# FINAL SECTION 4(f) EVALUATION

Route 1 Improvements at Fort Belvoir Fairfax County

From: Telegraph Road (Route 611)
To: Mount Vernon Memorial Highway (Route 235)

U.S. Department of Transportation Federal Highway Administration Eastern Federal Lands Highway Division

**November 20, 2012** 

## Introduction

This Section 4(f) Evaluation by the Federal Highway Administration (FHWA) addresses the application of Section 4(f) of the U.S. Department of Transportation Act of 1966, as amended, to proposed improvements to U.S. Route 1 through Fort Belvoir. Section 4(f) refers to Section 4(f) of the U.S. Department of Transportation Act of 1966, as amended, and as codified at Title 49, United States Code, Section 303, and at Title 23, United States Code, Section 138. Specifically, Section 4(f) states that the Secretary of Transportation (as delegated to FHWA under Title 49, Code of Federal Regulations, Section 1.48(b)(1)) may approve the use of publicly owned land of a publicly owned park, recreation area, wildlife and waterfowl refuge of national, state, or local significance, or land of a historic site<sup>1</sup> of national, state, or local significance only if a determination is made that:

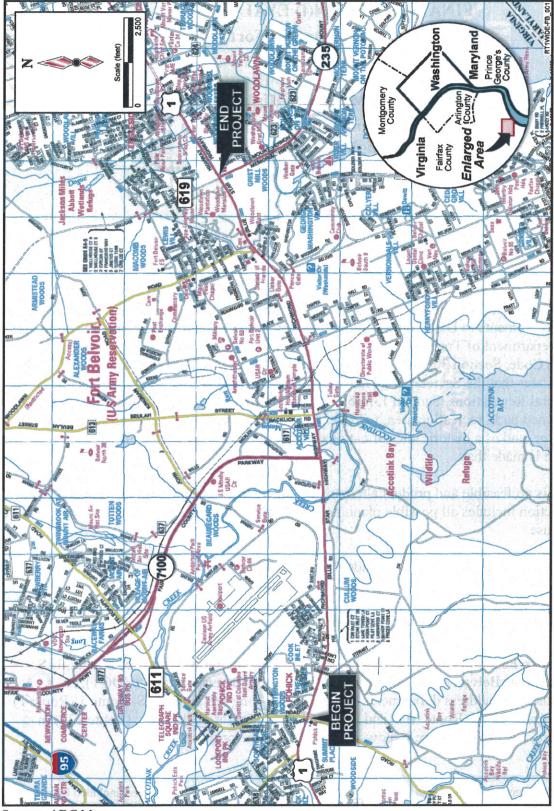
- a) There is no feasible and prudent alternative to the use of the land from the property; and
- b) The action includes all possible planning to minimize harm to the property resulting from such use.

Further regulatory guidance for actions under Section 4(f) appears at Title 23, Code of Federal Regulations, Section 774.

# I. Description of the Proposed Action

FHWA's Eastern Federal Lands Highway Division, in cooperation with Fairfax County, U.S. Army Garrison Fort Belvoir, and the Virginia Department of Transportation (VDOT), is conducting studies to address deficiencies in the 3.4-mile-long section of U.S. Route 1 (Route 1) between Telegraph Road (Route 611) and Mount Vernon Memorial Highway (Route 235) in Fairfax County, Virginia. **Figure 1** shows the location of the proposed project.

<sup>&</sup>lt;sup>1</sup> "Historic site" means "…any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register [of Historic Places]." 23 CFR 774.17. This definition is identical to the definition of "historic property," as defined at 36 CFR 800.16(l)1 in the Advisory Council on Historic Preservation's regulations implementing the National Historic Preservation Act (16 U.S.C. 470). Section 4(f) does not apply to archaeological sites on or eligible for inclusion in the National Register of Historic Places if FHWA "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." 23 CFR 774.13(b)(1).



Source: ADC Map

Figure 1. Project Location

This section summarizes the Purpose and Need, both of which are described in more detail in Section 1 of the Environmental Assessment. Additional information regarding the alternatives can be found in Section 2 of the Environmental Assessment.

## I.A. Project Purpose and Need

The purpose of the project is to expand roadway capacity to accommodate travel demand, facilitate access to medical and other facilities on Fort Belvoir, implement facilities for pedestrian and bicycle travel, and provide space for future transit services pursuant to Fairfax County's Comprehensive Plan.

