highways (**Figure 5-65**). Buses would be permitted to use the managed lanes.

B. Analysis

In consideration of Least Overall Harm Factor 5, Alternative 9 would meet the Purpose and Need of the Study to a greater degree than the other Build Alternatives that comprise the Proposed Action. Alternative 9 performs consistently well when evaluating traffic metrics to accommodate existing and long-term traffic growth. It also performs the best among the Build Alternatives when evaluating average speed and corridor travel times on I-495 and I-270 within the limits of the Study. Alternative 9 would provide a reliable trip in the managed lanes and enhance reliability of the trip in the GP lanes.

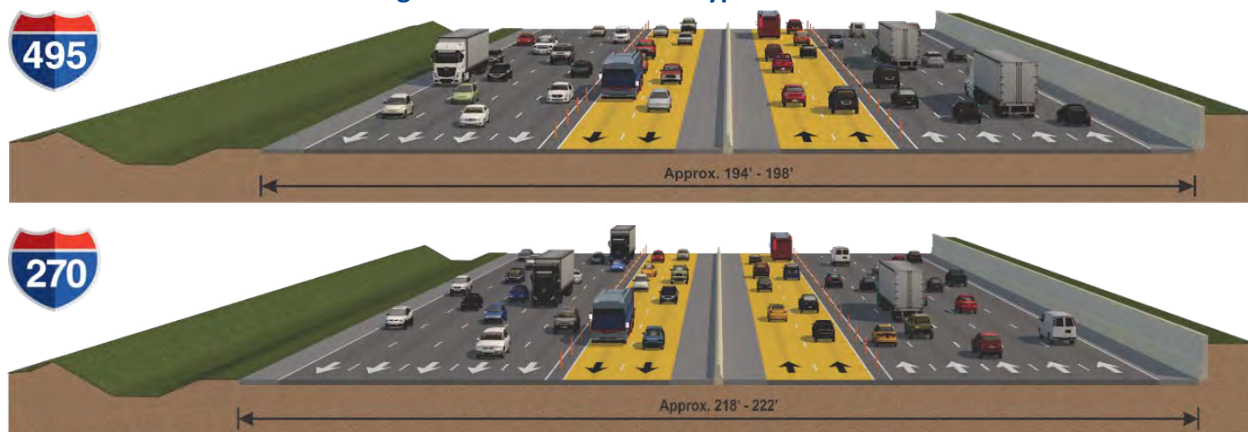
In consideration of Least Overall Harm Factor 7, the anticipated construction and right-of-way cost of Alternative 9 is approximately \$8.7 Billion to \$9.6 Billion, which compares to the other Build Alternatives which range from \$8.2 Billion to \$9.9 Billion. Alternative 9 cashflow estimates indicate that it would be the most likely to be financially self-sufficient (requiring no public subsidy), representing a substantial difference in the cost among the alternatives. In the baseline scenario, positive excess cashflows would be approximately \$960 million over the lifetime of the concessionaire's stake in the roadway. Under a lower construction price and lower interest rate scenario, the positive cashflows would be estimated at \$2,762 million. Conversely, a higher construction cost and higher interest rate scenario would result in a negative cashflow estimate where the State may be required to provide a subsidy of approximately \$482 million (lowest of the potential subsidies estimated from the financial analysis). Owing to meeting the Purpose and Need of the Study to a greater degree and for having the most financially self-sufficient outlook, Alternative 9 results in less harm than the other Build Alternatives in the Proposed Action.

In consideration of Least Overall Harm Factor 1, Alternative 9 would result in 146.8 acres of impacts to Section 4(f) properties when compared to the range of impacts for the other Build Alternatives – 144.7 to 149.0. Alternative 8 would result in the same area of impact to Section 4(f) properties. Each of the Build Alternatives in the Proposed Action would impact the same number of Section 4(f) properties. Differences between the Build Alternatives are limited to areas at the boundaries and edges of Section 4(f) properties, where they meet the existing transportation facility. Despite the minor difference in the acreage of Section 4(f) use between Alternative 9 and the other Build Alternatives, the quality and features of the impacted lands for all Build Alternatives would be very similar. The ability to mitigate adverse impacts caused by Alternative 9 would be substantially equal to the other Build Alternatives that comprise the Proposed Action. In consideration of Least Overall Harm Factor 2, when compared to the Build Alternatives that comprise the Proposed Action, Alternative 9 would result in substantially equal harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

In consideration of Least Overall Harm Factor 3, the most significant Section 4(f) property along the length of the Study is Greenbelt Historic District, owing to its status as a National Historic Landmark. Additional Section 4(f) properties of elevated significance are scattered along the length of the Study, and include: George Washington Memorial Parkway (**Section 2.1.1**), Chesapeake and Ohio NHP (**2.1.2**), Clara Barton Parkway (**Section 2.1.3**), both units of Rock Creek Stream Valley Park (**Sections 2.1.9** and **2.1.11**), Sligo Creek Parkway (**Section 2.1.17**), Greenbelt Park (**Section 2.1.30**), Baltimore Washington Parkway (**Section 2.1.31**), Glenarden Historic District (**Section 2.1.35**), Suitland Parkway (**Section 2.1.39**), and Cabin John Regional Park (**Section 2.2.2**). When compared to the Proposed Action, Alternative 9 would result in substantially equal use of these Section 4(f) properties.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of the Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 6, the number of potential relocations as well as impacts to wetlands, waterways and forest resources are substantially equal across all Build Alternatives.

Figure 5-65: Alternative 9 Typical Sections



5.3.3 Alternative 9 Modified

A. Description

Overall, Alternative 9M would be a blend of Alternatives 5 and 9 with the primary difference on the top side of I-495 between I-270 and I-95 being the addition of one HOT lane instead of two HOT lanes in each direction:

- Two HOT managed lanes added in each direction on I-495 on the west side – between the Study limits south of the George Washington Memorial Parkway and the I-270 West Spur, including the American Legion Bridge.
- Conversion of the one existing HOV lane in each direction to a HOT managed lane on I-270 and the West Spur, and the addition of one HOT managed lane in each direction on I-270 and the West Spur, resulting in a two-lane managed lanes network. (Similar to Alternative 9, **Figure 5-65**).
- Conversion of the one existing HOV lane in each direction to a HOT managed lane on the I-270 East Spur. (Similar to Alternative 5, **Figure 5-62**).
- One HOT managed lane in each direction on I-495 between the I-270 West Spur and I-95. (Similar to Alternative 5).
- Two HOT managed lanes added in each direction on I-495 on the east side – between I-95 and the Study limits west of MD 5. (Similar to Alternative 9).

B. Analysis

In consideration of Least Overall Harm Factor 5, Alternative 9M would meet the Purpose and Need of the Study to a lesser degree than the other Build Alternatives that comprise the Proposed Action. Alternative 9M provides less benefit than all of the other Build Alternatives, save Alternative 8, owing to deficiencies in addressing the existing traffic and long-term traffic growth and trip reliability. Because Alternative 9M only provides a single HOT lane in each direction of I-495 between the I-270 west spur and I-95 interchange, slow-moving vehicles can reduce trip reliability in the managed lanes compared to the other Build Alternatives, which all provide two-lane systems.

In consideration of Least Overall Harm Factor 7, Alternative 9M would cost approximately \$8.2 to \$9.1 Billion, which compares to the other Build Alternatives which range from \$8.2 Billion to \$9.9 Billion. Alternative 9M cashflow estimates indicate that it would may be financially self-sufficient. In the baseline scenario, positive excess cashflows would be approximately \$459 over the lifetime of the concessionaire's stake in the roadway. Under a lower construction price and lower interest rate scenario, the positive cashflows would be estimated at \$2,190 million. Conversely, a higher construction cost and higher interest rate scenario would result in a negative cashflow estimate where the State may be required to provide a subsidy of approximately \$827 million. Owing to the compromised ability to meet Purpose and Need and a financial outlook that is less than Alternatives 9 and 10, Alternative 9M would result in greater harm than the other Build Alternatives in the Proposed Action.

In consideration of Least Overall Harm Factor 1, Alternative 9M would result in 144.7 acres of impacts to Section 4(f) properties, the least among the range of impacts for the other Build Alternatives – 144.7 to 149.0. Each of the Build Alternatives in the Proposed Action would impact the same number of Section 4(f) properties. Differences between the Build Alternatives are limited to areas at the boundaries and

edges of Section 4(f) properties, where they meet the existing transportation facility. Despite the minor difference in the acreage of Section 4(f) use between Alternative 9M and the other Build Alternatives, the quality and features of the impacted lands for all Build Alternatives would be very similar. The ability to mitigate adverse impacts caused by Alternative 9M would be substantially equal to the other Build Alternatives that comprise the Proposed Action. In consideration of Least Overall Harm Factor 2, when compared to the Build Alternatives that comprise the Proposed Action, Alternative 9M would result in substantially equal harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

In consideration of Least Overall Harm Factor 3, the most significant Section 4(f) property along the length of the Study is Greenbelt Historic District, owing to its status as a National Historic Landmark. Additional Section 4(f) properties of elevated significance are scattered along the length of the Study, and include: George Washington Memorial Parkway (**Section 2.1.1**), Chesapeake and Ohio NHP (**2.1.2**), Clara Barton Parkway (**Section 2.1.3**), both units of Rock Creek Stream Valley Park (**Sections 2.1.9** and **2.1.11**), Sligo Creek Parkway (**Section 2.1.17**), Greenbelt Park (**Section 2.1.30**), Baltimore Washington Parkway (**Section 2.1.31**), Glenarden Historic District (**Section 2.1.35**), Suitland Parkway (**Section 2.1.39**), and Cabin John Regional Park (**Section 2.2.2**). When compared to the Proposed Action, Alternative 9M would result in less impact to Units 2 (0.2 acre less) and 3 (0.8 acre) of Rock Creek Stream Valley Park and Sligo Creek Parkway (0.8 acre) than the other Build Alternatives.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of the Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 6, owing to a narrower typical section no I-495 between the I-270 west spur and I-95, when compared to the Proposed Action, Alternative 9M would result in fewer impacts to wetlands, waterways, and forest resources. It would also result in fewer relocations. Detailed mapping of Alternative 9M can be found in **Appendix D** of the DEIS.

5.3.4 Alternative 10: Two ETL Managed Lanes Network on I-495

A. Description

Alternative 10 consists of adding two ETL managed lanes in each direction on I-495, retaining one existing HOV lane per direction on I-270, and adding two ETL managed lanes in each direction on I-270 (**Figure 5-66**). Buses would be permitted to use the managed lanes.

B. Analysis

In consideration of Least Overall Harm Factor 5, Alternative 10 would meet the Purpose and Need of the Study to a degree similar to Alternative 9, and greater than the other Build Alternatives that comprise the Proposed Action. Alternative 10 would perform well for metrics used to measure the criteria of existing traffic and long-term traffic growth, but not as strongly as Alternative 9. Owing to the compromised ability to meet the Purpose and Need, Alternative 8 would result in more harm than other Build Alternatives in the Proposed Action.

In consideration of Least Overall Harm Factor 1, Alternative 10 would result in 149.0 acres of impacts to Section 4(f) properties, the largest when compared to the range of impacts for the other Build Alternatives – 144.7 to 149.0. Each of the Build Alternatives in the Proposed Action would impact the same number of Section 4(f) properties. Differences between the Build Alternatives are limited to areas at the boundaries

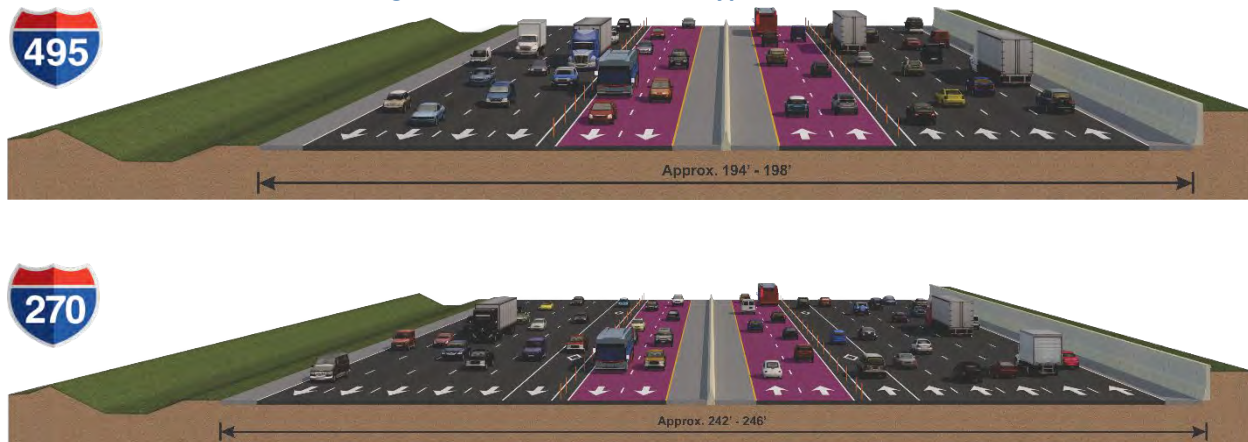
and edges of Section 4(f) properties, where they meet the existing transportation facility. Despite the minor difference in the acreage of Section 4(f) use between Alternative 10 and the other Build Alternatives, the quality and features of the impacted lands for all Build Alternatives would be very similar. The ability to mitigate adverse impacts caused by Alternative 10 would be substantially equal to the other Build Alternatives that comprise the Proposed Action. In consideration of Least Overall Harm Factor 2, when compared to the Build Alternatives that comprise the Proposed Action, Alternative 10 would result in substantially equal harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

In consideration of Least Overall Harm Factor 3, the most significant Section 4(f) property along the length of the Study is Greenbelt Historic District, owing to its status as a National Historic Landmark. Additional Section 4(f) properties of elevated significance are scattered along the length of the Study, and include: George Washington Memorial Parkway (**Section 2.1.1**), Chesapeake and Ohio NHP (**2.1.2**), Clara Barton Parkway (**Section 2.1.3**), both units of Rock Creek Stream Valley Park (**Sections 2.1.9** and **2.1.11**), Sligo Creek Parkway (**Section 2.1.17**), Greenbelt Park (**Section 2.1.30**), Baltimore Washington Parkway (**Section 2.1.31**), Glenarden Historic District (**Section 2.1.35**), Suitland Parkway (**Section 2.1.39**), and Cabin John Regional Park (**Section 2.2.2**). When compared to the Proposed Action, Alternative 10 would result in substantially equal use of these Section 4(f) properties.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of the Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 6, while Alternative 10 has the widest typical section, the number of potential relocations as well as impacts to wetlands, waterways and forest resources are substantially equal across all Build Alternatives.

In consideration of Least Overall Harm Factor 7, the anticipated construction and right-of-way cost to Build Alternative 10 is \$9 Billion to \$9.9 Billion, which compares to the other Build Alternatives which range from \$8.2 Billion to \$9.9 Billion. Alternative 10 cashflow estimates indicate a more positive financial self-sufficient position (requiring no public subsidy) than Alternatives 8, 9M, 13B, and 13C. Results for the baseline scenario indicated positive excess cashflows of approximately \$866 million. Under a lower construction price and lower interest rate scenario, the positive cashflows would be estimated at \$2,711 million. Conversely, a higher construction cost and higher interest rate scenario would result in a negative cashflow estimate where the state may be required to provide a subsidy of approximately \$604 million.

Figure 5-66: Alternative 10 Typical Sections



5.3.5 Alternative 13B: HOT Managed Reversible Lanes on I-495 and Two, Managed Lanes on I-270

A. Description

This alternative consists of adding two HOT managed lanes in each direction on I-495 and converting the existing HOV lanes in both directions to two HOT managed, reversible lanes on I-270 (Figure 5-67). Buses would be permitted to use the managed lanes.

B. Analysis

In consideration of Least Overall Harm Factor 5, Alternative 13B would meet the Purpose and Need of the Study to a lesser degree than the other Build Alternatives that comprise the Proposed Action. Alternative 13B would better accommodate existing and long-term traffic growth on I-495. However, on I-270, Alternative 13B would only provide better trip reliability and accommodate existing and long-term traffic growth in the peak direction of travel during peak periods. While the reversible HOT lanes on I-270 could accommodate the peak traffic demand, it would have negative impacts to travel along I-495 during the AM peak period. During this time, no northbound HOT lanes would be available along I-270, which would preclude any travelers along I-495 from using the HOT lanes if they were also destined for travel along northbound I-270. This would reduce the potential demand for the HOT lanes along both directions of I-495 approaching I-270 and increase the demand for the already over-capacity adjacent GP lanes. Owing to the compromised ability to meet the Purpose and Need, Alternative 13B would result in more harm than other Build Alternatives in the Proposed Action.

In consideration of Least Overall Harm Factor 1, Alternative 13B would result in 145.5 acres of impacts to Section 4(f) properties when compared to the range of impacts for the other Build Alternatives – 144.7 to 149.0. Each of the Build Alternatives in the Proposed Action would impact the same number of Section 4(f) properties. Differences between the Build Alternatives are limited to areas at the boundaries and edges of Section 4(f) properties, where they meet the existing transportation facility. Despite the minor difference in the acreage of Section 4(f) use between Alternative 13B and the other Build Alternatives, the quality and features of the impacted lands for all Build Alternatives would be very similar. The ability to mitigate adverse impacts caused by Alternative 13B would be substantially equal to the other Build Alternatives that comprise the Proposed Action. In consideration of Least Overall Harm Factor 2, when

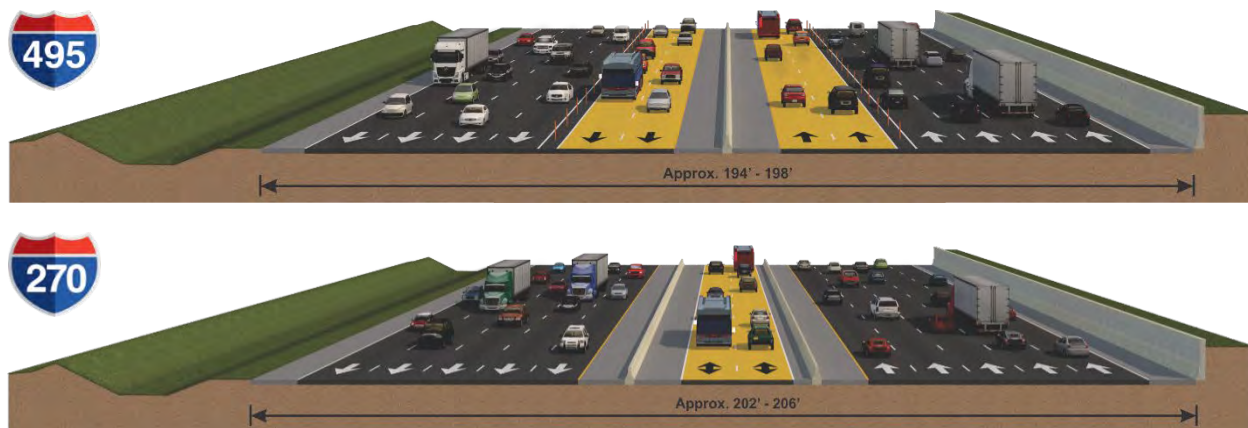
compared to the Build Alternatives that comprise the Proposed Action, Alternative 13B would result in substantially equal harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

In consideration of Least Overall Harm Factor 3, the most significant Section 4(f) property along the length of the Study is Greenbelt Historic District, owing to its status as a National Historic Landmark. Additional Section 4(f) properties of elevated significance are scattered along the length of the Study, and include: George Washington Memorial Parkway (**Section 2.1.1**), Chesapeake and Ohio NHP (**2.1.2**), Clara Barton Parkway (**Section 2.1.3**), both units of Rock Creek Stream Valley Park (**Sections 2.1.9** and **2.1.11**), Sligo Creek Parkway (**Section 2.1.17**), Greenbelt Park (**Section 2.1.30**), Baltimore Washington Parkway (**Section 2.1.31**), Glenarden Historic District (**Section 2.1.35**), Suitland Parkway (**Section 2.1.39**), and Cabin John Regional Park (**Section 2.2.2**). When compared to the Proposed Action, Alternative 13B would result in substantially equal use of these Section 4(f) properties.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of the Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 6, the number of potential relocations as well as impacts to wetlands, waterways and forest resources are substantially equal across all Build Alternatives.

In consideration of Least Overall Harm Factor 7, the anticipated construction and right-of-way cost to build Alternative 13B is \$8.7 Billion to \$9.6 Billion, which compares to the other Build Alternatives which range from \$8.2 Billion to \$9.9 Billion. Alternative 13B cashflow estimates indicate that it would be the least likely to be financially self-sufficient among the Build Alternatives. Results for the baseline scenario indicated positive excess cashflows of approximately \$196 million. Under a lower construction price and lower interest rate scenario, the positive cashflows would be estimated at \$1,907 million. Conversely, a higher construction cost and higher interest rate scenario would result in a negative cashflow estimate where the state may be required to provide a subsidy of approximately \$1,088.

Figure 5-67: Alternative 13B Typical Sections



5.3.6 Alternative 13C: ETL Managed Reversible Lanes and one HOV Managed Lane Network on I-270

A. Description

This alternative consists of adding two ETL managed lanes in each direction on I-495 and retaining the existing HOV lanes in both directions and adding two ETL managed, reversible lanes on I-270 (**Figure 5-68**). Alternative 13C would maintain the existing roadway network on I-270 with HOV lanes to allow for free HOV travel while adding two managed, reversible lanes. Buses would be permitted to use the managed lanes.

B. Analysis

In consideration of Least Overall Harm Factor 5, Alternative 13C meets the Purpose and Need to a lesser degree than the other Build Alternatives that comprise the Proposed Action. Alternative 13C would slightly outperform Alternative 13B – while still falling shy of Alternatives 9 and 10 – for the network delay metric because one HOV lane would be maintained in the non-peak direction under this alternative. Under Alternative 13C reversible HOT lanes on I-270 could accommodate the peak traffic demand, but the alternative would have negative impacts to travel along I-495 during the AM peak period and reversible lanes can only be operated in one direction at a time. Owing to the compromised ability to meet the Purpose and Need, Alternative 13C would result in more harm than other Build Alternatives in the Proposed Action.

In consideration of Least Overall Harm Factor 1, Alternative 13C would result in 146.7 acres of impacts to Section 4(f) properties when compared to the range of impacts for the other Build Alternatives – 144.7 to 149.0. Each of the Build Alternatives in the Proposed Action would impact the same number of Section 4(f) properties. Differences between the Build Alternatives are limited to areas at the boundaries and edges of Section 4(f) properties, where they meet the existing transportation facility. Despite the minor difference in the acreage of Section 4(f) use between Alternative 13C and the other Build Alternatives, the quality and features of the impacted lands for all Build Alternatives would be very similar. The ability to mitigate adverse impacts caused by Alternative 13C would be substantially equal to the other Build Alternatives that comprise the Proposed Action. In consideration of Least Overall Harm Factor 2, when compared to the Build Alternatives that comprise the Proposed Action, Alternative 13C would result in substantially equal harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection.

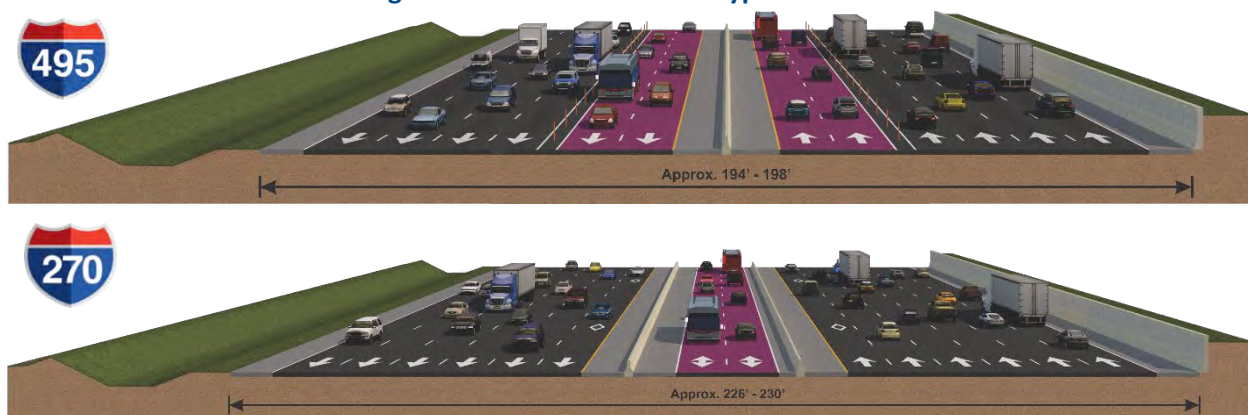
In consideration of Least Overall Harm Factor 3, the most significant Section 4(f) property along the length of the Study is Greenbelt Historic District, owing to its status as a National Historic Landmark. Additional Section 4(f) properties of elevated significance are scattered along the length of the Study, and include: George Washington Memorial Parkway (**Section 2.1.1**), Chesapeake and Ohio NHP (**2.1.2**), Clara Barton Parkway (**Section 2.1.3**), both units of Rock Creek Stream Valley Park (**Sections 2.1.9** and **2.1.11**), Sligo Creek Parkway (**Section 2.1.17**), Greenbelt Park (**Section 2.1.30**), Baltimore Washington Parkway (**Section 2.1.31**), Glenarden Historic District (**Section 2.1.35**), Suitland Parkway (**Section 2.1.39**), and Cabin John Regional Park (**Section 2.1.40**). In consideration of Least Overall Harm Factor 1, because it avoids the use of three Section 4(f) properties – despite the increased use of the Section 4(f) properties listed in **Table 5-14** – when compared to the Proposed Action Option LS-10 would result in greater ability to mitigate adverse impacts to Section 4(f) property. In consideration of Least Overall Harm Factor 2, Option LS-10 would also

result in less remaining harm to the protected activities, attributes, and features that qualify Section 4(f) properties for protection. When compared to the Proposed Action, Alternative 13C would result in substantially equal use of these Section 4(f) properties.