Route 1 serves as an integral transportation facility in northern Virginia. In the study area, Route 1 provides access to Fort Belvoir, residential and commercial developments, and numerous intersecting roads. This segment of Route 1, from Telegraph Road to Mount Vernon Memorial Highway, is unable to accommodate current and forecasted traffic demand due to inadequate capacity. Physical and geometric deficiencies of the existing roadway are also present. The existing geometry of the road is deficient due to narrow lanes and short turn lanes. The insufficient pedestrian and bicycle access and lack of shoulders also create safety concerns.

Route 1 provides direct access to Fort Belvoir via Pohick Road (Tulley Gate) and Belvoir Road (Pence Gate). Commercial (Accotink Village) and residential developments (Accotink Village, Worthington Woods, The Fairfax, Inlet Cove), the Accotink Bay Wildlife Refuge, Woodlawn Baptist Church, Woodlawn Plantation/Pope-Leighey House, and Woodlawn Stables also are accessed from Route 1 within the study area.

Route 1 provides indirect access via intersecting roads to other developments and roadways in the area as well. Route 1 is the principal north-south route for local traffic in eastern Fairfax County for shopping and other general-purpose trips, and it serves as a major commuter route and an alternate route for nearby I-95. Existing Route 1 within the project limits is a four-lane undivided highway with a posted speed limit of 45 to 50 miles per hour (mph).

Given that Route 1 is a north-south commuter route serving through trips and is the gateway to Fort Belvoir, congestion is prevalent within this section of Route 1 during the weekday peak periods and oftentimes during other times of the day as well, primarily between the Fairfax County Parkway and Belvoir Road. Other leading deficiencies include lack of pedestrian/bicycle access and crosswalks at intersections.

Daily travel demand on Route 1 is expected to increase by the year 2040 along with increasing population and economic activity in the corridor. The existing capacity of Route 1 will continue to be inadequate to serve the expected demand if no action is taken.

#### I.B Alternatives

a) Alternative A, No-Build Alternative: Under the No-Build Alternative, Route 1 would remain in its existing configuration (i.e., four lanes undivided). Regular maintenance would be performed to preserve the structural integrity of the pavement and the existing bridges. It is assumed that only other transportation projects currently listed in the Constrained Long Range Plan for construction would be in place by the design year.

- b) Alternative B, Build Alternative: Alternative B would entail reconstructing Route 1 to provide six through travel lanes, a 10-foot multi-purpose trail on the north side of the roadway, and a 5-foot sidewalk on the south side of the roadway between Telegraph Road and Mount Vernon Memorial Highway. All intersections with other streets would remain at-grade and appropriate turn lanes would be provided. A section of the alignment at the east end of the project would be shifted southward to new location in the vicinity of the Woodlawn Historic District (herein "Southern Bypass Alignment"). Attachment 2 shows preliminary design plans for this alternative. In the northbound direction, from south to north, the conceptual design plans call for:
  - Modifying the northbound approach to Telegraph Road to include a third left-turn lane.
     The roadway would be widened to the north, and the existing Route 1 curb-line that abuts the historic Pohick Church property would remain unchanged.
  - Constructing improvements to Telegraph Road to accommodate the turning movements.
  - Constructing three lanes from Telegraph Road to Cook Inlet Drive, with a left-turn lane at that intersection. Note that northbound access to Belvoir Woods Parkway and Inlet Cove Drive would be prohibited, as it is today.
  - Constructing three lanes from Cook Inlet Drive to Fairfax County Parkway, with two left-turn lanes at Fairfax County Parkway.
  - Constructing three lanes from Fairfax County Parkway to Pohick/Backlick Roads, with a left-turn lane and two right-turn lanes at the Pohick/Backlick intersection (full length auxiliary lanes from Fairfax County Parkway to Pohick Road).
  - Constructing three lanes from Pohick Road to Belvoir Road, with two left-turn lanes (to the new Lieber Gate Access Control Point) and one right-turn lane at the Belvoir Road intersection.
  - Constructing three lanes from Belvoir Road to Woodlawn Road along the Southern Bypass Alignment, with a left-turn lane at the Woodlawn Road intersection (existing Woodlawn Road would be extended to connect with the realigned Route 1 roadway, just to the west of Woodlawn Baptist Church).
  - Constructing three lanes from Woodlawn Road to Mount Vernon Memorial Highway/ Mulligan Road with two left-turn lanes and the rightmost of the three through lanes a "Right Lane Must Turn Right" lane, with only two lanes continuing through the intersection.