In consideration of Least Overall Harm Factor 4, the OWJ have not provided views regarding the least overall harm alternatives. The opportunity to comment will occur during review of the Draft Section 4(f) Evaluation. In consideration of Least Overall Harm Factor 6, the number of potential relocations as well as impacts to wetlands, waterways and forest resources are substantially equal across all Build Alternatives.

In consideration of Least Overall Harm Factor 7, the anticipated construction and right-of-way cost to build Alternative 13C is \$8.8 Billion to \$9.7 Billion, which compares to the other Build Alternatives which range from \$8.2 Billion to \$9.9 Billion. Alternative 13C cashflow estimates would be less likely to be financially self-sufficient than Alternatives 8, 9, and 10. In the base case scenario, positive excess cashflows would be approximately \$328 million. Under a lower construction price and lower interest rate scenario, the positive excess cashflows would be estimated at \$2,065 million, compared to the result for a higher construction price and higher interest rate scenario which indicate negative cashflows where the State may be required to provide a subsidy of approximately \$998 million.

Figure 5-68: Alternative 13C Typical Section



5.4 Results of Least Overall Harm Analysis

The location specific options, other minimization alternatives, and the Build Alternatives set forth in the DEIS were each evaluated above in terms of the seven Least Overall Harm factors defined in 23 CFR 774.3(c)(1). The following preliminary analysis, as summarized in **Table 5-22**, considers how each alternative compare to the others based on the seven Least Overall Harm factors to ultimately identify the alternative that would result in the least overall harm.

The nature of the build alternatives being considered in this case, the proposed expansion of two major existing highway facilities, influences greatly how the Least Overall Harm factors are applied to the Section 4(f) analysis. Many of the resources described above have already been impacted by the development and subsequent expansions of I-495 and I-270. Other resources have been developed and/or managed in recognition of the presence of these crucial regional transportation facilities. Moreover, the constrained

built environmental surrounding I-495 and I-270 in light of the large amount of commercial and residential development in proximity to the limits of the Study means that there are only minimal differences between each alternative in the Section 4(f) properties impacted and harm resulting from the use of those properties.

Therefore, certain of the least overall harm factors are weighted more heavily in this draft analysis than others because the potential harm or benefit associated with some factors is greater than with others. For instance, the ability to mitigate adverse impacts (Factor 1) is weighted less heavily because it is anticipated that acceptable mitigation for all identified Section 4(f) uses will be similar for all Build Alternatives. Similarly, the relative severity of the remaining harm to Section 4(f) properties and the relative significance of Section 4(f) properties (Factors 2 and 3) are also weighted less heavily because there is little variation among the alternatives considered in this evaluation in terms of the remaining harm to Section 4(f) properties and the array of Section 4(f) properties impacted.

For this preliminary analysis, the views of the OWJ (Factor 4) are not yet considered because discussions with the OWJ are ongoing and will not be available until the Final Section 4(f) Evaluation. By contrast, the views of the OWJ will be weighted more heavily than Factors 1, 2, and 3 as it is anticipated that their comments will provide beneficial diversity to the analysis of least overall harm.

By contrast, the magnitude of any adverse impacts to resources not protected by Section 4(f) (Factor 6) is relatively more important because many substantial non-Section 4(f) resources such as well-developed residential communities, streams, wetlands, and forests are commonly located adjacent to the existing highways and are highly valued in this project area. Substantial differences in costs among the alternatives (Factor 7) is also weighted more heavily than Factors 1, 2, and 3 because many of the differences in cost described above are extremely high. Beyond the numerical differences in basic construction, condemnation, and other costs, because this project will be delivered through a Public-Private Partnership, MDOT/SHA must also consider the long-term financial viability of each alternative. This factor is weighted more heavily in this analysis because differences in cost, especially for alternatives that are predicted to require state subsidies, could result in substantial harm to the financial viability of the P3 program for this project. Finally, the degree to which each alternative meets the Purpose and Need for the project (Factor 5) is weighted more heavily in this analysis because alternatives that hinder or prevent the project's ability to accommodate existing traffic and long-term traffic growth would likely result in economic, environmental and quality of life harm to Maryland and the entire Greater Washington region.

The preliminary Least Overall Harm analysis is presented in **Table 5-22** below. The final results will be presented in the Final Section 4(f) evaluation.



Table 5-22: Summary of the Least Overall Harm Analysis of Alternatives

Alternative	i. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property)	ii. 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	iii. The relative significance of each Section 4(f) property	iv. The views of the official(s) with jurisdiction over each Section 4(f) property	v. The degree to which each alternative meets the purpose and need for the project	vi. After reasonable mitigation, the magnitude of any adverse impacts to properties not protected by Section 4(f)	vii. Substantial differences in costs among the alternatives	Preliminary Summary
Build Alternatives within the Proposed Action								
Alternative 8	Substantially equal ability to mitigate adverse impacts to each Section 4(f) property	Substantially equal relative harm given the physical footprint among the Build Alternatives. Harm would occur to properties as described in Section 2	All build alternatives would impact the same number of Section 4(f) properties	OWJs to provide views during the review period of the DEIS and Draft Section 4(f) Evaluation. Views of OWJs will be considered and	Meets Purpose and Need to a Lesser Degree	Substantially equal magnitude of adverse impacts to properties not protected by Section 4(f)	Total Cost of Alternative would be between \$8.7 and \$9.6 Billion	Would meet the Purpose and Need to a lesser degree than other Build Alternatives. Would create traffic problems that would reduce trip reliability in the managed lanes.
Alternative 9					Meets Purpose and Need to Greater Degree		Total Cost of Alternative would be between \$8.7 and \$9.6 Billion	Meets Purpose and Need; impacts to properties protected by Section 4(f) are minimized; appropriate mitigation measures for use of Section 4(f) property to minimize harm.
Alternative 9 Modified					Meets Purpose and Need to a Lesser Degree	Lesser Magnitude of Adverse Impacts than Build Alternatives	Cost of Alternative would be between \$8.5 and \$9.3 Billion. Not financially viable owing to lower revenue.	Would meet the Purpose and Need to a lesser degree than other Build Alternatives because it does not successfully address existing traffic and long-term traffic growth or enhance trip reliability, and it is not financially viable.
Alternative 10					Meets Purpose and Need	Greater Magnitude of Adverse Impacts than other Build Alternatives	Total Cost of Alternative would be between \$9.0 and \$9.9 Billion	Would have greater impacts to Section 4(f) Properties, natural resources, and property relocations as well as greater cost, but would provide no additional benefit in meeting Purpose and Need.
Alternative 13B					Meets Purpose and Need to a Lesser Degree	Substantially equal magnitude of adverse impacts to properties not protected by Section 4(f)	Total Cost of Alternative would be between \$8.7 and \$9.6 Billion. Not financially viable owing to lower revenue	Would meet the Purpose and Need to a lesser degree than the other Build Alternatives. Would only accommodate traffic growth in the peak direction during peak period. Would not be financially self-sufficient.
Alternative 13C					Meets Purpose and Need to a Lesser Degree		Total Cost of Alternative would be between \$8.8 and \$9.7 Billion. Not financially viable owing to lower revenue	Would meet the Purpose and Need to a lesser degree. Would have negative impacts to travel along I-495 during the AM peak period as reversible lanes can only be operated in one direction at a time. Would not be financially self-sufficient.



Alternative	i. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property)	ii. 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	iii. The relative significance of each Section 4(f) property	iv. The views of the official(s) with jurisdiction over each Section 4(f) property	v. The degree to which each alternative meets the purpose and need for the project	vi. After reasonable mitigation, the magnitude of any adverse impacts to properties not protected by Section 4(f)	vii. Substantial differences in costs among the alternatives	Preliminary Summary
Other Alternatives Considered								
MD 200 Diversion Alternative	Greater Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives	OWJs to provide views during the review period of the DEIS and Draft Section 4(f) Evaluation	Does not meet Purpose and Need	Lesser Magnitude of Adverse Impacts than Build Alternatives	Cost of Alternative would be between \$7.0 and \$8.1 Billion. Not financially viable owing to lower revenue.	The MD 200 Diversion Alternative would not address the Study's Purpose and Need of accommodating long-term traffic growth, enhancing trip reliability or improving the movement of goods and services. Would not be financially self-sufficient.
Alternative 5	Greater Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives	OWJs to provide views during the review period of the DEIS and Draft Section 4(f) Evaluation	Does not meet Purpose and Need	Lesser Magnitude of Adverse Impacts than Build Alternatives	Cost of Alternative would be between \$7.8 and \$8.5 Billion. Not financially viable owing to lower revenue.	Alternative 5 does not meet the Study's Purpose and Need because it does not address existing traffic and long-term traffic growth or enhance trip reliability, and it is not financially viable.
Location Specific Options								
LS-1	Greater Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives	OWJs to provide views during the review period of the DEIS and Draft Section 4(f) Evaluation	Meets Purpose and Need	Lesser Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-1 would meet the Purpose and Need of the project, it would cost \$600 million more to construct than the Build Alternatives along this portion of the project.
LS-2	Greater Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives			Lesser Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives Not financially viable owing to lower revenue	Option LS-2 would adequately meet the Purpose and Need of the project, it would cost in excess of \$1 billion more than the Build Alternatives along this portion of the project.
LS-3	Less Ability to Mitigate than Build Alternatives	Greater Harm than Build Alternatives	Less Harm than Build Alternatives			Greater Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-3 would result in 10.4 acres of additional impacts to Section 4(f) properties, which would create additional mitigation along this portion of the project when compared to the Build Alternatives. Would cost in excess of \$1.7 billion more than the Build Alternatives along this portion of the project.
LS-4	Less Ability to Mitigate than Build Alternatives	Greater Harm than Build Alternatives	Greater Harm than Build Alternatives			Greater Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	When compared to the Build Alternatives, Option LS-4 would result in 11 acres of additional impacts to Section 4(f) properties and cost nearly \$700 million more.



Alternative	i. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property)	ii. 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	iii. The relative significance of each Section 4(f) property	iv. The views of the official(s) with jurisdiction over each Section 4(f) property	v. The degree to which each alternative meets the purpose and need for the project	vi. After reasonable mitigation, the magnitude of any adverse impacts to properties not protected by Section 4(f)	vii. Substantial differences in costs among the alternatives	Preliminary Summary
LS-5	Less Ability to Mitigate than Build Alternatives	Greater Harm than Build Alternatives	Greater Harm than Build Alternatives	OWJs to provide views during the review period of the DEIS and Draft Section 4(f) Evaluation	Meets Purpose and Need	Lesser Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-5 would result in 3.8 acres of additional impacts to Section 4(f) properties and cost \$27 million more than the Build Alternatives along this portion of the Study.
LS-6	Great Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives			Lesser Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-6 would cost \$25 million more than the Build Alternatives along this portion of the Study.
LS-7	Less Ability to Mitigate than Build Alternatives	Greater Harm than Build Alternatives	Greater Harm than Build Alternatives			Greater Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-7 would result in an increase of 12 acres of impact to Section 4(f) properties, result in 547 additional relocations, and cost approximately \$1.2 billion more than the Build Alternatives along this portion of the Study.
LS-8	Less Ability to Mitigate than Build Alternatives	Greater Harm than Build Alternatives	Greater Harm than Build Alternatives			Lesser Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-8 would result in 0.9 acre of additional impacts to Section 4(f) properties and cost \$250 million more than the Build Alternatives along this portion of the Study.
LS-9	Greater Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives			Lesser Magnitude of Adverse Impacts than Build Alternative	Greater Cost than Build Alternatives	Option LS-9 would cost approximately \$200 million more than the Build Alternatives along this portion of the Study.
LS-10	Less Ability to Mitigate than Build Alternatives	Greater Harm than Build Alternatives	Greater Harm than Build Alternatives			Lesser Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	When compared to the Build Alternatives, Option LS-10 would result in 6.1 acres of additional impacts to one Section 4(f) property: BARC. Option LS-10 would cost approximately \$88 million more than the Build Alternatives along this portion of the project.
LS-11	Greater Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives			Lesser Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-11 would cost approximately \$500 million more than the Build Alternatives along this portion of the project.



Alternative	i. The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property)	ii. 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	iii. The relative significance of each Section 4(f) property	iv. The views of the official(s) with jurisdiction over each Section 4(f) property	v. The degree to which each alternative meets the purpose and need for the project	vi. After reasonable mitigation, the magnitude of any adverse impacts to properties not protected by Section 4(f)	vii. Substantial differences in costs among the alternatives	Preliminary Summary
LS-12	Greater Ability to Mitigate than Build Alternatives	Substantially Equal	Less Harm than Build Alternatives	OWJs to provide views during the review period of the DEIS and Draft Section 4(f) Evaluation	Meets Purpose and Need	Greater Magnitude of Adverse Impacts than Build Alternatives	Less cost than Build Alternatives	Option LS-12 would cost approximately \$1 million less than the Build Alternatives. However, Option LS-12 would result in two displacements versus none by the Build Alternatives.
LS-13	Substantially Equal	Substantially Equal	Substantially Equal			Greater Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-13 would cause severe impacts to community resources, potentially resulting in the relocation of 166 properties and cost approximately \$400 million more than the build alternatives.
LS-14	Greater Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives			Lesser Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-14 would cause additional impacts to wetlands and forest resources and cost approximately \$125 million more than the Build Alternatives.
LS-15	Greater Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives			Lesser Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-15 would cost approximately \$25 million more than the Build Alternatives along this portion of the Study.
LS-16	Greater Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives			Greater Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-16 would cost approximately \$1.6 billion more than the Build Alternatives along this portion of the project.
LS-17	Greater Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives			Greater Magnitude of Adverse Impacts than Build Alternatives	Greater Cost than Build Alternatives	Option LS-17 would cost approximately \$270 million more than the Build Alternatives along this portion of the project.
LS-18	Greater Ability to Mitigate than Build Alternatives	Less Harm than Build Alternatives	Less Harm than Build Alternatives			Greater Magnitude of Adverse Impacts than Build Alternatives	Less Cost than Build Alternatives	Option LS-18 would be more difficult to permit than the Build Alternatives.

6

6 COORDINATION

A summary of relevant coordination with the agencies and OWJ listed below is provided in **APPENDIX A**.

6.1 Department of Interior

This Draft Section 4(f) Evaluation will be provided to for coordination and comment to the Department of Interior.

6.2 Officials with Jurisdiction over Public Parks

There are eight OWJ over parkland in the Study: NPS; M-NCPPC, Montgomery County; M-NCPPC, Prince George's County; Montgomery County Public Schools Board of Education; City of Gaithersburg; City of Greenbelt; City of New Carrollton; and City of Rockville. This Draft Evaluation will be circulated to the OWJ. Preliminary Coordination has also occurred with the following:

6.2.1 National Park Service (NPS)

The NPS is the official with jurisdiction over NPS property and is also the agency within the Department of Interior with responsibility for consultation related to Section 4(f). NPS agreed to become a Cooperating Agency in the development of the Environmental Impact Statement (EIS) in March 2018 and coordination has continued throughout the Study including calls, emails, in-person meetings and other written correspondence. As a Cooperating Agency, NPS provided concurrence on major project milestones including the Purpose and Need, Agency Coordination Plan, and the ARDS. Aside from numerous large agency coordination meetings, individual meetings and conference calls with NPS were held on fourteen occasions between June 2018 and February 2020 to discuss key topics related to Section 4(f) properties including permitting, property access, Section 106, impacts, mitigation, minimization, avoidance, technical studies, and other issues related to the overall Study and specific properties. Additional correspondence was conducted via email and extensive sharing of project documents with NPS. Coordination will continue with the review of the Draft Section 4(f) Evaluation.

6.2.2 Maryland-National Capital Park and Planning, Montgomery County

M-NCPPC, Montgomery County is the official with jurisdiction over county-owned public parks and recreation facilities in Montgomery County. M-NCPPC, Montgomery County is a Cooperating Agency, and coordination has occurred throughout the MLS process including calls, emails, in-person meetings and other written correspondence. Aside from numerous large agency coordination meetings, over 20 individual meetings and conference calls were held between June 2018 and February 2020. Topics for

coordination with M-NCPPC included property access, mitigation, mapping, avoidance, minimization, and impacts to each M-NCPPC park properties. MDOT SHA presented to the full M-NCPPC Commission twice to discuss the Study's Purpose and Need, preliminary range of alternatives, results of the MD 200 (Intercounty Connector [ICC]) Diversion Alternative and the ARDS. Additional correspondence via email and extensive sharing of project documents has occurred throughout the Study. Coordination will continue with the review of the Draft Section 4(f) Evaluation.

6.2.3 Maryland-National Capital Park and Planning, Prince George's County

M-NCPPC, Prince George's County is the official with jurisdiction over county-owned public parks and recreation facilities in Prince George's County. M-NCPPC, Prince George's County is a Cooperating Agency in the development of the Environmental Impact Statement, and coordination has occurred throughout the Study including meetings and written correspondence. Aside from numerous large agency meetings, over 15 individual meetings and conference calls were held between June 2018 and February 2020. Topics for coordination with M-NCPPC included anticipated impacts to Section 4(f) properties, mitigation, avoidance, minimization, and the Study process and progress. MDOT SHA presented to the full M-NCPPC Commission twice to discuss the Study's Purpose and Need, preliminary range of alternatives, results of the MD 200 (ICC) Diversion Alternative and the ARDS. Additional correspondence via email and extensive sharing of project documents has occurred throughout the Study. Coordination will continue with the review of the Draft Section 4(f) Evaluation.

6.2.4 Montgomery County Public Schools Board of Education

The Montgomery County Public Schools Board of Education is the official with jurisdiction over playgrounds and athletic fields on school property in Montgomery County, specifically Montgomery Blair High School athletic fields. On February 4, 2020, MDOT SHA sent a letter to Montgomery County Public Schools Board of Education requesting information on the athletic fields associated with Montgomery Blair High School. Specifically, the letter requested confirmation that the fields are under the agency's jurisdiction, the property was accurately depicted in the Study's mapping, the data related to the size and amenities was accurate, whether any planned or programmed facilities have been identified, and whether special funding was used, such as POS, to purchase the property. In addition, the letter requested the agency's determination of significance under Section 4(f). The Board of Education responded in both a call and in an email on February 27, 2020 to MDOT SHA affirming the request and determination of significance. Coordination with Montgomery County Public Schools Board of Education will continue with the review of the Draft Section 4(f) Evaluation.

6.2.5 City of Gaithersburg

The City of Gaithersburg is the official with jurisdiction over local park property within the city limits. Meetings with the City of Gaithersburg were conducted April, May, and August 2018. Additional coordination with the City of Gaithersburg has occurred via written correspondence, covering topics such as property access for City-owned land, and the scope of work for the project. The City of Gaithersburg is a Section 106 Consulting Party. On February 4, 2020, MDOT SHA sent a letter to the City of Gaithersburg requesting information on the local parks within the city limits. Specifically, the letter requested confirmation that the parks are under the city's jurisdiction, the property was accurately depicted in the Study's mapping, the data related to the size and amenities was accurate, whether any planned or programmed facilities have been identified, and whether special funding was used, such as POS, to

purchase the property. In addition, the letter requested the city's determination of significance under Section 4(f). Coordination will continue with the review of the Draft Section 4(f) Evaluation.

6.2.6 City of Greenbelt

The City of Greenbelt is the official with jurisdiction over local park property within the city limits. Meetings with the City of Greenbelt were held in November 2018, and January and June 2019. These meetings covered topics such as the Purpose and Need of the project, alternatives, impacts, and impacts to historic properties. The City of Greenbelt is a Section 106 Consulting Party. On February 5]4, 2020, MDOT SHA sent a letter to the City of Greenbelt requesting information on the local parks within the city limits. Specifically, the letter requested confirmation that the parks are under the city's jurisdiction, the property was accurately depicted in the Study's mapping, the data related to the size and amenities was accurate, whether any planned or programmed facilities have been identified, and whether special funding was used, such as POS, to purchase the property. In addition, the letter requested the city's determination of significance under Section 4(f). MDOT SHA followed up on March 10, 2020 with additional information that was requested by the City via phone call. The City of Greenbelt provided additional information in a May 1, 2020 letter and confirming the significance of all parks under the city's jurisdiction. Coordination with the City of Greenbelt will continue with the review of the Draft Section 4(f) Evaluation.

6.2.7 City of New Carrollton

The City of New Carrollton is the official with jurisdiction over local park property within the city limits. Coordination with the City of New Carrollton took place in January 2019. Topics of discussion include the Purpose and Need of the project, alternatives, and impacts. On February 4, 2020, MDOT SHA sent a letter to the City of New Carrollton requesting information on the local parks within the city limits. Specifically, the letter requested confirmation that the parks are under the city's jurisdiction, the property was accurately depicted in the Study's mapping, the data related to the size and amenities was accurate, whether any planned or programmed facilities have been identified, and whether special funding was used, such as POS, to purchase the property. In addition, the letter requested the city's determination of significance under Section 4(f). Coordination with the City of New Carrollton will continue with the review of the Draft Section 4(f) Evaluation.

6.2.8 City of Rockville

The City of Rockville is the official with jurisdiction over local park property within the city limits. Individual meetings have taken place with the City of Rockville a few times between May 2018 and February 2020. On February 4, 2020, MDOT SHA sent a letter to the City of Rockville requesting information on the local parks within the city limits. Specifically, the letter requested confirmation that the parks are under the city's jurisdiction, the property was accurately depicted in the Study's mapping, the data related to the size and amenities was accurate, whether any planned or programmed facilities have been identified, and whether special funding was used, such as POS, to purchase the property. In addition, the letter requested the city's determination of significance under Section 4(f). In late February 2020, MDOT SHA met with the City of Rockville and presented the potential impacts to each Section 4(f) resource within the City's jurisdiction. MDOT SHA described the need for the impact and the avoidance and minimization efforts incorporated into the design to-date. The City of Rockville is a Section 106 Consulting Party. Coordination with the City of Rockville will continue with the review of the Draft Section 4(f) Evaluation.

6.3 Officials with Jurisdiction of Historic Sites

There are four OWJ over historic sites in the Study corridor: Advisory Council on Historic Preservation; Maryland Historical Trust; NPS; and Virginia Department of Historic Resources.

Three meetings with Section 106 consulting parties have taken place, on May 3 and November 13, 2018, and June 17, 2019, all attended by FHWA and the Maryland Historical Trust. The first meeting provided overviews of the Study and the Section 106 process for this undertaking. A draft schedule of activities was also presented. The second meeting provided general Study updates, an update on Section 106 efforts, and outlined the development of the proposed PA. The third meeting included general Study updates, historic properties status updates, a preliminary list of adversely affected properties, and the PA development outline. A fourth consulting parties meeting is anticipated in spring 2020.

Coordination with OWJ over historic sites will continue as the Study moves forward, and the agencies with jurisdiction will have opportunity to comment on the Draft EIS and Draft Section 4(f) Evaluation.

6.3.1 Advisory Council on Historic Preservation

The Advisory Council on Historic Preservation is an official with jurisdiction because it is involved in consultation under Section 106 of the National Historic Preservation Act. FHWA notified the Advisory Council on Historic Preservation (ACHP) on March 26, 2018 of the Study. ACHP chose to participate in consultation in a letter dated May 22, 2018. Coordination will continue with the review of the Draft Section 4(f) Evaluation.

6.3.2 Maryland Historical Trust

The Maryland Historical Trust is the Maryland SHPO. MHT agreed in a response form on April 2018 to be a Participating Agency for the MLS. MDOT SHA, on behalf of and in coordination with FHWA, initiated the Section 106 process and presented the Study by letter to MHT, the Virginia Department of Historic Resources (DHR) and other consulting parties on April 12, 2018. A coordination meeting with MHT was held in April 2018 covering the MLS Study Section 106 approach, and numerous rounds of email and letter correspondence between May 2018 and early 2020. This has included sharing of Study materials DOE forms and a six volume Cultural Resources Technical Report. On March 12, 2020, MHT concurred with the eligibility and Section 106 effects finding for the Study. Section 106 consultation is ongoing. Coordination will continue with the review of the Draft Section 4(f) Evaluation.

6.3.3 National Park Service

MDOT SHA and FHWA recognize the importance of the NPS properties that would be impacted by the Build Alternatives. Since initiation of the study, NPS has actively participated as a cooperating agency in the NEPA process and as a consulting party in the Section 106 consultation. MDOT SHA and FHWA have met with NPS staff on a regular basis and this coordination will continue through the project development, design and construction stages of the project. The following discussions summarize the avoidance and minimization efforts made to-date by MDOT SHA and FHWA towards NPS properties. The effort to avoid, minimize and mitigate impacts will continue with NPS staff. One of the challenges with this consultation has been in locating and interpreting the various formal and informal agreements for the use of the NPS properties for vehicular use, some of which are over 50 years old.

NPS agreed to become a Cooperating Agency in development of the Environmental Impact Statement in March 2018 and coordination has continued throughout the MLS process including meetings and written correspondence. As a Cooperating Agency, NPS provided concurrence on major project milestones including the Purpose and Need, Agency Coordination Plan, and the ARDS. Aside from numerous large agency coordination meetings, individual meetings and conference calls with NPS were held on fourteen occasions between June 2018 and February 2020 to discuss key topics related to Section 4(f) properties including permitting, property access, Section 106, impacts, mitigation, minimization, avoidance, MLS technical studies, and other issues related to the overall Study and specific properties. Additional correspondence was conducted via email and extensive sharing of project documents with NPS. Coordination will continue with the review of the Draft Section 4(f) Evaluation.

6.3.4 Virginia Department of Historic Resources

The Virginia Department of Historic Resources is the Virginia SHPO. MDOT SHA, on behalf of and in coordination with FHWA, initiated the Section 106 process and presented the Study by letter to MHT, the Virginia Department of Historic Resources (DHR) and other consulting parties on April 12, 2018. In a letter dated February 14, 2020, VDHR did not concur with characterizing archaeological resources as the proposed Dead Run Archaeological District and instead recommended Sites 44FX0374, 44FX0379, 44FX0381 and 44FX0389 individually eligible for listing on the NRHP. Section 106 consultation is ongoing. Coordination will continue with the review of the Draft Section 4(f) Evaluation.

6.4 Coordination with Other Agencies

6.4.1 Department of Housing and Urban Development (HUD)

Section 4(f) requires coordination with HUD when the agency has an interest in a Section 4(f) property. MDOT SHA will notify HUD via letter of the availability of the Draft Section 4(f) Evaluation for the MLS. Coordination will continue with the review of the Draft Section 4(f) Evaluation.

6.4.2 United States Department of Agriculture (USDA)

Section 4(f) requires coordination with the USDA when national forests under the jurisdiction of the U.S. Forest Service may experience a Section 4(f) Use. The MLS will not use any land of a national forest and as such the USDA has no role as an official with jurisdiction under Section 4(f). However, the USDA is a Participating Agency under NEPA and is involved in Section 106 consultation as a consulting party. USDA owns the Beltsville Agricultural Research Center (BARC), an historic site under Section 4(f) and historic property under Section 106. The official with jurisdiction over BARC is the Maryland Historical Trust. Coordination will continue with the review of the Draft Section 4(f) Evaluation.

6.5 Public

The public will have an opportunity to review and comment on the Draft Section 4(f) Evaluation concurrently with the DEIS. For parks, recreation areas, or wildlife and waterfowl refuges, the OWJ over Section 4(f) property must be informed of the intent to make a *de minimis* impact determination, after which an opportunity for public review and comment must be provided. For historic sites, FHWA and MDOT SHA will consult with the parties participating in the Section 106 process, but is not required to provide additional public notice or provide additional opportunity for review and comment of *de minimis* impact findings. Comments from the public related to the Section 4(f) analysis will be addressed in the Final Section 4(f) Evaluation.

7

7 CONCLUSION

This Draft Section 4(f) Evaluation has been prepared in accordance with 23 CFR Part 774; FHWA's Section 4(f) Policy Paper (2012); and 23 U.S.C. 138 and 49 U.S.C. 303. Following a 45-day review period, the preceding alternatives evaluation along with any comments received would be considered as a basis for FHWA's final determination on whether feasible and prudent avoidance alternatives exist, and whether the Proposed Action includes all possible planning to minimize harm to Section 4(f) properties.



APPENDIX A

Summary of Correspondence with Agencies and Officials with Jurisdiction

**Table A-1: Relevant Correspondence with Agencies and Officials with Jurisdiction over Section 4(f) Properties**

To/ From	Agency	Date	Coordination Type	Topic / Subject	Agenda Items / Discussion Topics
From	NPS	05/01/2018	Letter	NPS Scoping Comments	<ul style="list-style-type: none"> Chesapeake & Ohio Canal National Historical Park Baltimore Washington and Suitland Parkways
From	NPS	05/03/2018	Email	Coordination Phone Call Follow-up	<ul style="list-style-type: none"> NPS will coordinate schedules for the appropriate NPS staff Laurel Hammig and Tammy Stidham will be points of contact for Special Use Permit
From	NPS	05/17/2018	Email	Section 106	<ul style="list-style-type: none"> Laurel Hammig and Tammy Stidham will be points of contact for Section 106
N/A	NPS	06/11/2018	Conference Call		Caryn Brookman and Tammy Stidham: <ul style="list-style-type: none"> ARPA Permit required to conduct Phase 1B archaeological investigations on NPS property, to be submitted by 6/15/18 with 60-day turnaround NPS requires multi-park Special Use Permit for all other studies requiring access to NPS property Sean McCabe will coordinate with individual NPS park to ensure needs appropriately addressed
N/A	NPS	06/12/2018	Conference Call	NPS Coordination Meeting	<ul style="list-style-type: none"> Permitting Staffing Agreement NPS Adoption of EIS Section 106 Programmatic Agreement Impacts and Mitigation



To/ From	Agency	Date	Coordination Type	Topic / Subject	Agenda Items / Discussion Topics
N/A	NPS	10/25/2018	Meeting	NPS Coordination Meeting	<ul style="list-style-type: none"> • Study Updates • Update on Property Access and Special Use Permit • American Legion Bridge – Design Current Thinking • American Legion Bridge – Total Avoidance Options • American Legion Bridge – Minimization Options • Construction • Mitigation • NEPA • Next Steps
N/A	NPS	12/10/2018	Meeting	NPS Coordination Meeting	<ul style="list-style-type: none"> • Property Access and Special Use Permit • ROW Information • Suitland Parkway • Baltimore-Washington Parkway/Greenbelt Park • Mitigation • NEPA
From	NPS	01/07/2019	Document	DEIS Outline	<ul style="list-style-type: none"> • NPS comments on DEIS outline
From	NPS	02/04/2019	Document	NPS Comments - American Legion Bridge	<ul style="list-style-type: none"> • General Project Comments • Potential Mitigation Projects
From	NPS	02/26/2019	Email	Section 106 Determinations of Eligibility	<ul style="list-style-type: none"> • Comments on Determinations of Eligibility Batch 4
From	NPS	03/26/2019	Email	Section 106 Determination of Eligibility	<ul style="list-style-type: none"> • Comments on Determinations of Eligibility for Greenbelt Park



To/ From	Agency	Date	Coordination Type	Topic / Subject	Agenda Items / Discussion Topics
N/A	NPS	04/17/2019	Meeting	NPS Coordination Meeting	<ul style="list-style-type: none"> • Study Updates • Update on Property Access and Special Use Permit • Discussion of LOD/Impacts • Discussion of Mitigation • Additional Topics • Next Steps
To	NPS	04/24/2019	Email	Greenbelt Park NR Eligibility	<ul style="list-style-type: none"> • MDOT SHA not able to support a NR-eligible determination for Greenbelt Park
N/A	NPS	05/29/2019	Meeting	NPS Coordination Meeting	<ul style="list-style-type: none"> • General Project Updates • Action Items from Previous Meeting • Direct Access/Traffic Analysis • Limits of Disturbance • Greenbelt Park Determination of Eligibility • Mitigation Discussion • Action Items/Next Steps
N/A	NPS	08/21/2019	Meeting	Assessment of Conditions - GW Memorial Parkway	<ul style="list-style-type: none"> • Update on MDOT project • Update on VDOT project • Traffic Assessment of Direct Access Options • Signing Options • Other Options
N/A	NPS	08/22/2019	Meeting	NPS Coordination Meeting	<ul style="list-style-type: none"> • Direct Access/Traffic Analysis • Action Items/Next Steps
From	NPS	10/28/2019	Concurrence Form	ARDS	<ul style="list-style-type: none"> • NPS re-concurrence on ARDS
N/A	NPS	11/4/2019	Meeting	NPS Coordination Meeting	<ul style="list-style-type: none"> • MDOT SHA presented update on traffic studies • MDOT SHA presented options for BWP interchange
N/A	NPS	11/18/2019	Meeting	NPS ROW Coordination Meeting	<ul style="list-style-type: none"> • Discussion of MDOT SHA ROW information



To/ From	Agency	Date	Coordination Type	Topic / Subject	Agenda Items / Discussion Topics
					<ul style="list-style-type: none"> • Walk through NPS Units • General ROW questions from MDOT SHA • Path forward for potential property transfers
N/A	MNCPPC	6/4/2018	Meeting	General coordination with MNCPPC	<ul style="list-style-type: none"> • Current Activities Update • Staffing Agreement • Purpose and Need • Property Access for Field Work • Mitigation
To	MNCPPC	6/7/2018	Letter	Right-of-Entry Request	<ul style="list-style-type: none"> • Request for right-of-entry onto MNCPPC-PG properties
From	MNCPPC	7/10/2018	Letter	Right of Entry	<ul style="list-style-type: none"> • Right of entry agreement from MNCPPC



To/ From	Agency	Date	Coordination Type	Topic / Subject	Agenda Items / Discussion Topics
N/A	MNCPPC	7/18/2018	Presentation	Commission Briefing	<ul style="list-style-type: none"> • Update on Study Status and Schedule • Summary of Purpose and Need • Preliminary Range of Alternatives • Screening Criteria to evaluate alternatives
N/A	MNCPPC	7/19/2018	Meeting	General coordination with MNCPPC	<ul style="list-style-type: none"> • Current Activities and Schedule • Discussion of M-NCPPC Coordination Process • Purpose and Need – Status of Comments • Staffing Agreement • Property Access Update • Mitigation • Section 4(f) Update
From	MNCPPC	7/24/2018	Letter	Right of Entry	<ul style="list-style-type: none"> • Right of entry agreement from MNCPPC
From	MNCPPC	8/2/2018	Letter	Right of Entry	<ul style="list-style-type: none"> • Right of entry agreement from MNCPPC
To	MNCPPC	8/15/2018	Letter	MDOT SHA Request for Right of Entry onto MNCPPC - PG Property	<ul style="list-style-type: none"> • MDOT SHA Request for Right of Entry onto MNCPPC - PG Property for mitigation site search
N/A	MNCPPC	9/25/2018	Meeting	Issue Resolution	<ul style="list-style-type: none"> • Understanding the NEPA Process • Roles, responsibilities and expectations of the Lead Agency, Sponsoring Agency, Cooperating Agencies and Participating Agencies • Maryland's Streamlined NEPA/Section 404 Process • Executive Order 13807 and Study Schedule • Understanding M-NCPPC organization and roles
From	MNCPPC	10/22/2018	Letter	Right of Entry	<ul style="list-style-type: none"> • MNCPPC Prince George's Parks provides permission to access properties owned by MNCPPC Prince George's Parks for wetland and waterway delineations and phase 1 archaeological investigations



To/ From	Agency	Date	Coordination Type	Topic / Subject	Agenda Items / Discussion Topics
From	MNCPPC	12/4/2018	Email	Executive Meeting	<ul style="list-style-type: none"> • MNCPPC comments on agenda for Executive Meeting
N/A	MNCPPC	12/7/2018	Meeting	Executive Level Coordination	<ul style="list-style-type: none"> • Introductions • Roles and Responsibilities • Summary of Coordination To-Date • Schedule/Critical Touch Points • Mitigation
To	MNCPPC	1/10/2019	Letter	Alternative Staff Funding	<ul style="list-style-type: none"> • MDOT SHA Response to MNCPPC request for financial assistance with staffing needs on the I-495 & I-270 Managed Lanes Study
N/A	MNCPPC	3/20/2019	Meeting	Potential stream and wetland mitigation sites	<ul style="list-style-type: none"> • Introductions, Project Overview, and Status • Mitigation Opportunities
From	MNCPPC	5/1/2019	Letter	ARDS	<ul style="list-style-type: none"> • MNCPPC comments on Draft ARDS paper
From	MNCPPC	5/31/2019	Email	NCPC Staff+1 Meeting	<ul style="list-style-type: none"> • Email from MNCPPC regarding attendance at the NCPC Staff +1 meeting
N/A	MNCPPC	6/20/2019	Meeting	Mitigation in Prince George's County	<ul style="list-style-type: none"> • Project Overview and Status • Mitigation Overview and Site Opportunities • Additional Mitigation Opportunities
To	MNCPPC	8/13/2019	Email	MD 200 Alternative & Direct Access Locations	<ul style="list-style-type: none"> • MDOT SHA response to MNCPPC questions on what information regarding the MD 200 Alternative and additional direct access locations can be shared with the City of Rockville
N/A	MNCPPC	9/16/2019	Meeting	MNCPPC Coordination Meeting	<ul style="list-style-type: none"> • Current Activities and Schedule • Avoidance and Minimization Process • Potential Mitigation



To/ From	Agency	Date	Coordination Type	Topic / Subject	Agenda Items / Discussion Topics
N/A	MNCPPC	10/7/2019	Meeting	MNCPPC Coordination Meeting	<ul style="list-style-type: none"> • Discussion of Current ROW Near Resources • Avoidance and Minimization Process • Potential Mitigation
N/A	MNCPPC	10/28/2019	Meeting	MNCPPC Coordination Meeting	<ul style="list-style-type: none"> • Right-of-Way • Other Ongoing Items • Detailed Mapping • Bridge over Northwest Branch - Construction • Cabin John Resources • Upcoming Meetings
N/A	MNCPPC	10/30/2019	Meeting	MNCPPC Prince George's Coordination Meeting	<ul style="list-style-type: none"> • Current Activities • Avoidance/Minimization Process • Anticipated Park Impacts • Potential Mitigation
N/A	MNCPPC	11/4/2019	Meeting	MNCPPC Coordination Meeting	<ul style="list-style-type: none"> • Discussion of Forest Conservation Easements (FCE) • Planting Opportunities for Reforestation Law Compliance • Discussion of Other Park Impacts and Avoidance/Minimization Efforts
From	MNCPPC	12/6/2019	Email	Pedestrian and Bike Considerations	<ul style="list-style-type: none"> • Follow-up from 11/15/19 meeting • Asks that project include bike/ped access at each crossing
From	MNCPPC	12/23/2019	Email	DEIS Review Schedule and Mandatory Referral	<ul style="list-style-type: none"> • Email from MNCPPC concurring with MDOT SHA proposal to provide MNCPPC with Administrative Draft of DEIS but seek MNCPPC concurrence on the RPA under after DEIS is published
N/A	MNCPPC	1/6/2020	Meeting	Potential Mitigation Opportunities in PG	<ul style="list-style-type: none"> • Discussion of news articles on revisions to MLS • Discussion of park impacts
To	MNCPPC	1/7/2020	Email	MNCPPC Non-Concurrence on Revised ARDS	<ul style="list-style-type: none"> • MDOT SHA response to M-NCPPC non-concurrence on ARDS



To/ From	Agency	Date	Coordination Type	Topic / Subject	Agenda Items / Discussion Topics
From	MNCPPC	2/28/2020	Email	PG County MCE Impacts and Planting Opportunities	<ul style="list-style-type: none"> PG Parks response to email regarding process for mitigating direct impacts to existing FCEs and planting opportunities
From	M-NCPPC	3/16/202	Letter	Section 106 Comments, Volumes 1-6	<ul style="list-style-type: none"> Comments on Section 106 technical report
To	Gaithersburg	4/27/2018	Letter	Response to Comments	<ul style="list-style-type: none"> MDOT SHA response to comments from City of Gaithersburg
To	Gaithersburg	8/23/2018	Letter	Right of Entry	<ul style="list-style-type: none"> MDOT SHA request for right-of-entry onto properties owned by the City of Gaithersburg
To	Gaithersburg	2/4/2020	Letter	Section 4(f) Park Inventory	<ul style="list-style-type: none"> Request for information about local park properties Requesting confirmation of park ownership, location, boundaries, amenities Request ID of planned or programmed activities Request confirmation of whether parks have used LWCF or POS funds
From	Greenbelt	6/26/2019	Letter	Historic Properties	<ul style="list-style-type: none"> Comments on Preliminary List of Adversely and Potentially Adversely Affected Historic Properties
To	Greenbelt	2/4/2020	Letter	Section 4(f) Park Inventory	<ul style="list-style-type: none"> Request for information about local park properties Requesting confirmation of park ownership, location, boundaries, amenities Request ID of planned or programmed activities Request confirmation of whether parks have used LWCF or POS funds
From	Greenbelt	5/1/2020	Letter	Response to MDOT SHA Letter	<ul style="list-style-type: none"> City of Greenbelt provides response to request for park information
To	New Carrollton	2/4/2020	Letter	Section 4(f) Park Inventory	<ul style="list-style-type: none"> Request for information about local park properties Requesting confirmation of park ownership, location, boundaries, amenities



To/ From	Agency	Date	Coordination Type	Topic / Subject	Agenda Items / Discussion Topics
					<ul style="list-style-type: none"> Request ID of planned or programmed activities Request confirmation of whether parks have used LWCF or POS funds
To	New Carrollton	2/14/2020	Email	Curbside Tree Plantings	<ul style="list-style-type: none"> Curbside tree plantings do not meet the reforestation criterion
To	Rockville	2/4/2020	Letter	Section 4(f) Park Inventory	<ul style="list-style-type: none"> Request for information about local park properties Requesting confirmation of park ownership, location, boundaries, amenities Request ID of planned or programmed activities Request confirmation of whether parks have used LWCF or POS funds
N/A	Rockville	2/14/2020	Meeting	Park Impacts	<ul style="list-style-type: none"> MDOT SHA provided update on project MDOT SHA provided walkthrough of project impacts through Rockville City of Rockville requested that buffer of trees be kept by dry SWM facility in Cabin John SVP
From	ACHP	5/22/2018	Letter	ACHP Participation	<ul style="list-style-type: none"> ACHP will participate in Section 106 consultation
From	ACHP	5/23/2018	Email	participating Agency	<ul style="list-style-type: none"> ACHP will not be a participating Agency because they will be participating in the Section 106 process
To	MHT	4/12/2018	Letter	Project Initiation Letter	<ul style="list-style-type: none"> Inform MHT of project Preliminary Area of Potential Effects Funding Identification Methods and Results Review Request
N/A	MHT	4/18/2018	Meeting	I-495 MLS Study Section 106 Approach	<ul style="list-style-type: none"> I-495 MLS Study Section 106 Approach
To	MHT	8/28/2018	Email	Greenbelt Park DOE	<ul style="list-style-type: none"> Greenbelt DOE



To/ From	Agency	Date	Coordination Type	Topic / Subject	Agenda Items / Discussion Topics
To	MHT	10/19/2018	Letter	Historic Context and Batch 1 of DOEs	• Transmit Historic Context and Batch 1 of DOEs
To	MHT	12/7/2018	Letter	Batch 2 of DOEs	• Transmit Batch 2 of DOEs
From	MHT	12/21/2018	Letter	Historic Context and Batch 1 of DOEs	• MHT comments on Historic Context and Batch 1 of DOEs
To	MHT	1/7/2019	Letter	Batch 3 of DOEs	• Transmit Batch 3 of DOEs
To	MHT	2/7/2019	Letter	Batch 4 of DOEs	• Transmit Batch 4 of DOEs
From	MHT	2/22/2019	Letter	Batch 2 of DOEs	• MHT comments on Batch 2 of DOEs
From	MHT	2/22/2019	Letter	Batch 3 of DOEs	• MHT comments on Batch 3 of DOEs
To	MHT	3/8/2019	Letter	Batch 5 of DOEs	• Transmit Batch 5 of DOEs
From	MHT	3/26/2019	Letter	Batch 4 of DOEs	• MHT comments on Batch 4 of DOEs
To	MHT	4/8/2019	Letter	Batch 6 of DOEs	• Transmit Batch 6 of DOEs
From	MHT	4/17/2019	Letter	Batch 5 of DOEs	• MHT comments on Batch 5 of DOEs
To	MHT	5/8/2019	Letter	Batch 7 of DOEs	• Transmit Batch 7 of DOEs
From	MHT	5/30/2019	Letter	Batch 6 of DOEs	• MHT comments on Batch 6 of DOEs
To	MHT	6/7/2019	Letter	Batch 8 of DOEs	• Transmit Batch 8 of DOEs



To/From	Agency	Date	Coordination Type	Topic / Subject	Agenda Items / Discussion Topics
From	MHT	6/13/2019	Concurrence Form	MHT APE Concurrence	• MHT concurrence with revised APE
To	MHT	7/8/2019	Letter	Batch 9 of DOEs	• Transmit Batch 9 of DOEs
From	MHT	3/12/2020	Letter	MHT Comments on Section 106 Technical Report	MHT concurrence on eligibility and effect findings
To	Virginia DHR	3/23/2018	Letter	Participating Agency	• Invitation to become a participating agency
From	Virginia DHR	4/17/2018	Response Form	Participating Agency	• Virginia DHR response agreeing to become a participating agency
To	Virginia DHR	5/28/2019	Letter	Archaeological investigations in Virginia	• Scope of archaeological investigations in Virginia
From	Virginia DHR	6/10/2019	Letter	Revised APE	• Expanded APE may be necessary

N/A	USDA	2/27/2019	Meeting	BARC Mitigation	<ul style="list-style-type: none"> • Project Overview and Status • Paint Branch Fish Passage Mitigation Site • Potential Stream Mitigation – Site PG 00120A/B • Field Walk – Site PG 00120A/B
From	USDA	3/28/2019	Email	BARC Mitigation	• BARC Stream & Wetland Mitigation Sites
To	USDA	8/22/2019	Email	BARC Mitigation	• Request for potential reforestation opportunities
To	USDA	1/7/200	Email	BARC Impacts	• MDOT SHA provides mapping showing potential Impacts to BARC property



APPENDIX B

Documentation of Easement Agreements and Permits

Chesapeake and Ohio Canal National Historical Park

Property Owner: Federal Government (Administered by NPS)

Type of Agreement: Letter Permit consisting of correspondence from 1959 to 1964 between State Roads Commission and National Parks Service

Rock Creek Stream Valley Park

Property Owner: M-NCPPC

Type of Agreement: Easement

Liber 3199, Folios 507-509 (1964) in Montgomery County Land Records

Liber 4512, Folios 407-410 (1974) in Montgomery County Land Records

Sligo Creek Stream Valley Park

Property Owner: M-NCPPC

Type of Agreement: Easement

Liber 2696, Folios 11-13 (1959) in Montgomery County Land Records

Northwest Branch Stream Valley Park, Unit 3

Property Owner: M-NCPPC

Type of Agreement: Easement

Liber 3098, Folios 574-578 (1963) in Montgomery County Land Records

Beltsville Agricultural Research Center

Property Owner: Federal Government (administered by USDA)

Type of Agreement: Easement

Liber 4053, Folios 130-155 (1972) in Prince George County Land Records

Greenbelt Park and Baltimore Washington Parkway

Property Owner: Federal Government (administered by NPS)

Type of Agreement: Permit

Referenced on State Highway Plats 27061, 13582, NPS Land Record No. 593



Suitland Parkway

Property Owner: Federal Government (administered by NPS)

Type of Agreement: Permit

State Highway Plats 26648, 26649, 26640

Special Use Permit No. NCR NACE 6000 1903



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL CAPITAL PARKS
WASHINGTON 25, D. C.

404 M II

46735

FEB 13 1951

Mr. Haines D. Felter
Special Assistant Right-of-Way Engineer
Maryland State Roads Commission
300 West Preston Street
Baltimore 1, Maryland

Dear Mr. Felter:

We have received your letter of January 25 with two paste-up copies of your construction drawings for the Capital Beltway Interchange with the George Washington Memorial Parkway, Maryland, showing the limits of construction required to build this interchange. This drawing has been assigned our Map File No. MCP 117.2-427.

The construction limits shown in red on this plan are in accordance with the agreement made at our meeting of January 17 and are approved by this Office. Although the limits of construction in some areas are in the center of a drainage ditch these limits will be extended to the top of slope.

This will authorize you to proceed with the construction of this interchange on Federal land subject to the following conditions:

1. The State of Maryland hereby agrees to be fully responsible for the management, protection, use and safety within the park area involved in this authorization until the work is completed, inspected, and the park areas are accepted, in writing, ~~and thereafter as long as this facility is in place.~~ The State of Maryland shall require its contractor to accept responsibility and assume liability for any and all claims arising through tort actions which result from incidents directly or indirectly connected with the work performed and to agree to indemnify the United States against any loss, damage or liability arising from the work permitted or performed, and further to provide evidence of adequate public liability and property damage insurance in a form to protect the interests of the United States.
2. That you will make every effort to preserve trees on park land within the work area, and your staff will consult with representatives of this Office on any situation concerning the preservation of these trees.