In the southbound direction, from north to south, the conceptual design plans for Route 1 call for:

 Constructing three lanes from Mount Vernon Memorial Highway/Mulligan Road to Woodlawn Road along the Southern Bypass Alignment, with a right-turn lane at Woodlawn Road.

<sup>&</sup>lt;sup>2</sup> The project would allow for the designation of the project's proposed multi-use trail as a segment of the Potomac Heritage National Scenic Trail and Washington-Rochambeau Revolutionary Route National Historic Trail (PHNST/WARO NHT), no portions of which are currently located within the project area. The National Trails System Act of 2009 (P.L. 90-453, as amended 69 through P.L. 111-11, March 30, 2009) authorized the establishment of the PHNST/WARO NHT, a portion of which may be sited within the footprint of the project and administered by the National Park Service (NPS); and the *Virginia Outdoors Plan: Charting a Course for Virginia's Outdoors* (2007) and the Fairfax County Trails Plan, a component of the Fairfax County Comprehensive Plan, recognize the PHNST/WARO NHT as a regional, state, and national resource; however, NPS, and not FHWA, would be the lead federal agency for NEPA/NHPA compliance if the National Trail designation within the footprint of the undertaking is finalized by NPS in the future.

- Constructing three lanes from Woodlawn Road to Belvoir Road, with two left-turn lanes and a right-turn lane.
- Constructing three lanes from Belvoir Road to Pohick/Backlick Roads, with a left-turn lane and a right-turn lane at Pohick/Backlick Roads.
- Constructing three lanes from Pohick/Backlick Roads to Fairfax County Parkway with two right-turn lanes, one of which is a full-length auxiliary lane and the other a turn bay, and a left-turn bay to allow U-turns to northbound Route 1.
- Constructing three lanes from Fairfax County Parkway to Cook Inlet Drive, with a right-turn lane.
- Constructing three lanes from Cook Inlet Drive to Inlet Cove Drive, with a right-turn lane.
- Constructing three lanes from Inlet Cove Drive to Telegraph Road, with one left-turn lane and one right-turn lane at Telegraph Road. A right-turn bay is also provided to Belvoir Woods Parkway, as it is today.
- c) Alternative B Modified, Build Alternative, Preferred Alternative: In response to comments and ongoing coordination with project stakeholders, Alternative B was refined. This alternative would be similar to Alternative B, except at the following four locations (see Attachment 3):
  - At the northwest quadrant of the Telegraph Road intersection, a stormwater management pond would be added.
  - East of the Inlet Cove community, a stomwater management pond would be eliminated.
  - The Southern Bypass alignment was shifted closer to existing Route 1 after bypassing Woodlawn Baptist Church.
  - At the southwest quadrant of Mulligan Road/Mount Vernon Memorial Highway, a stormwater management pond was eliminated and replaced by two smaller stormwater management ponds located against the tree line of the pasture land.
- d) Alternative C, Build Alternative: This alternative would be similar to Alternative B, except for at the following three locations (see Attachment 4):
  - At the Telegraph Road intersection where Alternative B proposes triple left-turn lanes to accommodate the northbound Route 1 to northbound Telegraph Road traffic, this alternative proposes a grade-separated flyover to accommodate this movement.
  - At the Fairfax County Parkway intersection where Alternative B proposes triple left-turn lanes to accommodate the southbound Fairfax County Parkway to northbound Route 1 traffic, this alternative proposes a grade-separated flyover to accommodate this movement.
  - North of Belvoir Road, where Alternative B diverts from Route 1 along the Southern Bypass Alignment, this alternative would instead continue along the current Route 1 alignment.
- e) Other Alternatives Considered: Additional information regarding other alternatives considered but dismissed from further consideration can be found in Section 2 of the Environmental Assessment.

# II. Applicability of Section 4(f)

Section 4(f) resources were identified along the Route 1 corridor within the project area, as shown in **Figure 2**.

There are no publicly owned public parks or recreation areas that would be impacted by the project.