3. That your staff will consult with representatives of this Office concerning field decisions involving finished grades and fine grading.
4. That you will use seed and fertilizer mixtures which will conform with those used on adjacent parkway sections.
5. That any felled trees, stumps, brush, large stones or debris of any kind resulting from construction of the interchange will be removed from park land before final acceptance of the interchange.
6. It is assumed that access to the outfall construction area below Rock Run Culvert will be staked on the ground and reviewed with representatives of this Office before any clearing or excavation is started.
7. That all storm drainage on park land will be carried in concrete pipe where ditches have to be constructed more than 3' deep, as stated in Section 11 of our letter of November 23, 1960.
8. That the use of the towpath for other than pedestrian traffic is prohibited with the exception of the existing access road crossing constructed by the bridge contractor. The State of Maryland shall arrange to have subsequent contractors requiring access to the river side of the C & O Canal use this same access across the canal. When construction access is no longer required to the river side of the canal for this project the State shall arrange to have the fill and culvert removed from the canal and have it restored as closely as possible to its original condition, according to instructions from representatives of this Office.
9. That you will fully cooperate with other contractors and Government employees and you will not commit or permit any act which will interfere with the performance of their work.
10. That every precaution will be taken to protect park property and preserve the landscape features.
11. That the areas disturbed shall be restored to the satisfaction of this Office.
12. That you will abide by any further instructions of the U. S. Park Police or other representatives of this Office during the course of the work.

13. Upon the acceptance of the conditions contained in this letter, indicated by the approval of the State Roads Commission acting for the State of Maryland in the space provided and the return of one annotated copy to the Office of National Capital Parks, this letter becomes a permit for the construction of the facility described.

We are returning one signed print as requested in your letter.

Unless sooner revoked or extended in writing, permission to perform this work will expire December 31, 1962.

Sincerely yours,

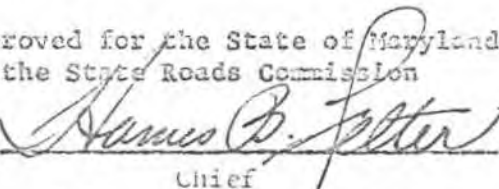
(S-1) Robert C. Horne

Robert C. Horne
Chief, Division of
Design and Construction

Enclosure 2

Approved for the State of Maryland
by the State Roads Commission

By:



Chief

Bureau of Government and
Public Utility Right of Way
Acquisition

RECEIVED

NOV 3 2 30 PM '61

RECEIVED



STATE OF MARYLAND

ROADS COMMISSION

March 7, 1961

Contract: M 512-50-320

I 495-2(75)40

Capital Beltway - Potomac River

To Seven Locks Road

Re: National Park Service Property

File No.: 46735

Mr. Robert C. Horne, Chief
Division of Design and Construction
U. S. Department of the Interior
National Park Service
National Capital Parks
Washington 25, D. C.

Dear Mr. Horne:

Reference is made to your letter of February 13, my reply of March 2 and your recent letter of March 3; all regarding authorization for construction of the Capital Beltway and the Capital Beltway Interchange at George Washington Memorial Parkway over land owned by National Park Service.

Your suggestion in the third paragraph of your letter of March 3 is entirely acceptable. The first sentence of the first condition in your letter of February 13 should be modified to read, "The State of Maryland hereby agrees to be fully responsible for the management, protection, use and safety within the park area involved in this authorization until the work is completed, inspected, and the park area is accepted, in writing, and thereafter so long as this facility (consisting of the east and west bound lanes of the George Washington Memorial Parkway) is in place."

Thank you for your cooperation in this matter.

Very truly yours,

HB:cc

cc: Mr. Leroy C. Moser
Mr. Cordt A. Goldstein
Mr. G. Bates Chaires
Mr. Malcolm D. Philpot
Mr. J. Francis Curren
Mr. William L. Shook

Haines B. Felter
Chief

Bureau of Government and Public Utility
Right of Way Acquisition

Mr. Horne
Mr. Anderson
File
4040
Copies sent to:
Park Police (2)
Maintenance (2)
Construction
Mr. Horne
Mr. Anderson
BPR

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March 3, 1961

Mr. Edwin B. Felter, Chief
Bureau of Government and Public Utility
Right of Way Acquisition
Maryland State Roads Commission
300 W. Preston Street
Baltimore 1, Maryland

Dear Mr. Felter:

You returned a copy of our letter of February 13 authorizing the construction of the Capital Beltway Interchange with the George Washington Memorial Parkway, Maryland, with your letter of March 2.

The deletion of the words "and thereafter as long as this facility is in place" in condition No. 1 is not satisfactory to this Office since we do not propose to take over the management and operation of the Capital Beltway and we do not believe this is your intention either. We would expect you to be the responsible party. We are, however, agreeable to eliminating any inference that this phrase relates to the east and westbound lanes of the George Washington Memorial Parkway which we will maintain.

We would be perfectly agreeable, if you so desire, to accept a letter from you reinscribing a modified phrase such as "and thereafter as long as this facility (exclusive of the east and westbound lanes of the George Washington Memorial Parkway) is in place." If this is satisfactory to you and your legal division. Upon the receipt of a letter from you indicating that the Maryland State Roads Commission is agreeable to this modification, we will consider such a letter a part of the authorization of February 13 and make that authorization effective.

Copy to: Files (2)
Div. of Maint. (2)
Park Police (2)
Construction
Mr. Horne
Mr. Andrews
Bu. of Public Roads

Sincerely yours,

Robert C. Horne
Chief, Division of
Design and Construction

MAR 3 3 00 PM '61
MAIL
CAPITAL PARKS

RGHorne:lbj

181

#181

FEB 13 1961

Mr. Haines B. Falter
Special Assistant Right-of-Way Engineer
Maryland State Roads Commission
300 West Preston Street
Baltimore 1, Maryland

Dear Mr. Falter:

We have received your letter of January 25 with two paste-up copies of your construction drawings for the Capital Beltway Interchange with the George Washington Memorial Parkway, Maryland, showing the limits of construction required to build this interchange. This drawing has been assigned our Map File No. MCP 117.2-427.

The construction limits shown in red on this plan are in accordance with the agreement made at our meeting of January 17 and are approved by this Office. Although the limits of construction in some areas are in the center of a drainage ditch these limits will be extended to the top of slope.

This will authorize you to proceed with the construction of this interchange on Federal land subject to the following conditions:

1. The State of Maryland hereby agrees to be fully responsible for the management, protection, use and safety within the park area involved in this authorization until the work is completed, inspected, and the park areas are accepted, in writing, and thereafter as long as this facility is in place. The State of Maryland shall require its contractor to accept responsibility and assume liability for any and all claims arising through tort actions which result from incidents directly or indirectly connected with the work performed and to agree to indemnify the United States against any loss, damage or liability arising from the work permitted or performed, and further to provide evidence of adequate public liability and property damage insurance in a form to protect the interests of the United States.
 2. That you will make every effort to preserve trees on park land within the work area, and your staff will consult with representatives of this Office on any situation concerning the preservation of these trees.
- #181

3. That your staff will consult with representatives of this Office concerning field decisions involving finished grades and fine grading.
4. That you will use seed and fertilizer mixtures which will conform with those used on adjacent parkway sections.
5. That any felled trees, stumps, brush, large stones or debris of any kind resulting from construction of the interchange will be removed from park land before final acceptance of the interchange.
6. It is assumed that access to the outfall construction area below Rock Run Culvert will be staked on the ground and reviewed with representatives of this Office before any clearing or excavation is started.
7. That all stream drainage on park land will be carried in concrete pipe where ditches have to be constructed more than 3' deep, as stated in Section 11 of our letter of November 23, 1960.
8. That the use of the towpath for other than pedestrian traffic is prohibited with the exception of the existing access road crossing constructed by the bridge contractor. The State of Maryland shall arrange to have subsequent contractors requiring access to the river side of the C & O Canal use this same access across the canal. When construction access is no longer required to the river side of the canal for this project the State shall arrange to have the fill and culvert removed from the canal and have it restored as closely as possible to its original condition, according to instructions from representatives of this Office.
9. That you will fully cooperate with other contractors and Government employees and you will not commit or permit any act which will interfere with the performance of their work.
10. That every precaution will be taken to protect park property and preserve the landscape features.
11. That the areas disturbed shall be restored to the satisfaction of this Office.
12. That you will abide by any further instructions of the U. S. Park Police or other representatives of this Office during the course of the work.

13. Upon the acceptance of the conditions contained in this letter, indicated by the approval of the State Roads Commission acting for the State of Maryland in the space provided and the return of one executed copy to the Office of National Capital Parks, this letter becomes a permit for the construction of the facility described.

We are returning one signed print as requested in your letter.

Unless sooner revoked or extended in writing, permission to perform this work will expire December 31, 1962.

Sincerely yours,

Robert C. Horne
Chief, Division of
Design and Construction

Enclosures 2

Approved for the State of Maryland
by the State Roads Commission

By: _____

Copy to: Files (2)
Div. of Maint. (2)
Park Police (2)
Construction ✓
Horne
Andrews
Bur. of Public Roads

EEERensch:mgw 2/8/61

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NATIONAL CAPITAL PARKS

NATIONAL CAPITAL PARKS

MAR 3 10 25 AM '61

RECEIVED
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NOV 3 1960

Mr. Haines B. Felter, Chief
Bureau of Government and Public Utility
Right of Way Acquisition
Maryland State Roads Commission
300 West Preston Street
Baltimore 1, Maryland

Dear Mr. Felter:

Your letter of October 21, File No. 46735 requested this office to issue you a permit for construction of the Capital Beltway and its interchange with the George Washington Memorial Parkway at Carderock, on the basis of the metes and bounds plat submitted with your letter of September 7. This plat has been assigned our Map File No. MCP 117.2-405.

From a review of the above plat it would appear advisable, before the issuance of a construction permit, to modify the actual land areas that you would require from those indicated. We suggest you submit to us a marked print of the construction drawings on which is indicated the extent of cut and fill sections along the south side of that section of the parkway roadway paralleling the canal, together with the same thing for the north side of that portion of the outbound parkway roadway falling within the northeast quadrant of the interchange. It would be our intention to make any of the land between the parkway roadways that are now in Federal ownership and coming within the interchange area, available for your use. This drawing should also indicate the area required adjacent and contiguous to the present bridge permit issued to you by our letter of February 23, 1960, together with the area required for the relocation of Rock Run. Following receipt of the above-mentioned plan, we shall be pleased to issue you the necessary permit.

Copy to: Files (2)
Horne
Weeden
O'Brien
Andrews

Sincerely yours,

William M. Hausmann
Acting Chief, Division of
Design and Construction

EHAndrews:ew

NOV 3 2 11 PM '60
MAIL ROOM
CAPITAL PARKS

MAIL

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Riddle

OCT 21 1960

Mr. Haines B. Felter, Chief
Bureau of Government and Public Utility
Right of Way Acquisition
Maryland State Roads Commission
300 West Preston Street
Baltimore 1, Maryland

Dear Mr. Felter:

At a meeting held October 19 with Mr. Hamilton, we discussed your letter of September 7 in reference to the question of an easement across park property for the construction of the Capital Beltway Interchange at Carderock. The drawings accompanying your September 7 letter were assigned our Map File No. MCP 117.2-425.

Mr. Hamilton agreed that perhaps the construction at this interchange could be handled on a permit basis, similar to the permit you now have for the construction of the Potomac River Bridge. We also discussed the possibility of working out an agreement covering the matter of maintenance and operation of the various roadways within the interchange. We understand that Mr. Hamilton will work out a tentative draft of such an agreement for our later review.

Sincerely yours,

William M. Haussmann
Acting Chief, Division of
Design and Construction

Copy to: Files (2)
Weeden
Horne
O'Brien
Andrews

OCT 24 3 38 PM '60
NATIONAL CAPITAL PARKS

MAIL

181

404M II

124-NCR(RU)

DEC 11 1964

Work Completed
File

Mr. John B. Funk
Chairman-Director, State Roads
Commission
State of Maryland
P.O. Box 717
Baltimore, Maryland 21203

Dear Mr. Funk:

Permission has been requested by letter of November 15 from Mr. Charles R. Anderson, Chief, Landscape Section, to perform landscape planting on the land of the George Washington Memorial Parkway, U. S. Reservation 404M, at the intersection of the Parkway and the Capital Beltway and also in the vicinity of Cabin John Parkway.

The proposed work is shown on prints of sheets 10, 6 and 7 of Interstate Planting Contract M-512-117-320 submitted with the letter and assigned our Map File No. NCR 117.2-610-1, 2 and 3 respectively.

It is understood that all planting under this contract will be maintained and guaranteed by the permittee for one year and that upon completion of the care and replacement phase, maintenance will be performed by the National Park Service.

The use of parkland for the work described is subject to ~~reservation at the discretion of the Regional Director, National Capital Region, National Park Service,~~ and the conditions contained herein.

1. The State of Maryland hereby agrees to be fully responsible for the management, protection, use and safety within the park area involved in this authorization until the work is completed, inspected, and the park areas are accepted, in writing. The State of Maryland shall require its contractors to accept responsibility and assume liability for any and all claims arising through tort actions which result from incidents directly or indirectly connected with the work performed and to agree to indemnify the United States against any loss, damage, or liability arising from the work permitted or performed, and further to provide evidence of adequate public liability and property damage insurance in a form to protect the interests of the United States.

1553

2. In the work described the State of Maryland will require its employees and contractors to exercise all normal and reasonable safety precautions.
3. All reasonable precautions shall be exercised to protect park property.
4. All disturbed areas and park facilities damaged by this work shall be restored to the satisfaction of the Regional Director, National Capital Region, National Park Service.
5. Permittee shall comply with all instructions issued by the U. S. Park Police and other official representatives of this Office.
6. In the use of the land covered by this permit the permittee agrees to comply with the nondiscrimination provisions prescribed by Section 301 of Executive Order 10925, dated March 6, 1961 (26 F.R. 1977), as amended and modified by Section 301 of Executive Order No. 11114 of June 20, 1963 (28 F.R. 6486, 6487), establishing the President's Committee on Equal Employment Opportunity which are incorporated herein by reference and made a part hereof, and as used therein the "Contractor" means the permittee.
7. Necessary barricades and suitable signs, flares, lanterns, and other signal devices shall be provided and used at locations where desirable for public safety.
8. Permittee shall remove any trash or debris left at site by workmen.
9. Any underground utility line damaged as a result of this work shall be promptly repaired.
10. This permit does not provide for any additional parking or storage areas on parkland. Work areas are limited to the area at the site of the actual planting.
11. The permittee shall notify this Service before starting work and when the work is completed and ready for inspection. (Telephone 381-7298.)
12. Upon the acceptance of the conditions contained in this letter, indicated by the approval of the State of Maryland in the space provided and the return of the executed copy to this Office, this letter becomes a permit for the work described. The work is not to be started until the concerned Department has verified that the acceptance by the State of Maryland has been received by this Office. (Receipt can be verified by telephoning 381-7298.)

Unless sooner revoked or extended in writing, permission to perform this work will expire ~~April 30, 1965~~ December 10, 1966.

Sincerely yours,

L. A. Powell

for Raymond L. Freeman
Assistant Regional Director,
Resource Planning

Accepted and agreed to this
22 day of Mar, ~~1964~~ 1965 as amended

STATE OF MARYLAND, STATE ROADS COMMISSION

By: *[Signature]*

Title: _____

cc:
✓ MCR Files (2)
✓ Mr. Haughwout
Mr. Bartel (2)
Park Police (2)
Mr. Rensch, NCIC

FHaughwout:pcs 12/7/64

MAIL
Dec 11 2 24 PM '64
NATIONAL CAPITAL REGION
NPS

LIBER 3199 FOLIO 506

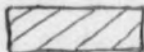
Recorded March 24th, 1964-at-2:40 P.M.

THIS DEED OF EASEMENT made this 13th day of March, 1964, by and between THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION, party of the first part, Grantor, and STATE OF MARYLAND to the use of the STATE ROADS COMMISSION OF MARYLAND, party of the second part, Grantee.


WITNESSETH:




THAT for and in consideration of the sum of SEVEN HUNDRED THOUSAND DOLLARS (\$700,000.00), and other good and valuable considerations, paid by the party of the second part unto the party of the first part, receipt whereof is hereby acknowledged, the party of the first part does hereby give, grant, bargain and sell, release, convey and confirm unto the party of the second part, its successors and assigns, an easement in perpetuity for all and every highway purpose over the hereinafter described land:

ALL the land lying between the outermost lines designated "Right of Way Line", as shown and/or indicated on State Roads Commission of Maryland Plats Nos. 29263, 29262, 29009, 29010, 29011, 29012, 29013, 29014, 29015, 29016, 29018, 29022, 29034, 29037, 29038, 29359, 29030, 29031, 29032 and 29035 attached hereto and made a part hereof.

And the Grantor does further grant unto the State of Maryland, to the use of the State Roads Commission of Maryland, its successors and assigns, the right to create, use and maintain on the area of the land shown hatched thus  on the above designated plats, such slopes as are necessary to retain and support the highway and/or adjacent property; it being agreed between the parties hereto, however, that at such time as the contour of the land over which this slope easement is granted is changed so that the easement required for slopes is no longer necessary to retain, support or protect the highway construction within the area conveyed, then said easement for slopes shall cease to exist.

LIBER 3199 COLM 507

And the Grantor does further grant unto the State of Maryland, to the use of the State Roads Commission of Maryland, its successors and assigns, the perpetual right to create, use and maintain on the area of the land shown cross-hatched thus  on the above designated plats, such stream changes, side ditches, inlet ditches, outlet ditches, pipes, culverts and all other drainage facilities as are necessary in the opinion of the State Roads Commission to adequately drain the highway or adjacent property and/or control the flow of water through those drainage structures to be built to protect said highway.

And the Grantor does further grant unto the State of Maryland, to the use of the State Roads Commission of Maryland, its successors and assigns, the perpetual right to discharge the flow of water from such stream changes, side ditches, inlet ditches, outlet ditches, pipes, culverts and all other drainage facilities as are necessary in the opinion of the State Roads Commission to adequately drain the highway or adjacent property and/or control the flow of water through those drainage structures to be built to protect said highway within the areas shown cross-hatched thus  into existing waterways or natural drainage courses, as indicated by the symbol  and/or upon the existing ground, as indicated by the symbol , at the outlet end of the drainage facilities so created by the Commission, all of which are shown graphically and indicated by appropriate symbols and explanatory notations on the aforesaid plats.

And the Grantor does further grant unto the State of Maryland, to the use of the State Roads Commission of Maryland, its successors and assigns, any and all right whatsoever of the Grantor, its successors and assigns, of any means whatsoever of ingress or egress between the through highway and their remaining property across the lines which are designated "Right of Way Line of Through Highway," to the end that there never will

be any vehicular, pedestrian and/or animal access to or from said Through Highway and their remaining property across those lines which are so marked on the above mentioned plats, except by means of such public road connections as the Grantees may construct, or permit to be constructed.

And the Grantor herein does hereby covenant and agree, on behalf of itself, its successors and assigns, to abide by and respect each and every control or restriction set forth in this instrument of writing, it being the intention of this conveyance to perpetuate all the rights and privileges granted to the State of Maryland, to the use of the State Roads Commission, by this deed. It is expressly understood and agreed that these covenants shall run with and bind the Grantor, its successors and assigns, forever.

It being further covenanted and agreed between the parties that no roadways connecting the Capital Beltway with the East-West Highway at Beach Drive shall ever be constructed by the party of the second part.

It being further covenanted and agreed between the parties that the Capital Beltway through the easement area hereby conveyed shall have a maximum of six (6) lanes, and wherever possible existing roadways in the area shall not be relocated and any additional lanes of the Capital Beltway shall be constructed in the median.

The foregoing covenants to run with the land and be binding upon the Grantees, their successors and assigns, forever.

TO HAVE AND TO HOLD the hereinbefore described easement unto the State of Maryland to the use of the State Roads Commission of Maryland, its successors and assigns, in perpetuity.

IN TESTIMONY WHEREOF the Maryland-National Capital Park and Planning Commission has caused these presents to be executed

LIBER 3199 FOLIO 509

by William J. Stevens, its Chairman, and attested to by Jesse F. Nicholson, its Secretary-Treasurer, and affixed its corporate seal hereto; and the State Roads Commission of Maryland has caused these presents to be executed by John B. Funk, its Chairman, and attested to by C. R. Pease, its Secretary and affixed its corporate seal hereto.

ATTEST:

THE MARYLAND-NATIONAL CAPITAL PARK
AND PLANNING COMMISSION

Jesse F. Nicholson
Jesse F. Nicholson,
Secretary-Treasurer

By William J. Stevens
William J. Stevens,
Chairman

STATE ROADS COMMISSION OF MARYLAND

C. R. Pease
C. R. Pease,
Secretary

By John B. Funk
John B. Funk,
Chairman

STATE OF MARYLAND, MONTGOMERY COUNTY, to wit:

I HEREBY CERTIFY that on this 13th day of March, 1964, before me the subscriber, a Notary Public of the State of Maryland in and for the County aforesaid, personally appeared William J. Stevens, Chairman of the Maryland-National Capital Park and Planning Commission and acknowledged the foregoing instrument to be the act and deed of said Commission and at the same time made oath in due form of law that he is fully authorized to execute and acknowledge same.

WITNESS my hand and Notarial Seal.

Delaine T. White
DELAINÉ T. WHITE Notary Public

My commission expires May 3, 1965

MONTGOMERY COUNTY CIRCUIT COURT (Land Records) HMS 4512, p. 0407, MSA_CE63_4470. Date available 08/31/2005. Printed 12/15/2025

FORM RW 25 (Revised 7/1/71) LEGAL DEPARTMENT 300 West Preston Street Baltimore, Maryland 21201 Mail Address - P. O. Box 717 Baltimore, Maryland 21203	DEED TO THE STATE OF MARYLAND TO THE USE OF THE STATE HIGHWAY ADMINISTRATION OF THE DEPARTMENT OF TRANSPORTATION	PAGE 1 Right of Way Hwy No. 401679 MD. State Highway Administration Project No. M 512-22-384
		2:14

of Perpetual Easement
This Deed, Made this 1st day of April in the year 1974

(A) WHEREAS, the State Highway Administration of the Department of Transportation, acting for and on behalf of the State of Maryland, finds it necessary to acquire the land, easements, rights and/or controls, shown and/or indicated on State Highway Administration's Plats Numbered 29989, 30265, 41184


APR-11-74 PAID 6 620 CLK. CT. N.C. HSC --- BCK 12.00


which are duly recorded, or intended to be recorded, among the Land Records of




Montgomery County ~~and~~ in the State of Maryland in order to lay out, open, establish, construct, extend, widen, straighten, grade and improve as a part of the State Roads System of Maryland, a highway and/or bridge, together with the appurtenances thereto belonging, under its Contract Number M 512-22-320 and known as the Capital Beltway - Georgia Avenue to Rock Creek Park and to thereafter use, maintain and/or further improve said highway and/or bridge, as a part of the Maryland State Roads System.

(B) NOW, THEREFORE, THIS DEED AND RELEASE WITNESSETH: That for and in consideration of the above premises, One Dollar (\$1.00) and other good and valuable considerations, the receipt whereof is hereby acknowledged, we do hereby grant and convey unto the STATE OF MARYLAND, TO THE USE OF THE STATE HIGHWAY ADMINISTRATION OF THE DEPARTMENT OF TRANSPORTATION, its successors and assigns, ~~WHEREIN THE STATE OF MARYLAND, TO THE USE OF THE STATE HIGHWAY ADMINISTRATION OF THE DEPARTMENT OF TRANSPORTATION, its successors and assigns, the right to create, use and maintain on the area of the land shown hatched thus~~ all our right, title and interest, free and clear of all liens and encumbrances, in and to **Perpetual Easement**

(C) ALL THE LAND, together with the appurtenances thereto belonging, or in anywise appertaining, lying between the outermost lines designated "Right of Way Line," as shown and/or indicated on the hereinbefore mentioned plats, all of which plats are made a part hereof, so far as our property and/or our rights may be affected by the said proposed highway and/or bridge, and the appurtenances thereto belonging, or in anywise appertaining.

~~(D) AND THE GRANTORS DO FURTHER GRANT unto the State of Maryland, to the use of the State Highway Administration of the Department of Transportation, its successors and assigns, the right to create, use and maintain on the area of the land shown hatched thus  on the above designated plats, such slopes as are necessary to retain and support the highway and/or adjacent property; it being agreed between the parties hereto, however, that at such time as the contour of the land over which this slope easement is granted is changed so that the easement required for slopes is no longer necessary to retain, support or protect the highway construction within the area conveyed in fee simple, then said easement for slopes shall cease to exist.~~

~~(E) AND THE GRANTORS DO FURTHER GRANT unto the State of Maryland, to the use of the State Highway Administration of the Department of Transportation, its successors and assigns, the perpetual right to create, use and maintain on the area of the land shown cross-hatched thus  on the above designated plats, such stream changes, side ditches, inlet ditches, outlet ditches, pipes, culverts and all other drainage facilities as are necessary in the opinion of the State Highway Administration to adequately drain the highway or adjacent property and/or control the flow of water through those drainage structures to be built to protect said highway.~~

~~(F) AND THE GRANTORS DO FURTHER GRANT unto the State of Maryland, to the use of the State Highway Administration of the Department of Transportation, its successors and assigns, the perpetual right to discharge the flow of water from such stream changes, side ditches, inlet ditches, pipes, culverts and all other drainage facilities as are necessary in the opinion of the State Highway Administration to adequately drain the highway or adjacent property and/or control the flow of water through those drainage structures to be built to protect said highway (either within the areas shown cross-hatched thus  or within the limits of the areas hereinbefore conveyed in the fee simple) into existing waterways or natural drainage courses, as indicated by the symbol  and/or upon the existing ground, as indicated by the symbol  at the outlet end of the drainage facilities so created by the State Highway Administration, all of which are shown graphically and indicated by appropriate symbols and explanatory notations on the aforesaid plats.~~

(G) AND THE GRANTORS DO FURTHER GRANT unto the State of Maryland, to the use of the State Highway Administration of the Department of Transportation, its successors and assigns, ANY AND ALL RIGHT WHATSOEVER of the GRANTORS, their heirs, successors and assigns, of any means whatsoever of ingress or egress between the THROUGH HIGHWAY and their remaining property across the lines which are designated "Right of Way Line of Through Highway," to the end that there never will be any vehicular, pedestrian and/or animal access to or from said Through Highway and their remaining property across those lines which are so marked on the above mentioned plats, except by means of such public road connections as ~~are shown on the State Highway Administration's Plats~~ the State Highway Administration may construct or permit to be constructed.

~~(H) AND THE GRANTORS DO FURTHER GRANT unto the State of Maryland, to the use of the State Highway Administration of the Department of Transportation, its successors and assigns, ANY AND ALL RIGHT WHATSOEVER of the GRANTORS, their heirs, successors and assigns, of vehicular ingress or egress between their remaining property and the highway across those portions of the right of way lines which are marked "THROUGHOUT THIS PORTION OF THE RIGHT OF WAY LINE ALL VEHICULAR ACCESS IS DENIED," to the end that there never will be any vehicular access to or from said highway and their remaining property across those portions of the said right of way lines which are so marked on the above mentioned plats.~~

(I) AND THE GRANTORS DO FURTHER GRANT unto the State of Maryland, to the use of the State Highway Administration of the Department of Transportation, its successors and assigns, the perpetual right to erect and maintain between October 1st and April 1st of each year, snow fences within 100 feet of the land hereby granted in fee simple, provided that said snow fences shall not interfere with the construction and use of buildings now erected or hereafter erected or with growing crops.

(J) AND THE GRANTORS HEREIN do hereby covenant and agree, on behalf of themselves, their heirs, successors and assigns, to abide by and respect each and every control or restriction set forth in this instrument of writing, it being the intention of this conveyance to perpetuate all the rights and privileges granted to the State of Maryland, to the use of the State Highway Administration, by this deed. It is expressly understood and agreed that these covenants shall run with and bind upon the GRANTORS, their heirs, successors and assigns, forever.

(K)

In addition to the highway right of way being conveyed, this instrument also conveys a perpetual easement over 0.34 acre, more or less, of extra land as indicated on State Highway Administration Extra Land Plat No. 41184

[Handwritten signature]

CONTINUED ON PAGE 3

BINDING MARGIN
DO NOT WRITE IN THIS SPACE

MONTGOMERY COUNTY CIRCUIT COURT (Land Records) HMS 4512, p. 0408, MSA_CE63_4470. Date available 08/31/2005. Printed 12/15/20

MONTGOMERY COUNTY CIRCUIT COURT (Land Records) HMS 4512, p. 0409, MSA_CE63_4470. Date available 08/31/2005. Printed 12/15/20

BINDING MARGIN
DO NOT WRITE IN THIS SPACE

LIBER 4512 FOLIO 409

FORM RW 25 (Revised 7/1/71)

CONTINUED FROM PAGE 2

PAGE 3

(V) TOGETHER with the buildings and improvements thereupon erected, made or being and all and every the rights, roads, alleys, ways, waters, privileges, appurtenances and advantages, to the same belonging, or anywise appertaining.

(W) IT IS UNDERSTOOD AND AGREED that the State Highway Administration shall have no further obligation or liability for the results of construction, reconstruction, maintenance or further construction of said highway and/or bridge.

(X) TO HAVE AND TO HOLD the land and premises above described and mentioned and hereby intended to be conveyed unto the proper use and benefit of the State of Maryland, to the use of the State Highway Administration of the Department of Transportation, its successors and assigns forever in ~~perpetuity~~, together with the rights, easements, privileges and controls hereinbefore mentioned. This instrument conveys a perpetual easement over 3 parcels consisting of 1.218+ acres.

(Y) AND the grantors covenant that they have neither done, nor suffered to be done, anything to encumber the property, easements and/or rights, etc., hereby conveyed, and that they will execute such other and further assurance of same as may be required.

(Z) AND the grantors covenant that they have neither done, nor suffered to be done, anything to encumber the property, easements and/or rights, etc., hereby conveyed, and that they will execute such other and further assurance of same as may be required.

IN WITNESS WHEREOF we have hereunto set our hands and seals.

MARYLAND-NATIONAL CAPITAL PARK
AND PLANNING COMMISSION

WITNESS A. Edward Navarre
A. Edward Navarre

By John F. Downs, Jr. (SEAL)
John F. Downs, Jr. (SEAL)

WITNESS _____

_____ (SEAL)

WITNESS _____

_____ (SEAL)

WITNESS _____

_____ (SEAL)

WITNESS _____

_____ (SEAL)

WITNESS _____

_____ (SEAL)

WITNESS _____

_____ (SEAL)

WITNESS _____

_____ (SEAL)

WITNESS _____

_____ (SEAL)

WITNESS _____

_____ (SEAL)

SEE PAGE 4 FOR ACKNOWLEDGMENTS

STATE OF MARYLAND - COUNTY OF Montgomery PAGE 4-PORM RU-25
I hereby certify that, before me, the subscriber, a NOTARY PUBLIC of the STATE OF MARYLAND, in and for
Montgomery County, personally appeared John F. Dineen Jr.
and each severally acknowledged the foregoing deed and release to be his her or their respective
act, or *to be the act of the said body corporate. (NOTE: strike out the words not applicable.)
AS WITNESS MY HAND AND NOTARIAL SEAL, this 1st day of April in the year 1974
NOTARY SEAL Erlyn R. Ralston NOTARY PUBLIC.
My Commission expires July 10 1977

STATE OF MARYLAND - COUNTY OF
I hereby certify that, before me, the subscriber, a NOTARY PUBLIC of the STATE OF MARYLAND, in and for
County, personally appeared
and each severally acknowledged the foregoing deed and release to be his her or their respective
act, or *to be the act of the said body corporate. (NOTE: strike out the words not applicable.)
AS WITNESS MY HAND AND NOTARIAL SEAL, this day of in the year
NOTARY SEAL NOTARY PUBLIC.
My Commission expires

STATE OF MARYLAND - COUNTY OF
I hereby certify that, before me, the subscriber, a NOTARY PUBLIC of the STATE OF MARYLAND, in and for
County, personally appeared
and each severally acknowledged the foregoing deed and release to be his her or their respective
act, or *to be the act of the said body corporate. (NOTE: strike out the words not applicable.)
AS WITNESS MY HAND AND NOTARIAL SEAL, this day of in the year
NOTARY SEAL NOTARY PUBLIC.
My Commission expires

DEED

FROM

MARYLAND-NATIONAL CAPITAL

PARK AND PLANNING COMMISSION

TO

THE STATE OF MARYLAND

TO THE USE OF

THE STATE HIGHWAY ADMINISTRATION

OF THE

DEPARTMENT OF TRANSPORTATION

Received for Record, 19

at o'clock, M. Same day recorded

in Liber, No. Folio, cc.,

one of the Land Records of

and examined per

County,

Cost of Record \$.

Clerk.

To - State Highway Administration

This conveyance has been recorded in

the Right of Way Division Ledger.

No Extra property was acquired by deed

Extra property has been acquired and

entered in property record - Form RU-91

INDEXED IN LEDGER DATE

By - Ledger Clerk.

OFF CONVEYANCES MADE.

I HEREBY CERTIFY that this
instrument has been properly
recorded in the
County of Montgomery, in
accordance with the
Court of Records of Maryland.
Special Highway
State Roads Commission

mailed to -

md. State Rds. Commission 301 W. Prater St. Baltimore Md. 21201


LIBER 2696 FOLIO 11

Recorded Jan. 18th, 1960-at-3:52 P. M.

THIS DEED OF EASEMENT, made this 25th day of November, 1959, by and between the MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION, part of the first part, and the STATE OF MARYLAND, to the use of THE STATE ROADS COMMISSION of Maryland, party of the second part.

WITNESSETH:

That for and in consideration of the sum of Ten (\$10.00) Dollars, and other good and valuable considerations paid by the party of the second part unto the party of the first part, receipt whereof is hereby acknowledged, the party of the first part does hereby give, grant, bargain, sell and release convey and confirm unto the party of the second part, its successors and assigns, an easement in perpetuity for highway purposes over all of the lands lying between the outermost line designated Right of Way Line or Right of Way Line of Through Highway, as shown and/or indicated on State Roads Commission of Maryland Plats Nos. 19567 and 19568, attached hereto and made a part hereof.

And the Grantor does further grant unto the State of Maryland, to the use of the State Roads Commission of Maryland, its successors and assigns, the right to create, use and maintain on the land shown hatched thus  on the above mentioned plats, such drainage structures, stream changes and facilities as are necessary in the opinion of the State Roads Commission to adequately drain the roadway and/or adjacent property and such slopes as are necessary to retain the highway and/or adjacent property; it being agreed between the parties hereto, however, that at such time as the contour of the land over which this easement is granted is changed so that this easement required for slopes is no longer necessary to support or protect the property lying between Right of Way Lines or Right of Way Lines of Through Highway, then said easement for slopes shall cease to be effective.

And the Grantor does further grant unto the State of Maryland, to the use of the State Roads Commission of Maryland, its successors and assigns, the right to create, use and maintain on or across the adjacent land of the Grantors such waterways and/or inlets and outlets as are necessary in the opinion of the State Roads Commission for the drainage structures indicated in the legend shown in the left hand corner of the above mentioned plats.

AND THE GRANTORS DO FURTHER GRANT unto the State of Maryland, to the use of the State Roads Commission of Maryland, its successors and assigns, any and all right whatsoever of the GRANTORS, their heirs, successors and assigns, of any means whatsoever of ingress or egress between the THROUGH HIGHWAY and their remaining property across the lines which are designated "Right of Way Line of Through Highway," to the end that there never will be any vehicular, pedestrian and/or animal access to or from said through highway and their remaining property across those lines which are so marked on the above mentioned plats, except by means of such public road connections to EXPRESSWAYS or by means of such public and/or private road connections to CONTROLLED ACCESS ARTERIAL HIGHWAYS, as the "COMMISSION" may construct, or permit to be constructed.

To have and to hold said easements unto the State of Maryland, to the use of the State Roads Commission of Maryland, its successors and assigns, in perpetuity, subject to and in accordance with the provisions of Sub-section 1(a) of Public Act No. 284, 71st Congress, as amended, and Section 28 Sub-title "Park and Planning Commission", of Article 16 of the Code of Public Local Laws of Maryland Title "Montgomery County" as enacted by Chapter 780 of the Laws of Maryland of 1959.

In testimony whereof, witness the name and seal of the grantor.

MARYLAND NATIONAL CAPITAL PARK
AND PLANNING COMMISSION

Robert W. Weller (SEAL)
its Chairman

Attest:

John F. Nicholas
Secretary-Treasurer

STATE OF MARYLAND

MONTGOMERY COUNTY, to wit:

I hereby certify that on this 25th day of November, 1999, before me the subscriber, a Notary Public in and for Montgomery County, personally appeared Herbert W. Wells, Chairman of the Maryland National Capital Park and Planning Commission, and acknowledged the foregoing instrument to be the act and deed of said Commission and at the same time made oath in due form of law that he is fully authorized by proper resolution to execute and acknowledge same.

Witness my hand and Notarial Seal.

Carl E. Guter

Notary Public



mailed -

State Rds. Comm. 300 W. Preston St. Rm. 402 Baltimore Md 7-22-63

LIBER 3098 FOLIO 577

Recorded June 21st, 1963-at-2:14 P. M.

THIS DEED OF EASEMENT, made this 15th day of May 196³, by and between Maryland National Capital Park and Planning Commission, party of the first part, and the State of Maryland, to the use of the State Roads Commission of Maryland, party of the second part.

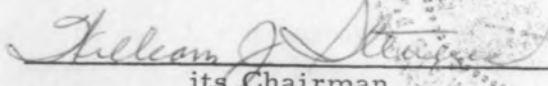
WITNESSETH:

THAT for and in consideration of the sum of One Dollar and other good and valuable considerations paid to the party of the first part by the party of the second part; receipt whereof is hereby acknowledged, the party of the first part does hereby give, grant and convey unto the party of the second part and its successors, a perpetual easement for normal highway purposes over, across and through all of the lands shown colored in red and yellow on State Roads Commission of Maryland Plats No. 15420 and 17847, attached hereto and made a part hereof.

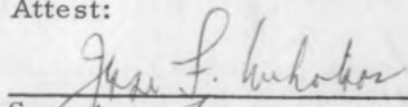
TO HAVE AND TO HOLD the same unto the State of Maryland, to the use of the State Roads Commission of Maryland and its successors, in perpetuity, except that at any time said area shall be abandoned and not used for highway purposes, then in that event, said easement shall cease and determine, and subject to and in accordance with the provisions of Subsection 1(a) of Public Act No. 284, 71st Congress, as amended, and Section 28 Sub-title "Park and Planning Commission", of Article 16 of the Code of Public Local Laws of Maryland Title "Montgomery County" as enacted by Chapter 780 of the Laws of Maryland of 1959.

WITNESS, the Maryland-National Capital Park and Planning Commission.

MARYLAND NATIONAL CAPITAL PARK
AND PLANNING COMMISSION


its Chairman
William J. Stevens

Attest:


Secretary - Treasurer
Jesse F. Nicholson

State of Maryland)

County of Montgomery)

On this 15th day of May, 196~~7~~³, before me,

a Notary Public of the State of Maryland, in and for Montgomery County,


personally appeared WILLIAM J. STEVENS
~~Herbert W. Wells~~, Chairman of the Maryland National

Capital Park and Planning Commission, and acknowledged the foregoing and

annexed deed to be the act and deed of the Maryland National Capital Park and

Planning Commission.

IN WITNESS WHEREOF I have hereunto set my hand and official seal.


Carl E. Gudikunst

Notary Public, State of Maryland

MY COMMISSION EXPIRES MAY 3, 1965

Carl E. Gudikunst

parcel D, as shown on State Roads Commission's plat number 37636, the three (3) following courses and distances, VIZ.: (1) S 68° 28' 44" E 50.25 feet; (2) S 65° 03' 32" E 50.04 feet; (3) S 54° 47' 55" E 50.49 feet to intersect the northerly right of way line of the Capitol Beltway, said intersection being situated 150.00 feet, measured perpendicularly, from station 281+50.00 of the base line of right of way of the Capitol Beltway, thence binding along the northerly right of way line of the Capitol Beltway N 62° 46' 06" W 150.00 feet to the place of beginning.

Containing 0.01 acres more or less.

PARCEL F

BEGINNING for the same at a point on the northerly right of way line of the Capitol Beltway, said point being situated 150.00 feet, measured perpendicularly from station 281+50.00 of the base line of right of way of the Capitol Beltway, as said base line is delineated on State Roads Commission's plat number 37636 attached hereto and made a part hereof, running thence and binding along the outline of the perpetual easement area marked parcel

F, as shown on State Roads Commission's plat number 37636, the four (4) following courses and distances; VIZ.: (1) N 44° 49' 27" E 215.06 feet; (2) N 76° 02' 45" E 159.45 feet; (3) S 62° 46' 06" E 65.00 feet; (4) S 27° 13' 54" W 310.00 feet to intersect the northerly right of way line of the Capitol Beltway, said intersection being situated 150.00 feet, measured perpendicularly, from station 284+00.00 of the base line of right of way of the Capitol Beltway, thence binding along the northerly right of way line of the Capitol Beltway N 62° 46' 06" W 250.00 feet to the place of beginning.

Containing 1.32 acres more or less.

PARCEL G

BEGINNING for the same at a point on the southerly right of way line of the Capitol Beltway, said point being situated 150.00 feet, measured perpendicularly, from station 281+50.00 of the base line of right of way of the

Capitol Beltway, as said base line is delineated on State Roads Commission's plat no. 37636, attached hereto and made a part hereof; running thence and binding along said southerly right of way line of the Capitol Beltway S 62° 46' 06" E 115.00 feet to a point situated 150.00 feet, measured perpendicularly, from station 282+65.00 of the base line of right of way of the Capitol Beltway, thence leaving the southerly right of way line of the Capitol Beltway and binding along the outline of the perpetual easement area marked parcel G, as shown on State Roads Commission's plat no. 37636, the four (4) following courses and distances; VIZ.: (1) S 27° 13' 54" W 325.000 feet; (2) N 62° 46' 06" W 85.00 feet; (3) N 17° 30' 15" E 177.55 feet; (4) N 27° 13' 54" E 150.00 feet to the place of beginning.

Containing 0.80 Acres more or less.

PARCEL H

BEGINNING for the same at a point on the southerly right of way line of the Capitol Beltway, said point being situated 150.00 feet, measured radially, from station equality 284+61.63 back equals 284+91.07 ahead of the base line of right of way of the Capitol Beltway as said base line is delineated on State Roads Commission's plat number 37636, attached hereto and made a part hereof, running thence and binding along said southerly right of way line of Capitol Beltway by a curve to the left having a radius of 5061.07 feet for a distance of 382.14 feet, said curve being subtended by a chord S 64° 55' 53" E 382.05 feet to intersect the right of way line of ramp A, said intersection being situated 150.00 feet, measured radially, from station 288+61.88 of the base line of right of way of the Capitol Beltway, said intersection also being situated 50.00 feet, measured radially, from station 2+22.59 of the base line of right of way of Ramp A, as said base line is delineated on State Roads Commission's plat number 37636, thence binding along the right of way line of ramp A by a curve to the right having a radius of 10277.61 feet for a distance of 117.70 feet, said curve being subtended by a chord S 57° 12' 20" E 117.69 feet to intersect the easterly line of division of the U.S. Department

of Agriculture, thence binding thereon S 32° 47' 50" W 27.00 feet to the southeastern extremity of the perpetual easement area marked parcel

H, as shown on State Roads Commission's plat number 37636, thence binding along the outline of said easement area the eight (8) following courses and distances; VIZ.: (1) N 61° 12' 29" W 40.81 feet; (2) N 63° 12' 32" W 83.24 feet; (3) N 57° 53' 43" W 52.48 feet; (4) N 58° 05' 10" W 104.44 feet; (5) N 57° 11' 43" W 52.12 feet; (6) N 62° 06' 40" W 51.64 feet; (7) N 63° 44' 51" W 51.59 feet; (8) N 57° 28' 23" W 61.06 feet to the place of beginning.

Containing 0.22 Acres more or less.

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The following are perpetual easement areas for stream change:

PARCEL I

BEGINNING for the same at a point on the southerly right of way line of the Capitol Beltway, said point being situated 111.00 feet, measured perpendicularly, from station 244+65.00 of the base line of right of way of the Capitol Beltway, as said base line is delineated on State Roads Commission's Plat Number 36603, attached hereto and made a part hereof, running thence and binding along the outline of the perpetual easement area, as shown on State Roads Commission's plat number 36603, the three (3) following courses and distances, VIZ" (1) S 00° 52' 46" E 171.82 feet; (2) S 86° 44' 36" W 71.70 feet; (3) N 15° 56' 53" W 159.53 feet to intersect the aforementioned southerly right of way line of the Capitol Beltway, said intersection being situated 111.00 feet, measured perpendicularly, from station 243.50.00 of the base line of right of way of the Capitol Beltway, thence binding along said southerly right of way line N 78° 43' 34" E 115.00 feet to the place of beginning.

Containing 0.35 acres more or less.

PARCEL J

BEGINNING for the same at a point on the right of way line of the south bound lane of Interstate Route 95, hereinafter called I-95, said point being situated 175.00 feet, measured radially, from station 591+50.00 of the base line of right of way of I-95, as said base line is delineated on State Roads Commission's plat number 36604, attached hereto and made a part hereof, running thence and binding along the outline of the perpetual easement area, as shown on State Roads Commission's plat number 36604, the three (3) following courses and distances; VIZ: (1) S 61° 53' 20" W 90.81 feet; (2) N 26° 55' 15" E 45.67 feet; (3) N 53° 46' 25" E 92.54 feet to intersect the aforementioned right of way line of the south bound lane of I-95, said intersection being situated 191.00 feet, measured radially, from station 592+00.00

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of the base line of right of way of I-95, thence binding along said right of way line S 16° 08' 27" W 54.78 feet to the place of beginning.

Containing 0.06 acres more or less.



GATE ROAD COMMISSION
PO Box # 99
Upper Marlboro, MD.

4053 155

REC
 Federal Highway
OCT 13 1971
 Region 2
 Maryland Division

Taxes levied and on record
 as of this date

JAN 7 1972 *J*

have been paid
 DIRECTOR OF FINANCE
 PRINCE GEORGES COUNTY, MD.

Received for recording on the *16*
 Day of *March* A.D. *1972*
 and the same day recorded in Liber
 No. *4053* at Folio *130* &c
 one of the *C&D* Records
 of Prince George's County, Maryland
W. Waverly Webb
 Clerk of the Circuit Court

4053 130

THIS DEED, made this 4th day of October,
1971, by and between the UNITED STATES OF AMERICA, acting by and
through the DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION,
hereinafter referred to as the DEPARTMENT, and the STATE OF MARYLAND,
STATE HIGHWAY ADMINISTRATION, hereinafter referred to as the STATE.

W I T N E S S E T H :

WHEREAS, the STATE has filed application under the provisions
of the Act of Congress approved August 27, 1958 (Title 23, United
States Code, Section 107(d), 72 Stat. 893) for the conveyance to the
STATE certain easements in, over and across lands hereinafter
described being located in Prince Georges County, Maryland, and
a part of Agricultural Research Center, Department of Agriculture;
and

WHEREAS, the Federal Highway Administrator pursuant to delegation
of authority from the Secretary of Transportation, has determined
that the interests in lands requested by the STATE are reasonably
necessary in connection with the construction of Interstate
Projects I-495-2(74)26 and I-95-3(5)5; and

WHEREAS, this conveyance is further authorized under the provisions
of the Act of Congress approved October 15, 1966 (Section 6(a)(1)(A),
80 Stat. 931, 937); and

WHEREAS, the Deputy Administrator of the Agricultural Research
Service, Department of Agriculture, has authorized the DEPARTMENT
to convey the easements in, over and across the hereinafter
described lands to the STATE.

NOW, THEREFORE, the DEPARTMENT as authorized by law, does hereby
appropriate, remise, release, quitclaim and convey unto the State
of Maryland the following easements:

RECORDED
M. WAVERLY WEBB
RECORDER & CLERK
CIRCUIT COURT

MAR 16 3 40 PM '72

MAR-16-72 PAID 3 5 7 CLK.CT.P.G.C. DCK—AGR

65.50

1. A perpetual and assignable easement to locate, construct, reconstruct, repair, operate, and maintain a right-of-way and appurtenances thereto in, on, through and across Parcels Nos. 1, 2, 3 as described in Exhibit "A" and shown on Plat Nos. 21563, 21562, 37635, 37636 in Exhibit "B", both attached hereto and made parts hereof, including all existing, future, or potential common law or statutory abutters' rights or easements of access to, from and between the right-of-way of Interstate Project I-495-2(74)26 and the adjoining property of the United States of America; and
2. Perpetual and assignable easements and rights-of-way to locate, construct, operate, maintain, repair and patrol drainage facilities in, upon, over and across Parcels Nos. A, B, C, D, E, H as described in Exhibit "A" and shown on Plats Nos. 21563, 21562, 37635, 37636 in Exhibit "B"; and
3. A perpetual and assignable easement to relocate, construct, reconstruct and maintain the Little Paint Branch, a stream, in, on, through and across Parcels Nos. F and G as described in Exhibit "A" and shown on Plat No. 37636 in Exhibit "B"; and
4. A perpetual and assignable easement to locate, construct, reconstruct, repair, operate and maintain a right-of-way and appurtenances thereto in, on, through and across Parcels Nos. 4, 5 and 6 as described in Exhibit "A" and shown on Plats Nos. 36603, 36604 and 36605 in Exhibit "B", both attached hereto and made parts hereof, including all existing, future, or potential common law or statutory abutters' rights or easements of access to, from and between the right-of-way of Interstate Project I-95-3(5)5 and the adjoining property of the United States of America; and
5. A perpetual and assignable easement to relocate, construct, reconstruct and maintain a stream in, on, through and across Parcel No. I as described in Exhibit "A" and shown on Plat No. 36603; and
6. A perpetual and assignable easement and right-of-way in, over and across Parcel J, as described in Exhibit "A" and shown on Plat No. 36604 in Exhibit "B", to construct, maintain, repair, operate, patrol an outlet ditch.

TO HAVE AND TO HOLD, the above-mentioned lands and interests in lands unto the State of Maryland, for so long a time as such are needed for highway purposes upon the express condition that if, at any time, the need for highway purposes shall no longer exist, notice of the fact shall be given by the STATE to the DEPARTMENT and such lands and interests in lands shall immediately revert to the United States of

America and to the control of the Department of Agriculture as such control existed prior to this instrument; and subject to the following covenants and regulations, which shall be binding on the State, its successors and assigns:

1. The State in consideration of the conveyance of said lands and interests in lands does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns that it will comply with the provisions of Title VI of the Civil Rights Act of 1964, (78 Stat. 252; 42 U.S.C., Sections 2000d-2000d-4) and the regulations set forth in Title 49-Transportation, Subtitle A, Part 21, Code of Federal Regulations (49 CFR 21.1-21.23) (1970), specifically that (a) no members of the traveling public and business users of the Federally-assisted highway shall, on the ground of race, color, or national origin be excluded from participating in, be denied the benefits of, or be otherwise subject to discrimination in their access to and use of said highway or their access to and use of the facilities and services provided for public accommodations (such as eating, sleeping, rest, recreation and vehicle servicing) constructed on, over, or under the right-of-way of the said highway, (b) that the State shall use the lands and interests in lands so conveyed, in compliance with all other requirements imposed pursuant to said Title 49, Subtitle A, Code of Federal Regulations, Part 21.