There are two wildlife refuge or refuge-like properties that would be impacted by the project:

- Accotink Bay Wildlife Refuge The refuge is located along the south side of Route 1 between Old Colchester Road and Pohick Road on the U.S. Army's Fort Belvoir in Fairfax County, Virginia. The Refuge encompasses approximately 1,315 acres, most of it centered about Accotink Bay and Accotink Creek, and some of it along Pohick Creek and Pohick Bay. The U.S. Army Garrison Fort Belvoir considers the Refuge to be permanently preserved and not available for development.
- Fort Belvoir Forest and Wildlife Corridor The Corridor was established by Fort Belvoir in 1993 as a mitigation commitment to offset the ecological impacts of habitat fragmentation caused by several major construction projects on Fort Belvoir. The Corridor is approximately 15 miles long with a minimum width of 250 meters. The Corridor protects a wildlife habitat and migratory corridor, while also maintaining a continuous area of natural forest habitat between Jackson Miles Abbott Wetland Refuge (JMAWR) and the Accotink Bay Wildlife Refuge (ABWR).

Comprehensive historic property identification surveys of architectural and archaeological resources have been conducted along and near the project corridor. There are two historic sites that would be impacted by the project:

- Fort Belvoir Military Railroad (including the existing bridge over Route 1) Use of land from this linear property within Fort Belvoir would be required to implement the project. The use under either Alternative B, B Modified, or C would include removal of the existing bridge (which is individually eligible for the National Register of Historic Places (NRHP) as well as being part of the multi-component NRHP-eligible Military Railroad), regrading of embankments at the bridge abutments, and incorporation of a part of the Railroad site into a permanent easement for project right-of-way.
- Woodlawn Historic District This NRHP-eligible historic district straddles Route 1 and encompasses Woodlawn Plantation, Woodlawn Quaker Meetinghouse, George Washington's Distillery and Gristmill (all three of which are individually listed on the NRHP), Grand View House, and the Woodlawn Baptist Church parcel. The Woodlawn Plantation parcel on the north side of Route 1 also is a designated National Historic Landmark (NHL). Any widening of existing Route 1 through the District, as in Alternative C, would require use of land from either or both of the north and south parcels. Alternative B and B Modified would relocate the alignment to the south, thereby minimizing encroachment on the NHL portion of the property.

Accordingly, Accotink Bay Wildlife Refuge, Fort Belvoir Forest and Wildlife Corridor, Fort Belvoir Military Railroad, and Woodlawn Historic District meet the criteria for protection under Section 4(f) and would be "used" by Alternatives B, B Modified, or C and are therefore addressed in this Section 4(f) Evaluation (see **Figure 3** for boundaries of these properties with respect to limits of construction of Alternative B Modified).

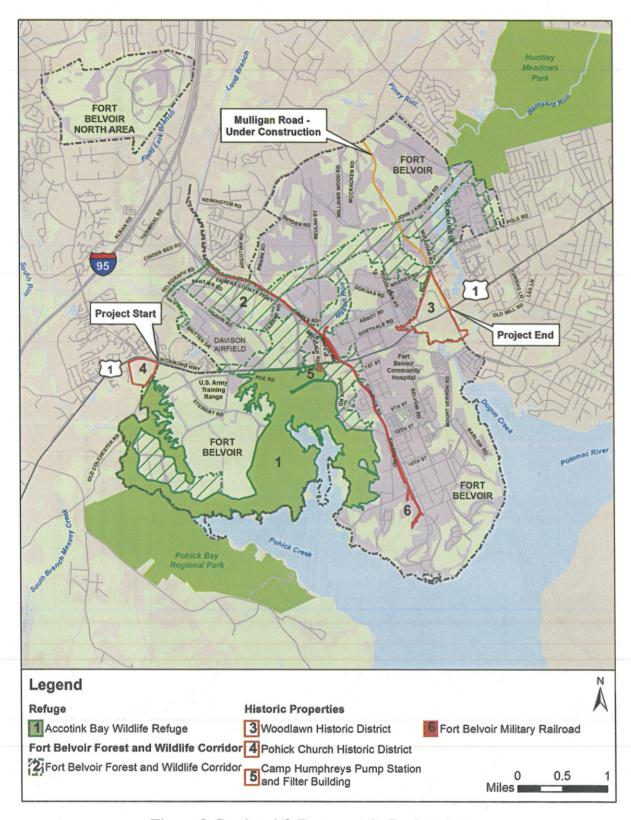


Figure 2. Section 4(f) Resources in Project Area

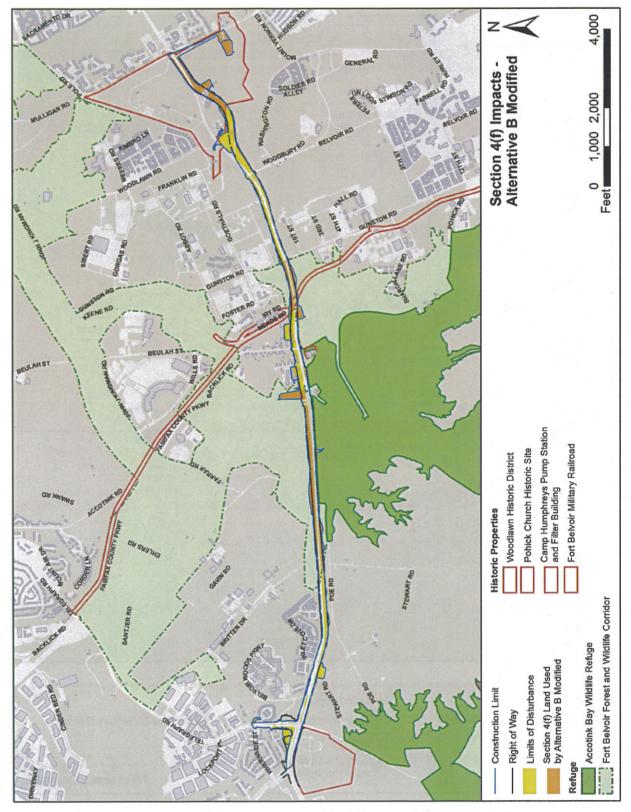


Figure 3. Section 4(f) Impacts – Alternative B Modified

## II.A. Accotink Bay Wildlife Refuge

a) Description of Accotink Bay Wildlife Refuge: As shown in Figures 2 and 3, Accotink Bay Wildlife Refuge (ABWR) is located south of Route 1 between Old Colchester Road and Pohick Road on the U.S. Army's Fort Belvoir in Fairfax County, Virginia. The Refuge encompasses approximately 1,315 acres, most of it centered about Accotink Bay and Accotink Creek, and some of it along Pohick Creek and Pohick Bay. The U.S. Army Garrison Fort Belvoir considers the Refuge to be permanently preserved and not available for development. The Refuge is open to the public dawn to dusk, seven days a week; however, temporary vehicle passes are required for visitors not affiliated with the Department of Defense.

### b) Features and Functions:

- 1. **Figure 4A** shows the relationship of Alternative B and **Figure 4B** shows the relationship of Alternative B Modified to the Wildlife Refuge. Alternative C would be identical to Alternative B at that location. The preliminary plans in Attachments 2, 3, and 4 show the location on aerial photo-base mapping.
- 2. The Accotink Bay Wildlife Refuge encompasses approximately 1,315 acres.
- 3. The U.S. Army owns the land.<sup>3</sup>
- 4. The Refuge provides opportunities for fishing, hiking, and wildlife observation by both military personnel and civilians, including school groups. Interpretive programs are offered during the regular season (April through October). Organized school, civic, and professional groups may reserve dates for interpretive talks and outdoor classroom activities anytime during the year. Existing facilities include more than 9 miles of hiking trails, boardwalks in marshes, and observation points. An informational kiosk adjacent to the parking lot offers trail maps, a bird list, and a guide to interpretive programs. The Environmental Education Center, opened in 2000, provides information regarding the Refuge complex and the Fort's natural resources through displays, videos, and brochures. The center is open seasonally, April through October, five days a week.
- 5. The Refuge is accessed through Tulley Gate on Pohick Road from Route 1.
- 6. There are similarly used properties in the vicinity of the project. Fairfax County's Pohick Bay Regional Park is located on the south side of Pohick Creek and Pohick Bay. Mason Neck State Park and Mason Neck National Wildlife Refuge are located to the south of Pohick Bay Regional Park. The Occoquan Bay National Wildlife Refuge lies on western shores of Belmont Bay and Occoquan Bay. The Jackson Miles Abbot Wetland Refuge (JMAWR) is on Fort Belvoir lands northeast of the Accotink Bay Refuge. Fairfax County's Huntley Meadows Park, consisting largely of wetland areas, lies northeast of and adjacent to the JMAWR. The Fort Belvoir Wildlife Corridor connects ABWR with JMAWR.
- 7. The deed for the property does not contain clauses affecting ownership.
- 8. An unusual feature of the Refuge is that it also functions as an active range for military training. Further, due to past military training activities, portions of the land may contain unexploded ordnance or other hazardous materials. If this land is used for highway purposes, unexploded ordnance clearance activities would have to be undertaken. Finally, portions of the land were formerly operated as a landfill for waste disposal.