2. In the event of breach of the above-mentioned nondiscrimination covenants, the DEPARTMENT reserves the right to declare the term of this grant terminated in whole or in part and to revest title in the United States of America and to the control of the Department of Agriculture as such control existed prior to this instrument.

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IN WITNESS WHEREOF, I, Edwin J. Reis, Assistant Chief Counsel,
pursuant to delegations of authority from the Secretary of Transportation,
the Federal Highway Administrator, and the Chief Counsel, Federal
Highway Administration, by virtue of authority in me vested by law,
have hereunto subscribed my name as of the day and year first
above written.

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

IN PRESENCE OF:

June L. Greel
Ethel M. Bell

BY

Edwin J. Reis
Assistant Chief Counsel

UNITED STATES OF AMERICA)
DISTRICT OF COLUMBIA)

I, James A. Bloom, a Notary Public in and for
the District of Columbia, do hereby certify that on this the 4th
day of October, 1971, before me personally
appeared Edwin J. Reis, Assistant Chief Counsel, Federal Highway
Administration and acknowledged that the foregoing instrument having
date of October 4, 1971, was executed
by him in his official capacity and by authority in him vested by
law, for the purposes and intents in said instrument described and
set forth, and acknowledged the same to be his free act and deed as
Assistant Chief Counsel, Federal Highway Administration.

Witness my hand and seal this 4th day of October,
1971.



James A. Bloom
Notary Public

My Commission Expires December 31, 1973

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In compliance with the conditions set forth in the foregoing deed, the STATE OF MARYLAND, STATE HIGHWAY ADMINISTRATION, certifies and, by the acceptance of this deed, accepts the right-of-way over certain lands herein described and agrees for itself, its successors and assigns forever to abide by the conditions set forth in said deed.

Approved as to form
and legal sufficiency

11/4/71 19...
Eli Baer
Special ~~At~~ Attorney ~~General~~

STATE OF MARYLAND
STATE HIGHWAY ADMINISTRATION

BY David H. Fisher
STATE HIGHWAY ADMINISTRATOR

STATE OF MARYLAND)
COUNTY OF Baltimore)

I, _____, a Notary Public in and for the State of Maryland, hereby certify that David H. Fisher whose name as State Highway Administrator is signed to the foregoing conveyance and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he in his capacity as such Administrator executed the same voluntarily on this day.

Given under my hand and seal of office this 13th day of December, 1971.



Frank J. Paskowski
Notary Public

My Commission Expires July 1, 1974

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-1-

Property to be Conveyed to the State Roads
Commission of Maryland by the U. S. Government
(U.S. Agricultural Department)
Capitol Beltway
Contract No. 722-3-320
722-8-320
File No: 39747

Parcel No. I: Beginning at the intersection of the Northerly Right of Way line of the Capitol Beltway with the 15th or South $73^{\circ} 45' 01''$ East 498.6 foot line of Lot 4, 186.28 feet from the beginning thereof of a deed from the State of Maryland to the United States of America dated October 2, 1937 and recorded among the Land Records of Prince George's County, Maryland, in Liber 485 at Folio 116, said point of intersection being 150.00 feet measured radially from Station 370+09.72 of the base line of Right of Way of the Capitol Beltway as said base line of Right of Way is delineated on State Roads Commission Plat No. 21563 attached hereto and made a part hereof, thence binding along the title line of the United States of America the two following courses and distances vis: North $73^{\circ} 46' 01''$ West 186.28 feet, South $64^{\circ} 07' 02''$ West 238.14 feet to intersect the Southerly Right of Way line of the Capitol Beltway, said point of intersection being 150.00 feet measured radially from Station 367+50.45 of the aforementioned base line of Right of Way, thence binding along the Southerly Right of Way line of the Capitol Beltway, North $48^{\circ} 21' 13''$ West 1007.67 feet to intersect the title line of the Baltimore & Ohio Railroad as shown on the Baltimore & Ohio Railroad Valuation Map No. V-18.1-10, said point of intersection being 150.00 feet measured radially from Station 357+42.78 of the aforementioned base line of Right of Way, thence binding along the aforementioned title line of the Baltimore & Ohio Railroad 320.70 feet along the arc of a curve deflecting to the left having a radius of 5762.58 feet and a long chord bearing of North $20^{\circ} 58' 00''$ East 320.66 feet to intersect the aforementioned Northerly Right of Way line of the Capitol Beltway, said point of intersection being 150.00 feet measured radially from Station 356+29.53 of the aforementioned base line of right of way, thence binding along the aforementioned Right of Way line of the Capitol Beltway South $48^{\circ} 21' 13''$ East 1380.19 feet to the place of beginning.

Containing 7.87⁺ Acres.

The above described tracts of land being subject to the drainage rights as indicated on State Roads Commission's Plats Nos. 21562 and 21563 attached hereto and made a part hereof.

Exhibit "A"

.....

Parcel No. 2: Beginning for the same at a point of intersection of the Northerly Right of Way line of the Capitol Beltway and the tenth or South $00^{\circ} 48' 02''$ East 1351 9/10 foot line 131.66 feet from the beginning thereof of a deed from the State of Maryland to the United States of America dated October 2, 1937 and recorded among the Land Records of Prince George's County, Maryland, in Liber 485 at Folio 116, said point of intersection being 150.00 feet measured radially from Station 342+21.54 of the base line of Right of Way of Capitol Beltway as said base line of Right of Way is delineated on State Roads Commission Plat No. 21562 attached hereto and made a part hereof, thence binding along said Northerly Right of Way line the two following courses and distances vis:

1068.08 feet along the arc of a curve deflecting to the right having a radius of 3969.72 feet and a long chord bearing of South $56^{\circ} 03' 42''$ East 1064.86 feet, South $48^{\circ} 21' 13''$ East 308.89 feet to intersect the title line of the Baltimore & Ohio Railroad as shown on Baltimore & Ohio Railroad Valuation Map No. V-18.1-10, said point of intersection being 150.00 feet measured radially from Station 355+58.15 of the aforementioned base line of Right of Way as said base line of Right of Way is delineated on State Roads Commission Plat No. 21563 attached hereto and made a part hereof, thence binding along the aforementioned title line of the Baltimore and Ohio Railroad, 321.25 feet along the arc of a curve deflecting to the right having a radius of 5696.58 feet and a long chord bearing of South $20^{\circ} 42' 56''$ West 321.21 feet to intersect the Southerly Right of Way line of the Capitol Beltway, said point of intersection being 150.00 feet measured radially from Station 356+72.89 of the aforementioned base line of Right of Way, thence binding along the Southerly Right of Way of the Capitol Beltway the two following courses and distances vis: North $48^{\circ} 21' 13''$ West 423.63 feet, 831.99 feet along the arc of a curve deflecting to the left having a radius of 3669.72 feet and a long chord bearing of North $54^{\circ} 50' 55''$ West 830.21 feet to intersect the aforementioned tenth or South $00^{\circ} 48' 02''$ East 1351 9/10 foot line, said point of intersection being 150.00 feet measured radially from Station 343+89.26 of the aforementioned base line of Right of Way, thence running with said title line North $00^{\circ} 53' 20''$ West 340.75 feet to the place of beginning.

Containing 9.08⁺ Acres.

Contract No. (P-722-3-320)
Project: Capital Beltway - New Hampshire
Avenue to Rhode Island Avenue.
Property: U. S. Department of Agriculture
Item No.: 39747

Property to be conveyed to the State Roads Commission of Maryland by
the United State Government Agricultural Department.

.....
PARCEL NO. 3

BEGINNING for the same at the point of intersection of the Northerly Right
of Way Line of the Capital Beltway and the second or S 39° 24' W 1535.7 foot
line 388.42 feet from the beginning thereof of a deed from Joseph E. Gatti
and Josephine A. Gatti, his wife, to the United States of America dated
December 20, 1940, and are recorded among the land records of Prince Georges
County, Maryland, in Liber 591 at Folio 283, said point of intersection being
150 feet measured radially from station 290+39.67 of the base line of Right
of Way of the Capital Beltway as said base line of Right of Way is delineated
on State Roads Commission's Plat No. 37636, attached hereto and made a part
hereof; thence binding along the aforementioned title line S 32° 47' 50" W
153.23 feet to intersect the base line of Right of Way of the aforesaid Capital
Beltway at station 290+07.90; thence continuing along the aforementioned
title line the two following courses and distances; VIZ.: S 32° 47' 50" W
124.98 feet, and S 32° 47' 50" W 50.00 feet to intersect the Southerly Right
of Way Line of the Capital Beltway; thence leaving the aforementioned title
line and binding along said Southerly Right of Way Line of the Capital Beltway
the four following courses and distances; VIZ.: (1) by a curve to the left
117.69 feet, said curve being subtended by a chord N 57° 12' 19" W 117.68 feet,
said curve having a radius of 10,277.61 feet; (2) by a curve to the right having
a radius of 5,061.07 feet for a distance of 382.06 feet, said curve being sub-
tended by a chord N 64° 55' 53" W 382.05 feet; (3) N 62° 46' 06" W 493.75
feet; (4) by a curve to the left having a radius of 4,472.66 feet for a dis-
tance of 1,571.40 feet, said curve being subtended by a chord N 72° 50' 00" W
1,563.33 feet to intersect the easterly existing Right of Way Line of Cherry
Hill Road, said point being situated at a distance of 111 feet measured
radially from station 262+38.31 of the base line of Right of Way of the east-

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bound lane of the Capital Beltway, as said base line of Right of Way is delineated on State Roads Commission's Plat No. 37635, attached hereto and made a part hereof; thence leaving the southern Right of Way Line of the Capital Beltway and binding along the easterly existing Right of Way Line of Cherry Hill Road the five following courses and distances; VIZ: (1) N 09° 10' 26" W 115.52 feet; (2) N 09° 10' 26" W 42.34 feet; (3) by a curve to the right having a radius of 1,402.39 feet for a distance of 107.70 feet, said curve being subtended by a chord N 06° 58' 24" W 107.68 feet; (4) N 04° 46' 26" W 132.57 feet; (5) N 04° 46' 26" W 180.13 feet to intersect the aforementioned northerly Right of Way Line of the Capital Beltway; thence leaving the easterly existing Right of Way Line of Cherry Hill Road and binding along the northerly Right of Way Line of the Capital Beltway the four following courses and distances; VIZ.: (1) S 65° 54' 30" E 130.63 feet; (2) by a curve to the right having a radius of 4,733.66 feet for a distance of 897.32 feet, said curve being subtended by a chord S 68° 11' 56" E 895.98 feet; (3) S 62° 46' 06" E 1,330.58 feet; (4) by a curve to the left having a radius of 4,761.07 feet for a distance of 531.84 feet, said curve being subtended by a chord S 65° 58' 06" E 531.57 feet to the place of beginning.

Containing 22.44 Acres more or less.

The above described parcels being subject to provisions stated in the expressway note as shown on State Roads Commission's Plat Nos. 37635 and 37636 attached hereto and made a part hereof.

The above described parcels also being subject to all easement and drainage notes as shown on State Roads Commission's Plat Nos. 37635 and 37636, attached hereto and made a part hereof.

This description is a replacement for the description previously written for State Roads Commission's Plat Nos. 21560 and 21561 whose Contract No. was P-722-3-320 and which was written in February 1959.

CONTRACT NO. P-199-3-342

Proj: Interstate Route 95.,
From Powder Mill Road to Capital Beltway
Property: U.S. Department of Agriculture
Item No. 39747

-5-

PARCEL NO. 4:

BEGINNING for the same at the intersection of the easterly property line of the U. S. Department of Agriculture with the southerly right of way line of the eastbound lane of the Capital Beltway, said point of beginning being situated 111.00 feet distant, measured radially, from station 251+99.38 of the base line of right of way of the eastbound lane of the Capital Beltway, as said base line is delineated on State Roads Commission's plat number 36603, attached hereto and made a part hereof, said point of beginning also being N $41^{\circ} 07' 53''$ W 257.14 feet from a point designated as the beginning of the N $36^{\circ} 36' 10''$ W 460.32 feet line of the deed dated 4/29/41, from Anita E. McCoy to the United States of America, Liber 609, folio 18; thence leaving said point of beginning and running along the southerly right of way line of the eastbound lane of the Capital Beltway by a curve to the left having a radius of 4472.66 feet for a distance of 420.24 feet, said curve being subtended by a chord S $81^{\circ} 25' 04''$ W 420.08 feet; thence continuing along said southerly right of way line S $78^{\circ} 43' 34''$ W 727.32 feet to intersect the right of way line of Ramp "D", said ramp "D" being located in the southeast quadrant of the interchange of the Capital Beltway and Interstate Route 95; thence leaving the southerly right of way line of the eastbound lane of the Capital Beltway and running along the right of way line of Ramp "D" the six (6) following courses and distances, VIZ: (1) by a curve to the right having a radius of 686.00 feet for a distance of 503.97 feet, said curve being subtended by a chord S $12^{\circ} 09' 43''$ W 492.71 feet; (2) S $49^{\circ} 06' 35''$ W 169.78 feet; (3) by a curve to the right having a radius of 660.00 feet for a distance of 259.33 feet, said curve being subtended by a chord S $58^{\circ} 47' 18''$ W 257.66 feet; (4) S $70^{\circ} 02' 41''$ W 164.25 feet; (5) S $43^{\circ} 28' 48''$ W 55.90 feet; (6) S $68^{\circ} 38' 53''$ W 18.63 feet to intersect the westerly property line of the U. S. Dept. of Agriculture; thence leaving the right of way line of Ramp "D" and running along the westerly property line of the U. S. Dept. of Agriculture N $27^{\circ} 04' 17''$ E 125.36 feet to intersect the base line of right of way of the aforementioned Ramp "D" at station 7+23.10 as said base line is delineated on State Roads Commission's Plat No. 36603, attached hereto and made a part hereof; thence continuing

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along said westerly property line N $27^{\circ} 04' 17''$ E 888.48 feet to intersect the aforementioned base line of right of way of the eastbound lane of the Capital Beltway at station 238+37.27; thence continuing along said westerly property line N $27^{\circ} 04' 17''$ E 153.28 feet to intersect the northerly property line of the U. S. Dept. of Agriculture; thence leaving the westerly property line of the U. S. Dept. of Agriculture and running along the northerly property line of the U. S. Dept. of Agriculture the six (6) following courses and distances, VIZ: (1) N $71^{\circ} 05' 14''$ E 502.10 feet; (2) N $81^{\circ} 11' 17''$ E 62.55 feet; (3) N $01^{\circ} 39' 43''$ W 15.00 feet; (4) N $85^{\circ} 20' 17''$ E 14.00 feet; (5) N $88^{\circ} 31' 26''$ E 360.40 feet; (6) N $39^{\circ} 36' 25''$ E 162.43 feet to intersect the aforementioned easterly property line of the U. S. Dept. of Agriculture; thence leaving the northerly property line of the U. S. Dept. of Agriculture and running along the easterly property line of the U. S. Dept. of Agriculture S $32^{\circ} 47' 24''$ E 207.59 feet; thence continuing along said easterly property line S $41^{\circ} 07' 53''$ E 68.08 feet to intersect the aforementioned base line of right of way of the eastbound lane of the Capital Beltway at station 251+21.42; thence continuing along said easterly property line S $41^{\circ} 07' 53''$ E 135.10 feet to the place of beginning.

Containing 13.26 acres more or less.

PARCEL NO. 5

BEGINNING for the same at the intersection of the southerly property line of the U. S. Dept. of Agriculture with the easterly right of way line of the northbound lane of Interstate Route 95, said point of beginning being situated 162.93 feet distant, measured radially, from station 594+37.34 of the base line of right of way of the northbound lane of Interstate Route 95, as said base line is delineated on State Roads Commission's Plat Nos. 36604 and 36605, attached hereto and made a part hereof, said point of beginning also being $N 79^{\circ} 48' 36'' W$ 964.04 feet from a concrete monument, said monument being located at the end of the $N 73^{\circ} 57' W$ 551.00 feet line of the deed dated 10/2/33, from Theodore A. Sellman to the United States of America, Liber 401, Folio 96; thence leaving said point of beginning and running with said southerly property line of the U. S. Dept. of Agriculture the five (5) following courses and distance, VIZ: (1) $N 79^{\circ} 48' 36'' W$ 117.91 feet; (2) $S 02^{\circ} 30' 49'' E$ 93.62 feet; (3) $S 81^{\circ} 44' 24'' W$ 102.53 feet to intersect the aforementioned base line of right of way of the northbound lane of Interstate Route 95 at station 592+69.45; (4) $S 81^{\circ} 44' 24'' W$ 605.35 feet to intersect the southbound lane of Interstate Route 95 at station 590.63.18, as said base line is delineated on State Roads Commission's Plat Nos. 36604 and 36605, attached hereto and made a part hereof; (5) $S 81^{\circ} 44' 24'' W$ 253.93 feet to intersect the westerly right of way line of the southbound lane of Interstate Route 95; thence leaving the southerly property line of the U. S. Dept. of Agriculture and running along the westerly right of way line of the southbound lane of Interstate Route 95 the twenty (20) following courses and distances, VIZ.: (1) $N 37^{\circ} 20' 15'' E$ 96.48 feet; (2) $N 65^{\circ} 27' 51'' E$ 63.41 feet; (3) by a curve to the right having a radius of 3969.72 feet for a distance of 51.97 feet, said curve being subtended by a chord $N 31^{\circ} 37' 21'' E$ 51.96 feet; (4) $N 06^{\circ} 45' 03'' E$ 57.81 feet; (5) $N 16^{\circ} 08' 27'' E$ 54.78 feet; (6) $N 39^{\circ} 31' 14'' E$ 262.52 feet; (7) $N 33^{\circ} 38' 23'' E$ 157.54 feet; (8) $N 47^{\circ} 29' 03'' E$ 52.84 feet; (9) $N 56^{\circ} 01' 28'' E$ 107.98 feet; (10) by a curve to the right having a radius of 3969.72 feet for a distance of 415.71 feet, said curve being subtended by a chord $N 44^{\circ} 44' 50'' E$ 415.52 feet; (11) $N 24^{\circ} 44' 43'' E$ 114.20 feet; (12) $N 37^{\circ} 10' 33'' E$ 108.14 feet; (13) $N 50^{\circ} 24' 52'' E$ 105.80 feet; (14) $N 63^{\circ} 10' 33'' E$ 213.57 feet; (15) $N 31^{\circ} 05' 59'' E$ 57.82 feet; (16) $N 41^{\circ} 32' 09'' E$ 54.68 feet; (17) $N 60^{\circ} 37' 04'' E$ 88.30

feet; (18) N $56^{\circ} 16' 43''$ E 166.77 feet; (19) N $62^{\circ} 08' 01''$ E 166.35 feet; (20) N $44^{\circ} 47' 08''$ E 33.66 feet to intersect the southerly existing right of way line of Sellman Road; thence leaving the westerly right of way line of the southbound lane of Interstate Route 95 and running along the southerly existing right of way line of Sellman Road N $66^{\circ} 27' 30''$ E 547.59 feet to intersect the westerly existing right of way line of Cherry Hill Road; thence leaving the southerly existing right of way line of Sellman Road and running along the westerly existing right of way line of Cherry Hill Road S $20^{\circ} 46' 58''$ E 115.69 feet to intersect the base line of right of way of Interstate Route 95 at station 617+18.67; thence continuing along the westerly existing right of way line of Cherry Hill Road S $20^{\circ} 46' 58''$ E 609.65 feet to intersect the westerly right of way line of Cherry Hill Road; thence leaving the westerly existing right of way line of Cherry Hill Road and running along the westerly right of way line of Cherry Hill Road the three following courses and distances, VIZ.: (1) N $38^{\circ} 21' 54''$ W 26.29 feet; (2) N $20^{\circ} 22' 52''$ W 268.25 feet; (3) S $71^{\circ} 58' 02''$ W 6.17 feet to intersect the easterly right of way line of Interstate Route 95; thence leaving the westerly right of way line of Cherry Hill Road and running along the easterly right of way line of Interstate Route 95 the ten (10) following courses and distance, VIZ.: (1) S $60^{\circ} 53' 28''$ W 397.27 feet; (2) S $17^{\circ} 41' 23''$ W 112.23 feet; (3) S $35^{\circ} 36' 31''$ W 140.25 feet; (4) S $59^{\circ} 35' 39''$ W 378.65 feet; (5) S $42^{\circ} 47' 00''$ W 140.23 feet; (6) S $45^{\circ} 07' 25''$ W 142.29 feet; (7) by a curve to the left having a radius of 2815.35 feet for a distance of 94.18 feet, said curve being subtended by a chord S $34^{\circ} 14' 36''$ W 94.17 feet; (8) S $37^{\circ} 38' 01''$ W 238.20 feet; (9) S $19^{\circ} 08' 32''$ W 95.91 feet (10) S $23^{\circ} 56' 14''$ W 106.61 feet to the place of beginning.

Containing 33.12 acres more or less.

PARCEL NO. 6

BEGINNING for the same at the intersection of the easterly existing right of way line of Cherry Hill Road with the southerly existing right of way line of Sellman Road, said intersection being situated 115.38 feet distant, measured radially, from station 617+96.90 of the base line of right of way of Interstate Route 95, as said base line is delineated on State Roads Commission's

Plat No. 36605, attached hereto and made a part hereof; thence leaving said point of beginning and running along the southerly existing right of way line of Sellman Road N $79^{\circ} 57' 56''$ E 235.60 feet to intersect the aforementioned base line of right of way of Interstate Route 95 at station 620+04.43; thence continuing along said southerly existing right of way line N $79^{\circ} 57' 56''$ E 428.54 feet to intersect the easterly right of way line of Interstate Route 95; thence leaving the southerly existing right of way line of Sellman Road and running along the easterly right of way line of Interstate Route 95 S $31^{\circ} 45' 28''$ W 70.48 feet to intersect the northerly right of way line of Relocated Sellman Road; thence leaving the easterly right of way line of Interstate Route 95 and running along the northerly right of way line of Relocated Sellman Road by a curve to the right having a radius of 994.93 feet for a distance of 132.84 feet, said curve being subtended by a chord N $56^{\circ} 38' 49''$ E 132.74 feet to intersect the aforementioned southerly existing right of way line of Sellman Road; thence leaving the northerly right of way line of Relocated Sellman Road and running along the southerly existing right of way line of Sellman Road N $79^{\circ} 57' 56''$ E 152.46 feet to intersect the base line of right of way of Relocated Sellman Road at station 9+26.76, as said base line is delineated on State Roads Commission's plat number 36605, attached hereto and made a part hereof; thence continuing along said southerly existing right of way line N $79^{\circ} 57' 56''$ E 255.32 feet to intersect the southerly right of way line of Relocated Sellman Road; thence leaving the southerly existing right of way line of Sellman Road and running along the southerly right of way line of Relocated Sellman Road the six (6) following courses and distances, VIZ.: (1) S $51^{\circ} 43' 46''$ W 48.64 feet; (2) S $80^{\circ} 02' 54''$ W 31.59 feet; (3) by a curve to the left having a radius of 914.93 feet for a distance of 490.19 feet, said curve being subtended by a chord S $64^{\circ} 41' 58''$ W 484.35 feet; (4) S $49^{\circ} 21' 04''$ W 437.86 feet; (5) by a curve to the right having a radius of 676.62 feet for a distance of 89.59 feet, said curve being subtended by a chord S $53^{\circ} 08' 40''$ W 89.52 feet; (6) S $15^{\circ} 47' 49''$ W 85.70 feet to intersect the easterly right of way line of Cherry Hill Road; thence leaving the southerly right of way

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line of Relocated Sellman Road and running along the easterly right of way line of Cherry Hill Road the two following courses and distances, VIZ.: (1) S 20° 22' 52" E 215.00 feet; (2) S 12° 02' 42" W 29.62 feet to intersect the aforementioned easterly existing right of way line of Cherry Hill Road; thence leaving the easterly right of way line of Cherry Hill Road and running along the easterly existing right of way line of Cherry Hill Road N 20° 46' 58" W 622.13 feet to intersect the aforementioned base line of right of way of Interstate Route 95 at station 617+60.49; thence continuing along said easterly existing right of way line N 20° 46' 58" W 120.87 feet to the place of beginning.

Containing 4.87 acres more or less.

The above described parcels numbered 5 and 6 being a part of the Agricultural Research Center's Tract No. 021 formerly known as the Sellman Brothers Tract, said tract being surveyed for the U. S. Government July - September, 1933.

The above described parcels being subject to the provisions stated in the "Expressway" note as shown on State Roads Commission's Plat Nos. 36603, 36604 and 36605, attached hereto and made a part hereof.

The above described parcels also being subject to all easement and drainage notes as shown on State Roads Commission's Plat Nos. 36603, 36604, and 36605, attached hereto and made a part hereof.

Easement Areas to be acquired by the State of Maryland to the use
of the State Roads Commission of Maryland from the U. S. Depart-
ment of Agriculture.