<sup>&</sup>lt;sup>3</sup> The land is owned by the United States of America and is under the jurisdiction of the Department of the Army.

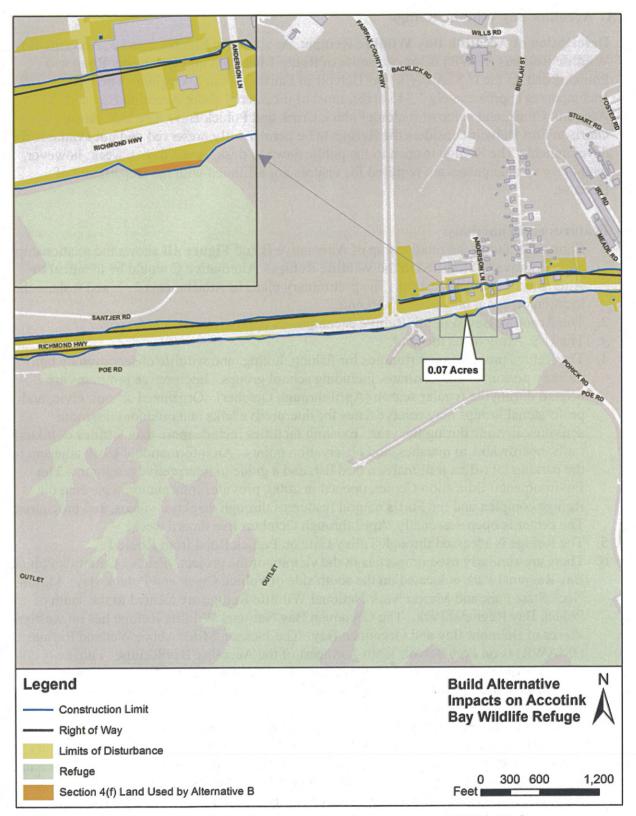


Figure 4A. Alternative B Impacts on Accotink Bay Wildlife Refuge

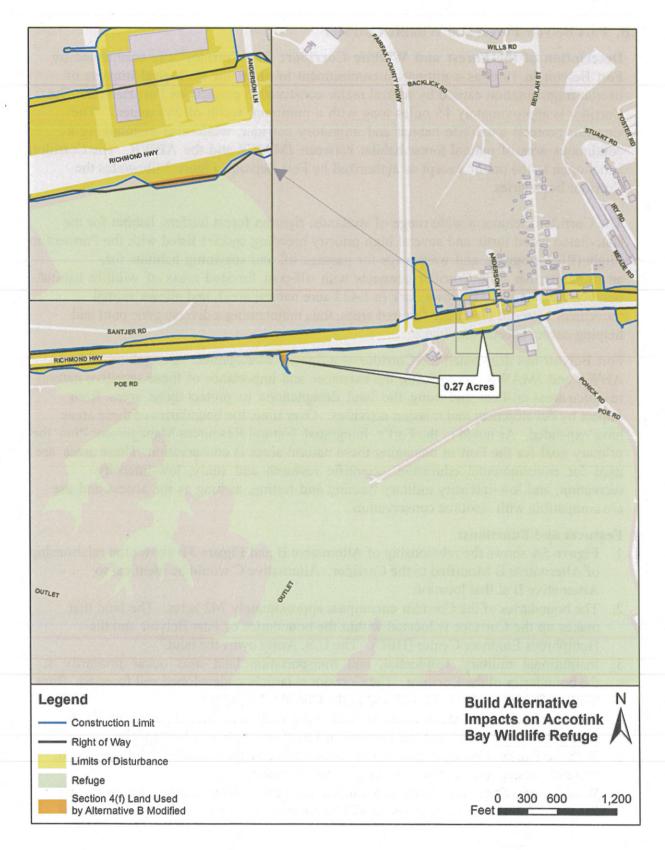


Figure 4B. Alternative B Modified Impacts on Accotink Bay Wildlife Refuge

#### II.B. Fort Belvoir Forest and Wildlife Corridor

**Description of the Forest and Wildlife Corridor:** The Corridor<sup>4</sup> was established by Fort Belvoir in 1993 as a mitigation commitment to offset the ecological impacts of habitat fragmentation caused by several major construction projects on Fort Belvoir. The Corridor is approximately 15 miles long with a minimum width of 250 meters. The Corridor protects a wildlife habitat and migratory corridor, while also maintaining a continuous area of natural forest habitat between JMAWR and the ABWR. The Corridor is not open to the public except as authorized by Fort Belvoir. Figure 2 illustrates the Corridor boundaries.

The Corridor includes a wide range of wetlands, riparian forest buffers, habitat for the state-listed wood turtle and several high priority breeding species listed with the Partners in Flight (PIF) program, and waterways for passage of, and spawning habitats for, anadromous fish. The Corridor connects with off-post forested areas of wildlife habitat, notably the Huntley Meadows Park (a 1,425 acre natural area), and allows animal movement between the larger forested areas, thus maintaining a diverse gene pool and helping ensure species survival.

Fort Belvoir has designated the Corridor as a Special Management Area (along with ABWR and JMAWR) recognizing the existence and importance of these sensitive natural resource areas on-Post and using the land designations to protect those areas from impact by development and mission activities. Over time, the boundaries of these areas have expanded. As noted in the Fort's Integrated