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PARCEL NO. A

BEGINNING FOR the same at a point in the northerly right of way line
and right of way line of Through Highway of the Capitol Beltway, said point
being 150 feet distant, measured radially in a northerly direction from
station 347+50 of the base line of Right of Way of the Capitol Beltway as
said base line is delineated on State Roads Commission's Plats Nos. 21562
and 21563 attached hereto and made a part hereof, running thence and binding
along the northerly extremities of said easement area the nineteen (19) fol-
lowing courses and distances; VIZ:

- | | | |
|------|-----------------|-------------|
| (1) | S 58° 46' 14" E | 52.07 feet; |
| (2) | S 54° 43' 06" E | 52.00 feet; |
| (3) | S 53° 58' 01" E | 52.00 feet; |
| (4) | S 56° 31' 03" E | 52.11 feet; |
| (5) | S 53° 34' 07" E | 52.06 feet; |
| (6) | S 52° 49' 02" E | 52.07 feet; |
| (7) | S 54° 15' 50" E | 52.17 feet; |
| (8) | S 50° 13' 05" E | 52.11 feet; |
| (9) | S 48° 22' 01" E | 52.11 feet; |
| (10) | S 48° 43' 36" E | 50.94 feet; |
| (11) | S 53° 56' 30" E | 51.35 feet; |
| (12) | S 43° 46' 43" E | 50.16 feet; |
| (13) | S 46° 03' 03" E | 50.04 feet; |
| (14) | S 47° 12' 26" E | 50.01 feet; |
| (15) | S 41° 30' 40" E | 25.18 feet; |
| (16) | S 48° 21' 17" E | 25.00 feet; |
| (17) | S 87° 01' 01" E | 32.01 feet; |
| (18) | S 48° 53' 15" E | 23.51 feet; |
| (19) | S 20° 42' 59" W | 27.00 feet; |

to intersect the aforesaid northerly right of way line of the Capitol Beltway, thence binding thereon (20) N 48° 21' 13" W 308.89 feet; (21) by a curve to the left, having a radius of 3969.72 feet for a distance of 519.36 feet, said curve being subtended by a chord, N 52° 06' 03" W 518.11 feet to the place of beginning.

Containing 0.16 ± Acre.

PARCEL NO. B

BEGINNING FOR the same at a point in the northerly right of way line and right of way line of Through Highway of the Capitol Beltway, said point being situated 150 feet distant, measured at right angles, from station 356+ 29.53 of the Base line of right of way of the Capitol Beltway as said base line is delineated on State Roads Commission's Plat Nos. 21562 & 21563 attached hereto and made a part hereof, running thence and binding along the northerly extremities of the aforesaid easement area the seventeen (17) following courses and distances; VIZ:

- | | | |
|------|-----------------|-------------|
| (1) | N 20° 57' 59" E | 27.00 feet; |
| (2) | S 61° 23' 40" E | 56.46 feet; |
| (3) | S 48° 21' 06" E | 25.00 feet; |
| (4) | S 46° 03' 44" E | 50.04 feet; |
| (5) | S 46° 03' 47" E | 50.04 feet; |
| (6) | S 47° 12' 26" E | 50.01 feet; |
| (7) | S 44° 55' 12" E | 50.09 feet; |
| (8) | S 41° 30' 34" E | 50.36 feet; |
| (9) | S 44° 55' 15" E | 50.09 feet; |
| (10) | S 47° 12' 23" E | 50.01 feet; |
| (11) | S 44° 55' 12" E | 50.09 feet; |
| (12) | S 42° 38' 33" E | 50.25 feet; |
| (13) | S 43° 46' 46" E | 50.16 feet; |
| (14) | S 48° 21' 12" E | 50.00 feet; |

- (15) S 46° 03' 47" E 50.04 feet;
(16) S 44° 55' 09" E 50.09 feet;
(17) S 44° 55' 12" E 50.09 feet;

to intersect the aforesaid northerly right of way line and right of way line of Through Highway, thence binding thereon (18) N 48° 21' 13" W 770.47 feet to the place of beginning.

Containing 0.37± Acres.

The following are perpetual easement areas for drainage facility:

PARCEL C

Beginning for the same at a point on the easterly right of way line of Cherry Hill Road, said point being situated 30.00 feet, measured perpendicularly, from station 14+50.00 of the base line of right of way of Cherry Hill Road, as said base line is delineated on State Roads Commission's plat number 37635, attached hereto and made a part hereof; running thence and binding along the outline of the perpetual easement area marked parcel C, as shown on State Roads Commission's plat number 37635, the ten (10) following courses and distances; VIZ.: (1) S 29° 07' 37" E 52.81 feet; (2) S 08° 03' 30" E 50.04 feet; (3) S 05° 42' 57" E 37.14 feet; (4) S 05° 45' 17" E 13.53 feet; (5) S 09° 21' 42" E 52.00 feet; (6) S 05° 49' 46" E 39.93 feet; (7) S 00° 08' 41" W 11.66 feet; (8) S 02° 29' 00" E 25.02 feet; (9) S 04° 46' 26" E 75.00 feet; (10) S 01° 17' 51" E 35.02 feet to intersect the right of way line of the west bound lane of the Capitol Beltway, thence binding along said right of way line N 65° 54' 30" W 9.00 feet to intersect the easterly right of way line of Cherry Hill Road, said intersection being situated 169.31 feet, measured radially, from station 261+36.15 of the base line of right of way of the west bound lane of the Capitol Beltway, as said base line is delineated on State Roads Commission's plat number 37635, thence leaving the right of way line of the west bound lane of the Capitol Beltway and binding along the easterly right of way line of Cherry Hill Road the three (3) following courses and distances, VIZ.: (1) N 04° 46' 26" W 142.23 feet to a point situated 30.00 feet, measured radially, from station 16+88.38 of the base line of right of way of Cherry Hill Road; (2) by a curve to the left with a radius of 1071.74 feet for a distance of 104.28 feet, said curve being subtended by a chord N 07° 33' 41" W 104.24 feet to a point situated 30.00 feet, measured radially, from station 15+87.02 of the base line of right of way of Cherry Hill Road; (3) N 10° 20' 56" W 137.02 feet to the place of beginning.

Containing 0.10 Acres more or less.

PARCEL D

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BEGINNING for the same at the intersection of the easterly right of way line of Cherry Hill Road with the right of way line of the east bound lane of the Capitol Beltway, said intersection being situated 111.00 feet, measured radially, from station 262+38.31 of the base line of right of way of the east bound lane of the Capitol Beltway, as said base line is delineated on State Roads Commission's plat number 37635, attached hereto and made a part hereof; running thence along the right of way line of the east bound lane of the Capitol Beltway by a curve to the right with a radius of 4472.66 feet for a distance of 11.00 feet, said curve being subtended by a chord S 82° 49' 41" E 10.99 feet, thence leaving the right of way line of the east bound lane of the Capitol Beltway, and binding along the outline of the perpetual easement area marked parcel D, as shown on State Roads Commission's plat number 37635 the six (6) following courses and distances; VIZ.: (1) S 03° 58' 24" E 42.91 feet; (2) S 09° 10' 26" E 49.94 feet; (3) S 12° 57' 12" E 59.38 feet; (4) S 13° 54' 23" E 50.16 feet; (5) S 15° 02' 35" E 50.25 feet; (6) S 14° 25' 01" W 54.63 feet to intersect the easterly right of way line of Cherry Hill Road, said intersection being situated 16.00 feet, measured perpendicularly, from station 13+00.00 of the base line of right of way of Cherry Hill Road, as said base line is delineated on State Roads Commission's plat number 37635, thence binding along the easterly right of way line of Cherry Hill Road N 08° 47' 51" W 305.05 feet to the place of beginning.

Containing 0.08 acres more or less.

PARCEL E

BEGINNING for the same at a point on the northerly right of way line of the Capitol Beltway, said point being situated 150.00 feet measured perpendicularly, from station 280+00.00 of the base line of right of way of the Capitol Beltway, as said base line is delineated on State Roads Commission's plat number 37636, attached hereto and made a part hereof, running thence and binding along the outline of the perpetual easement area marked

National Park Service
NATIONAL CAPITAL REGION

LAND RECORD NO. ⁵⁹³~~595~~

May 13, 1968

Baltimore-Washington Parkway
Reservation No. 688
Prince Georges County, Maryland

1. On May 13, 1968, the following DISPOSAL was recorded in the Land Records of National Capital Region.

Part of Greenbelt Park transferred to the State Roads Commission of Maryland.

MARYLAND STATE ROADS COMMISSION has filed application under the provisions of the Act of Congress of August 27, 1958 (Title 23, United States Code, Section 317, 72 Stat. 916), for the transfer of land and interests in land hereinafter described, situate in Prince Georges County, Maryland and being a part of the land known as Greenbelt Park under the jurisdiction and control of the Department of the Interior; National Park Service, this transfer is further authorized under the provisions of the Act of Congress approved October 15, 1966, (Section 6(a) (1) (A), 80 Stat. 931, 937); and

The Director, Bureau of Public Roads has determined that the land and interests in lands covered by the application are reasonably necessary for the Edmonston Road Relocation designated as Federal-Aid Secondary Route 397; and

The National Park Service, Department of the Interior, by letter of May 11, 1967, has authorized the transfer of the land and interests in land to the Maryland State Roads Commission. Subject, however, to the following condition:

That there be reserved to the United States of America the right of access between Greenbelt Park and Edmonston Road, as indicated on Plat 17086, between survey station 66+00 and station 67+00.

Deed to the State of Maryland Recorded April 3, 1967,

Land Records of Prince Georges County, Book 3579, Page 200.

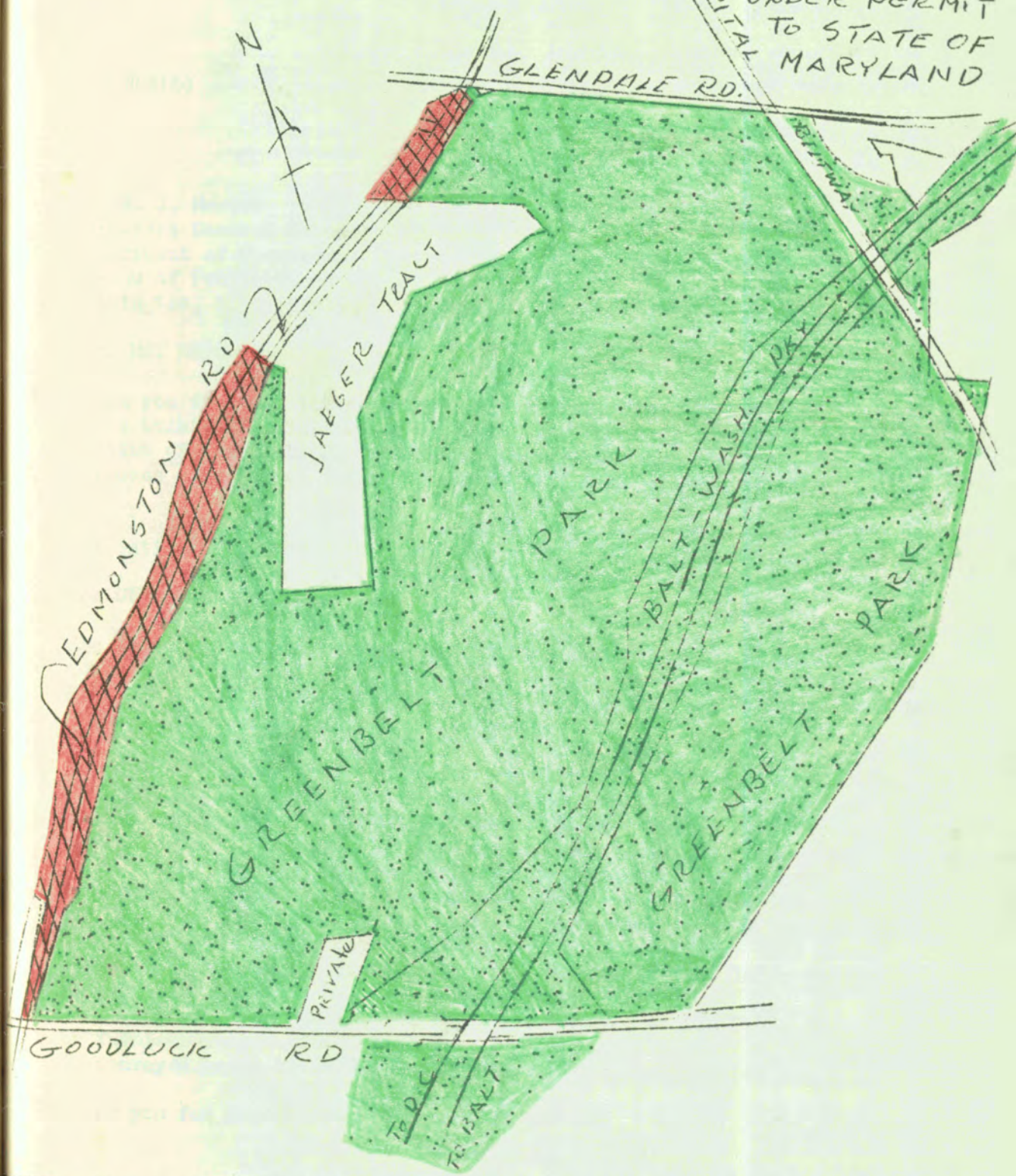
Plats assigned map file No. NCR 123-469-1 to 4.

2. This land was transferred to the State of Maryland by deed dated December 12, 1967.
3. Drawing is on page 3.

Frederic W. Bennewise
Assistant Regional Director,
Operations

RESERVATION N^o 688
BALTIMORE-WASH. PKY.

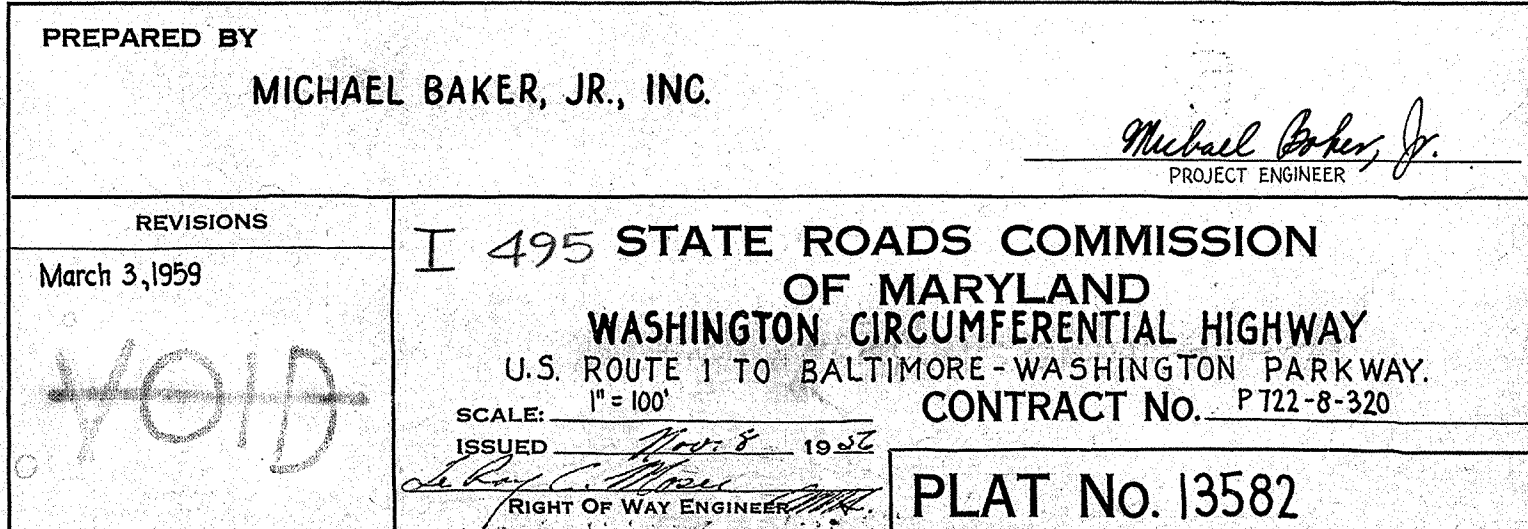
AREA OCCUPIED
BY CAPITAL
BELTWAY IS
UNDER PERMIT
TO STATE OF
MARYLAND



AREA TRANSFERRED TO STATE OF MARYLAND
AREA PREVIOUSLY ACQUIRED

LAND RECORD N^o 593

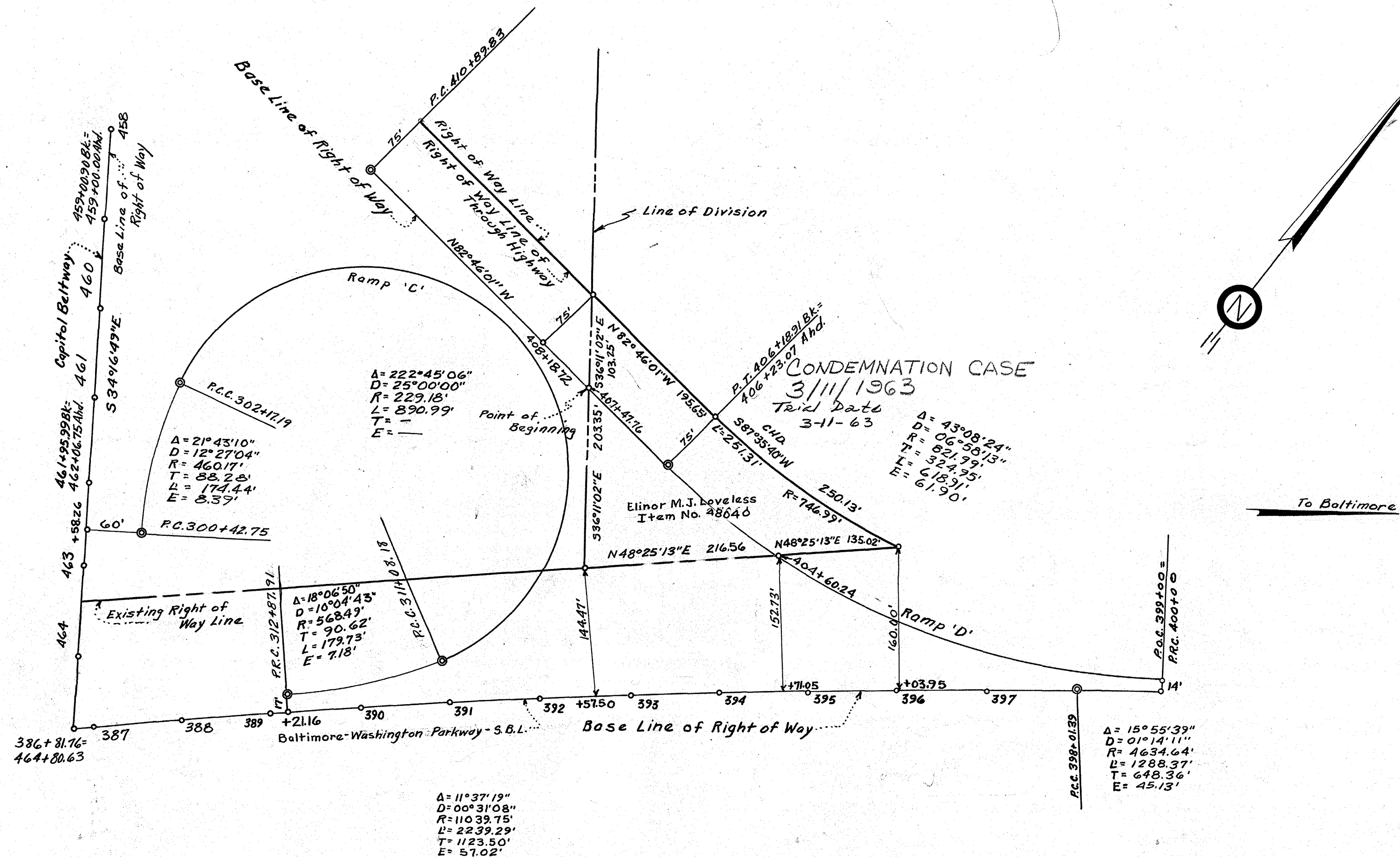
THIS IS AN EXPRESSWAY, AND NO ACCESS EITHER VEHICULAR, PEDESTRIAN AND/OR ANIMAL WILL BE PERMITTED ACROSS THE LINES DESIGNATED "RIGHT OF WAY LINE OF THROUGH HIGHWAY" EXCEPT BY MEANS OF SUCH PUBLIC ROAD CONNECTIONS AS THE COMMISSION MAY CONSTRUCT OR PERMIT TO BE CONSTRUCTED.



USA S1624-13582

LEGEND FOR DRAINAGE STRUCTURES
DRAINAGE STRUCTURES CALLED FOR IN THE DEED OR DEEDS TO THE STATE OF MARYLAND TO THE USE OF THE STATE ROADS COMMISSION ARE PLANNED AT APPROXIMATELY THE FOLLOWING STATION LOCATIONS; HOWEVER, THE COMMISSION RESERVES THE RIGHT TO LOCATE OR LATER MOVE SAID DRAINAGE STRUCTURES NOT MORE THAN TWENTY-FIVE (25) FEET, PLUS OR MINUS, FROM SAID DESIGNATED STATIONS.

THIS IS AN EXPRESSWAY, AND NO ACCESS EITHER VEHICULAR, PEDESTRIAN AND/OR ANIMAL WILL BE PERMITTED ACROSS THE LINES DESIGNATED 'RIGHT OF WAY LINE OF THROUGH HIGHWAY' EXCEPT BY MEANS OF SUCH PUBLIC ROAD CONNECTIONS AS THE COMMISSION MAY CONSTRUCT OR PERMIT TO BE CONSTRUCTED.



To Washington, D.C.

To Baltimore

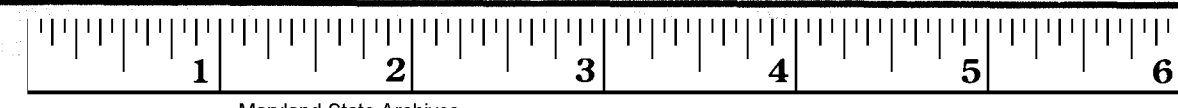
Fee Simple Area 1.10± Acres Shown Thus

NAMES OF REPORTED PROPERTY OWNERS AS SHOWN ON THIS PLAN ARE THOSE OF ORIGINAL GRANTORS TO THE COMMISSION. THE APPROXIMATE PROPERTY LINES SHOWN WERE NOT ESTABLISHED BY ACTUAL SURVEY, BUT ARE INTENDED FOR AN APPROXIMATE GUIDE ONLY.

LOCATED IN PRINCE GEORGES COUNTY

PREPARED BY
Bureau of Design
Henry R. Oheim
Chief, Condemnation Section

APPROVED BY THE STATE ROADS COMMISSION PURSUANT TO CHAPTER 89, ACTS OF THE GENERAL ASSEMBLY OF MARYLAND, 1954	BOOKS 13586, 14424, 14261, 14019, 14262	REVISIONS	STATE ROADS COMMISSION OF MARYLAND Capitol Beltway SCALE: 1"=100' ISSUED June 21, 1962 <i>Le Roy C. Mues</i> RIGHT OF WAY ENGINEER	CONTRACT No. P722-13-320 PLAT No. 27061
DATE	CHAIRMAN			



LEGEND FOR DRAINAGE STRUCTURES
DRAINAGE STRUCTURES CALLED FOR IN THE DEED OR DEEDS TO THE STATE OF MARYLAND TO THE USE OF THE STATE ROADS COMMISSION ARE PLANNED AT APPROXIMATELY THE FOLLOWING STATION LOCATIONS; HOWEVER, THE COMMISSION RESERVES THE RIGHT TO LOCATE OR LATER MOVE SAID DRAINAGE STRUCTURES NOT MORE THAN TWENTY-FIVE (25) FEET, PLUS OR MINUS, FROM SAID DESIGNATED STATIONS.

STA. 510+50

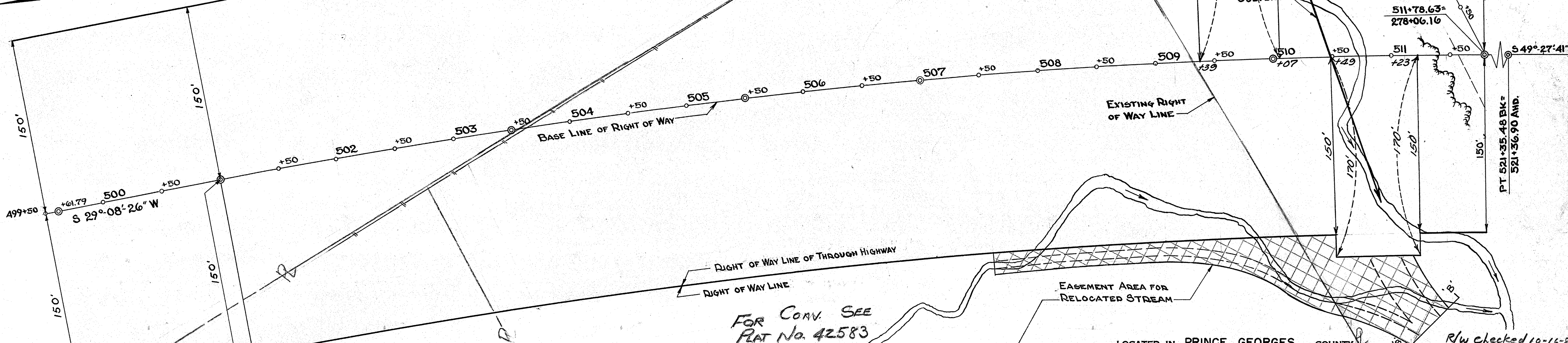
Now SHA R/W
Sec'y # 40211
2804/75
Recorded - 4-5-63
MAXWELL CHRISTOPHER
49120

Sec'y # 40733
Now SHA R/W 2857/219
Recorded 8-22-63
JOHN H. BURTON
49118

THIS IS AN EXPRESSWAY AND NO ACCESS EITHER VEHICULAR, PEDESTRIAN AND/OR ANIMAL WILL BE PERMITTED ACROSS THE LINES DESIGNATED "RIGHT OF WAY LINE OF THROUGH HIGHWAY" EXCEPT BY MEANS OF SUCH PUBLIC ROAD CONNECTIONS AS THE COMMISSION MAY CONSTRUCT OR PERMIT TO BE CONSTRUCTED.

TO MARLBORO PIKE

TO BRANCH AVENUE



FOR CORV. SEE
PLAT No. 42583

CURVE DATA
BASE LINE OF RIGHT OF WAY
 $\Delta = 20^\circ - 19' - 15''$
 $D = 1^\circ - 00' - 00''$
 $R = 5729.58'$
 $T = 1026.83'$
 $L = 2032.08'$
 $E = 91.28'$
SUPERELEVATE 0.03:1'

JOHN H. BURTON
49118
Sec'y # 40733
2857/219
Recorded - 8-22-63

Now SHA R/W
RAYMOND BENTE ETAL
49115
Sec'y # 40925
2887/509
Recorded - 10-25-63

LOCATED IN PRINCE GEORGES COUNTY

R/W checked 10-16-87

PREPARED BY BUREAU OF DESIGN

Frederic A. Heuring 2/27/62
ASST. ENGR. OF ROAD DESIGN

REVISIONS
June 25, 1962

STATE ROADS COMMISSION
OF MARYLAND

CAPITOL BELTWAY-NORTH OF MD. 4 TO EAST OF MD. 5.
SCALE: 1" = 50'
ISSUED March 2, 1962
DeRay C. Moran
CHIEF, RIGHT OF WAY DIVISION

CONTRACT NO. P-722-29-320

PLAT NO. 26648

MSA S1624-26648

NAMES OF REPORTED PROPERTY OWNERS AS SHOWN ON THIS PLAT ARE THOSE OF ORIGINAL GRANTORS TO THE COMMISSION. THE APPROXIMATE PROPERTY LINES SHOWN WERE NOT ESTABLISHED BY ACTUAL SURVEY, BUT ARE INTENDED FOR AN APPROXIMATE GUIDE ONLY.



Maryland State Archives

DRAINAGE STRUCTURES CALLED FOR IN THE DEED OR DEEDS TO THE STATE OF MARYLAND TO THE USE OF THE STATE ROADS COMMISSION ARE PLANNED AT APPROXIMATELY THE FOLLOWING STATION LOCATIONS; HOWEVER, THE COMMISSION RESERVES THE RIGHT TO LOCATE OR LATER MOVE SAID DRAINAGE STRUCTURES NOT MORE THAN TWENTY-FIVE (25) FEET, PLUS OR MINUS, FROM SAID DESIGNATED STATIONS.

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GEORGE B.
PADGETT
45830
NOW SHARW
see plat 27255

PREPARED BY BUREAU OF DESIGN

R/w checked 10-16-87 ecg

Frederic A. Hering 2/27/62
ASST. ENGR. OF ROAD DESIGN

STATE ROADS COMMISSION
OF MARYLAND
CAPITOL BELTWAY- NORTH OF MD.4 TO EAST OF MD.5.
SCALE: 1" = 50' CONTRACT No. P-722-29-320

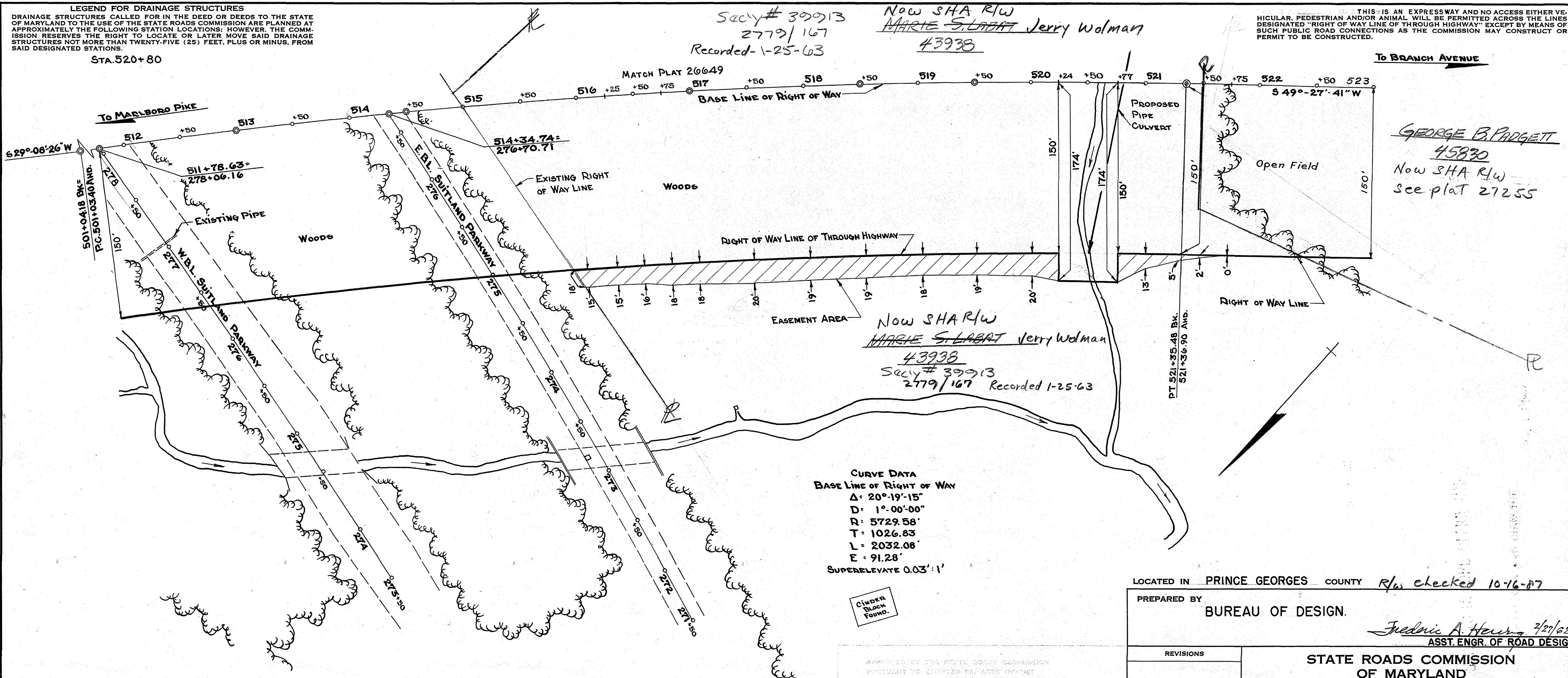
PLAT No. 26649

MSA 81624-26649

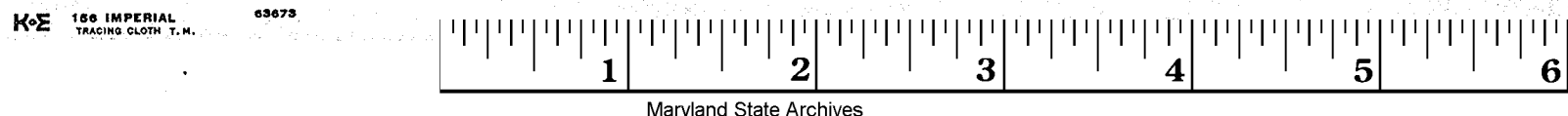


LEGEND FOR DRAINAGE STRUCTURES
DRAINAGE STRUCTURES CALLED FOR IN THE DEED OR DEEDS TO THE STATE OF MARYLAND TO THE USE OF THE STATE ROADS COMMISSION ARE PLANNED AT APPROXIMATELY THE FOLLOWING STATION LOCATIONS: HOWEVER, THE COMMISSION RESERVES THE RIGHT TO LOCATE OR LATER MOVE SAID DRAINAGE STRUCTURES NOT MORE THAN TWENTY-FIVE (25) FEET, PLUS OR MINUS, FROM SAID DESIGNATED STATIONS

STA. 520+80



NAMES OF REPORTED PROPERTY OWNERS AS SHOWN ON THIS PLAT ARE THOSE OF ORIGINAL GRANTORS TO THE COMMISSION. THE APPROXIMATE PROPERTY LINES SHOWN WERE NOT ESTABLISHED BY ACTUAL SURVEY, BUT ARE INTENDED FOR AN APPROXIMATE GUIDE ONLY.



LOCATED IN PRINCE GEORGES COUNTY R/W checked 10-16-67

PREPARED BY
BUREAU OF DESIGN.

Frederic A. Heuring 3/27/62
ASST. ENGR. OF ROAD DESIGN

REVISIONS

STATE ROADS COMMISSION
OF MARYLAND

CAPITOL BELTWAY-NORTH OF MD. 4 TO EAST OF MD. 5.
CONTRACT No. P-722-29-320

SCALE: 1" = 50'
ISSUED *March* 1962
DeWay C. Mena
CHIEF, RIGHT OF WAY DIVISION

PLAT No. 26650

MSA S1624-26650



SPECIAL USE PERMIT

National Capital Parks-East
1900 Anacostia Drive, S.E.
Washington, D.C., 20020
(202) 690-5185



Name Mr. Daniel Beck			
Company/Organization Maryland Department of Transportation State Highway Administration Office of Structures			
Street Address 707 North Calvert Street			
City Baltimore	State Md	Zip Code 21202	Country
Telephone Number 410-545-8317		Cell Phone Number 410-545-8317	
Fax Number 410-209-5002			
Email Address DBeck@sha.state.md.us			

Park Alpha Code
NACE
Type of Use
Long Term
Permit #
NCR NACE 6000 1903

Is hereby authorized to use the following described land or facilities in (U.S. Reservation 675, Suitland Parkway):
I-95/495 (Capital Beltway) in Prince George's County, Maryland.

The area must be restored to its original condition at the end of the permit.

The permit begins at 7:30 ☒ am / ☐ pm on 04/08/2019 (mm/dd/yyyy). The permit expires at 4:30 ☐ am / ☒ pm on 03/08/2024 (mm/dd/yyyy).

SUMMARY OF PERMITTED ACTIVITY: (see attached sheets for additional information and conditions)

To perform structural removal and replacement and widening of the I-95/495 overpass dual bridges within median over the Parkway by Maryland Department of Transportation State Highway Administration (MDOT-SHA) in accordance with submitted plans.

Person on site responsible for adherence to the terms and conditions of the permit (include contact information)
Mohammed Omer, MDOT-SHA District 3 Construction, Office Phone: 240-563-1306, Cell Phone: 443-569-1081

Authorizing legislation or other authority
Director's Order # 53: Special Use Permits - PEPC #58370

APPLICATION FEE

PERFORMANCE BOND

LIABILITY INSURANCE

COST RECOVERY

LOCATION FEE

<input checked="" type="checkbox"/> Received	Amount
<input type="checkbox"/> Not Required	\$ 250.00
<input type="checkbox"/> Required	Amount
<input checked="" type="checkbox"/> Not Required	\$
<input checked="" type="checkbox"/> Required	Amount
<input type="checkbox"/> Not Required	\$
<input type="checkbox"/> Required	Amount
<input checked="" type="checkbox"/> Not Required	\$
<input type="checkbox"/> Required	Amount
<input checked="" type="checkbox"/> Not Required	\$

ISSUANCE of this permit is subject to the attached conditions. The undersigned hereby accepts this permit subject to the terms, covenants, obligations, and reservations, expressed or implied herein.

PERMITTEE Signature

Title: PROJECT MANAGER
OFFICE OF STRUCTURES
MDOT-SHA
Title: Superintendent

Date: 5 APR 19

Authorizing NPS Official

Date: APR 5 2019

Authorizing NPS Official (additional, if required)

Title:

Date:

CONDITIONS OF THIS PERMIT

Failure to comply with any of the terms and conditions of this permit may result in the immediate suspension or revocation of the permit. [36 CFR 1.6(h)]

1. The permittee is prohibited from giving false information; to do so will be considered a breach of conditions and be grounds for revocation: [36 CFR 2.32(a)(3)].
 2. This permit may not be transferred or assigned without the prior written consent of the Superintendent.
 3. The permittee shall exercise this privilege subject to the supervision of the Superintendent or designee, and shall comply with all applicable Federal, State, county and municipal laws, ordinances, regulations, codes, and the terms and conditions of this permit. Failure to do so may result in the immediate suspension of the permitted activity or the revocation of the permit. All costs associated with clean up or damage repairs in conjunction with a revoked permit will be the responsibility of the permittee.
 4. The permittee is responsible for making all necessary contacts and arrangements with other Federal, State, and local agencies to secure required inspections, permits, licenses, etc.
 5. The park area associated with this permit will remain open and available to the public during park visiting hours. This permit does not guarantee exclusive use of an area. Permit activities will not unduly interfere with other park visitors' use and enjoyment of the area.
 6. This permit may be revoked at the discretion of the Superintendent upon 24 hours notice.
 7. This permit may be revoked without notice if damage to resources or facilities occurs or is threatened, notwithstanding any other term or condition of the permit to the contrary.
 8. This permit is made upon the express condition that the United States, its agents and employees shall be free from all liabilities and claims for damages and/or suits for or by reason of any injury, injuries, or death to any person or persons or property of any kind whatsoever, whether to the person or property of the Permittee, its agents or employees, or third parties, from any cause or causes whatsoever while in or upon said premises or any part thereof during the term of this permit or occasioned by any occupancy or use of said premises or any activity carried on by the Permittee in connection herewith, and the Permittee hereby covenants and agrees to indemnify, defend, save and hold harmless the United States, its agents, and employees from all liabilities, charges, expenses and costs on account of or by reason of any such injuries, deaths, liabilities, claims, suits or losses however occurring or damages growing out of the same.
 9. Permittee agrees to carry general liability insurance against claims occasioned by the action or omissions of the permittee, its agents and employees in carrying out the activities and operations authorized by this permit. The policy shall be in the amount of \$ 1 million per Occurrence, \$ 3 million Aggregate and underwritten by a United States company naming the United States of America as additional Insured. The permittee agrees to provide the Superintendent with a Certificate of Insurance with the proper endorsements prior to the effective date of the permit.
 10. Permittee agrees to deposit with the park a bond in the amount of \$ N/A from an authorized bonding company or in the form of cash or cash equivalent, to guarantee that all financial obligations to the park will be met.
 11. Costs incurred by the park as a result of accepting and processing the application and managing and monitoring the permitted activity will be reimbursed by the permittee. Administrative costs and estimated costs for activities on site must be paid when the permit is approved. If any additional costs are incurred by the park, the permittee will be billed at the conclusion of the permit. Should the estimated costs paid exceed the actual costs incurred; the difference will be returned to the permittee.
 12. The person(s) named on the permit as in charge of the permitted activity on-site must have full authority to make any decisions about the activity and must remain available at all times. He/she shall be responsible for all individuals, groups, vendors, etc. involved with the permit
 13. Nothing herein contained shall be construed as binding the Service to expend in any one fiscal year any sum in excess of appropriations made by Congress or administratively allocated for the purpose of this permit for the fiscal year, or to involve the Service in any contract or other obligation for the further expenditure of money in excess of such appropriations or allocations.
 14. If any provision of this permit shall be found to be invalid or unenforceable, the remainder of this permit shall not be affected and the other provisions of this permit shall be valid and be enforced to the fullest extent permitted by law.
- Add additional park specific conditions sequentially**
15. The permitted work shall be in accordance with the Special Use Permit Application submitted by Maryland Department of Transportation State Highway Administration (MDOT-SHA), to access to the underside of the bridge to install traffic barriers and make repairs on the existing I-95/I-495 bridges, to remove portions of the existing bridge in the median area of I-95/I-495, and to commence the construction of the bridge abutments in the median of the existing beltway (to include excavation, pile driving and placing concrete for the abutments), dated January 30, 2019. Any other alterations to the document must be reviewed and approved by the Superintendent in writing.
 16. The Permittee will provide the NPS POC with digital photographs of the project area(s) prior to and at the completion of the permitted activity with orientation references, clearly depicting the present conditions of all parkland that will be disturbed under this Permit. The NPS POC Jamese Hemsley can be reached at (202) 690-5163 or nace_special_permits@nps.gov.
 17. The Permittee shall provide NPS with weekly email updates on project status for the duration of the approved work. Updates should be sent to NPS POC Jamese Hemsley at nace_special_permits@nps.gov. Failure to provide weekly updates may result in suspension or termination of this permit by the Superintendent.
 18. Permitted activities must be coordinated through the Parkway Supervisor (15) fifteen days in advance at (301) 763-4912.

19. Should the Permittee encounter any human remains, previously unidentified archeological sites or materials, excavations will stop and immediately notify the U.S. Park Police (USPP) at (202) 610-7500, National Capital Parks-East Superintendent at (202) 690-5127 and Chief of Resource Management at (202) 494-6905. The Park Superintendent, in consultation with the USPP, Chief of Resource Management, shall determine the appropriate course of action.
20. The Permittee shall report all emergencies (i.e. injuries, accidents) that occur on park property during permitted work to the U.S. Park Police (USPP) at (202) 610-7500 and to the Superintendent of National Capital Parks-East (202) 690-5127 immediately.
21. Permitted work hour is weekdays only, 7:30 a.m. to 4:30 p.m., and Federal holidays excluded. Schedule work shall not interfere with daily rush hours, Mornings 6:00 a.m. to 9:00 a.m. and evenings 3:00 p.m. to 7:00 p.m. The Permittee may request changes to those work hours as needed throughout the project, but requests must be in writing and submitted to the park Superintendent at least (15) fifteen calendar days before the proposed work date/time change. No work may occur outside of the hours established here unless the Superintendent has provided written authorization to proceed.
22. The Permittee and/or any sub-permittees or contractors performing the permitted activity must have a signed copy of the permit, along with the enclosed conditions, in their possession and available for inspection at all times when working on park property.
23. The Permittee or its contractors will submit a Traffic Control Plan and a Safety Plan to NPS at least fifteen (15) calendar days before the proposed start of work. Site work may not begin until these two plans have been submitted to and approved by the NPS. In the event that NPS is unable to complete its review and provide approval of the plans within fifteen (15) calendar days, NPS will notify the Permittee in writing to negotiate additional review time with MDOT-SHA. Traffic management & safety: All traffic management activities shall be done in accordance with MUTCD, and shall be coordinated through the USPP within fifteen (15) calendar days in advance. Please coordinate directly with Sergeant Norlith Roberts of the USPP District 5. Sergeant Roberts can be reached at (202) 610-8724 or at norlith_roberts@nps.gov.
24. The Permittee or its contractors will submit a detailed work proposal to NPS at least fifteen (15) calendar days before the proposed start of work. The work proposal must include a clear timeline of permitted activities. Site work may not begin until the work proposal has been submitted to and approved by the NPS. In the event that NPS is unable to complete its review and provide approval of the work proposal within fifteen (15) calendar days, NPS will notify the Permittee in writing to negotiate additional review time with MDOT-SHA.
25. The Permittee or its contractors will submit an Erosion Control Plan to NPS at least fifteen (15) calendar days before the proposed start of work. Site work may not begin until this plan has been submitted to and approved by the NPS. In the event that NPS is unable to complete its review and provide approval of the plan within fifteen (15) calendar days, NPS will notify the Permittee in writing.
26. The Permittee shall implement all necessary measures to prevent air, noise, and water pollution by any material and/or equipment used during this permitted activity.
27. Only the Permittee shall negotiate requests, correspondence, and meetings desired with the NPS. All contractors, subcontractors or consultants must channel their requests through the recognized representative of the Permittee who, in turn, will contact the NPS.
28. All access roads and the areas adjacent to the work site shall be kept free of trash, mud and construction debris. The work zone shall be kept free of trash and construction debris to the extent possible. Parking for all vehicles associated with construction is limited to areas within the limits of disturbance or paved parking lots on MDOT-SHA property.
29. No contaminated water, material or chemical residue shall be discharged or expelled into park-owned land or into adjacent lands or waterways.
30. The Permittee shall consider all reasonable steps to ensure that no spillage of contaminants, fuels, chemicals or other potentially hazardous substances, or damage from vehicles or equipment occurs.
31. The Permittee shall be responsible for the cost and repairs to any structures, facilities, installations, sod, soils, or landscape vegetation on park property damaged by the work authorized under this permit and shall, at the direction of the NPS, submit detailed plans for the repair, restoration, and/or replacement of such. The Permittee agrees to pay the NPS for any damage resulting from this permit that would not reasonably be inherent in the use that the Permittee is authorized to make of the land. The NPS will give the Permittee written notice of such damage and the Permittee shall either take corrective action or pay the indicated amount as agreed upon and approved by the Superintendent (or delegate).
32. On its construction documents, the Permittee will clearly indicate the LOD represents the limit of tree clearing. The Permittee will also assure the LOD is clearly marked in the field and apparent to all MDOT-SHA and sub-contractor crews. The Permittee will provide physical "hard" protection at the limit of the LOD to minimize damage or destruction of vegetation, especially trees of five (5) inches Diameter at breast height (DBH) or greater that have not been identified for removal and wildlife habitat. The Permittee must seek the Superintendent's approval for all vegetation clearing activities.
33. The Permittee shall conduct a tree survey of all trees identified to be removed with a five (5) inch diameter at breast height and greater. This survey will require NPS approval at least fifteen (15) calendar days before the proposed start of work. Site work may not begin until this plan(s) has been submitted to and approved by the NPS. In the event that NPS is unable to complete its review and provide approval of the invasive species control plan within fifteen (15) calendar days, NPS will notify the Permittee in writing to negotiate additional review time with MDOT-SHA.
34. The Permittee will develop a 5-year invasive species control plan to manage the impacted forested area(s). This plan will need NPS approval at least fifteen (15) calendar days before the proposed start of work. Site work may not begin until this plan(s) has been submitted to and approved by the NPS. In the event that NPS is unable to complete its review and provide approval of the invasive species control plan within fifteen (15) calendar days, NPS will notify the Permittee in writing to negotiate additional review time with MDOT-SHA.
35. The Permittee will protect soil from compaction by using geotextile and rock blankets in the construction work area(s) whenever possible.
36. The Permittee or its contractors shall ensure all vehicular traffic is confined to the permitted work area only and environmentally sensitive areas immediately adjacent to the work zone are avoided and protected.
37. The Permittee or its contractors shall be responsible for identifying staging areas for equipment and materials. However, no staging areas will be located in regulated areas like floodplains, streams, wetlands, wetland buffers, or NPS property.

38. The Permittee shall require its contractor to submit all public notices and communication for road closures, detours, or other aspects of this project to the Public Affairs Specialist Jonathan Shafer at least fifteen (15) business days in prior to being released. Mr. Shafer can be reached at (202) 619-7186 or at jonathan_shafer@nps.gov.
39. The Permittee shall contact the NPS point of contact to schedule an onsite field meeting prior to the start of work on NPS property. Also, within seven calendar days prior to the expiration date of the work on parklands, a joint walk-through of the project area with the Permittee and NPS POC (point of contact) shall be conducted. The walk-through will be conducted in all areas to restore. The NPS POC Jameese Hemsley can be reached at (202) 690-5163 or nace_special_permits@nps.gov.
40. The Permittee has been approved to remove up to 26 trees (total 162.9" DBH) within the limit of Disturbance (LOD) to perform structural removal, replacement and widening of the I-95/495 overpass dual bridges over the Parkway. The Permittee is required to mitigate for the loss of trees (based on a 1:1 DBH) on property owned by the NPS. The Superintendent must approve, in writing, any additional trees for removal.
41. For the loss of trees (based on a 1:1 DBH), the Permittee will replant 65 – 2.5" DBH trees. The Permittee will work with the NPS POC to identify locations along Suitland Parkway to replant trees. The Permittee will maintain the trees for 5 years, which includes removing tree staking materials after 1 year. The NPS POC Jameese Hemsley can be reached at (202) 690-5163 or nace_special_permits@nps.gov.
42. The Permittee or its contractors shall comply with all applicable Federal, State, county and municipal laws, ordinances, regulations, codes, and the terms and conditions of this permit. This includes but is not limited to Resource Conservation Recovery Act, The Clean Water Act, The National Historic Preservation Act, The Clean Air Act, The Oil Pollution Act, and The National Oil and Hazardous Substance Pollution Contingency Plan. The Permittee also shall comply with all applicable Occupational Safety and Hazard Administration requirements. Failure to do so may result in the immediate suspension of the permitted activity or the termination of the permit. The Permittee shall require its contractor to reimburse NPS for cleanup or repair of damages required to be made by NPS staff or contractor in conjunction with the termination of this permit.