Natural Resources Management Plan, the primary goal for the Fort in managing these natural areas is conservation. These areas are used for environmental education, scientific research and study, low-intensity recreation, and low-intensity military training and testing, as long as the access and use are compatible with resource conservation.

### a) Features and Functions:

- 1. **Figure 5A** shows the relationship of Alternative B and **Figure 5B** shows the relationship of Alternative B Modified to the Corridor. Alternative C would be identical to Alternative B at that location.
- 2. The boundaries of the Corridor encompass approximately 742 acres. The land that makes up the Corridor is located within the boundaries of Fort Belvoir and the Humphreys Engineer Center (HEC). The U.S. Army owns the land.<sup>5</sup>
- 3. Institutional military, residential, and transportation land uses occur primarily at the boundaries of the Corridor. The Corridor is largely undeveloped and forested. Bow hunting for deer only is allowed within the Corridor by permit.
- 4. The Corridor serves habitat functions within the study area, including habitat for the state-listed wood turtle and the Partners in Flight (PIF) priority bird species.
- 5. Both the Fairfax County Parkway and Route 1 traverse the Corridor. Mulligan Road, currently under construction, also crosses the Corridor.
- 6. Wildlife crossings have been constructed for both Fairfax County Parkway and Route 1. Another wildlife crossing will be constructed as part of the Mulligan Road

<sup>&</sup>lt;sup>4</sup> See Fort Belvoir's Integrated Natural Resources Management Plan for a more detailed description of the Forest and Wildlife Corridor and its development.

<sup>&</sup>lt;sup>5</sup> The land is owned by the United States of America and is under the jurisdiction of the Department of the Army.

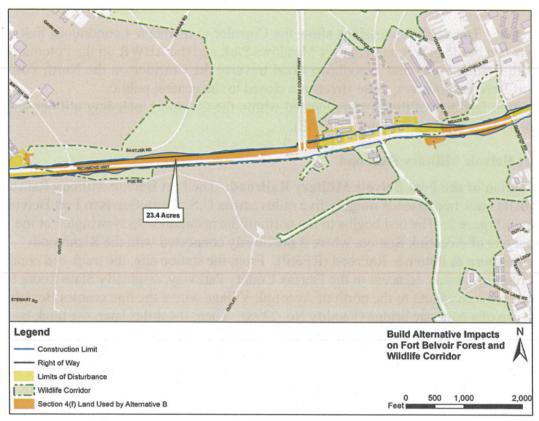


Figure 5A. Alternative B Impacts on Fort Belvoir Forest and Wildlife Corridor

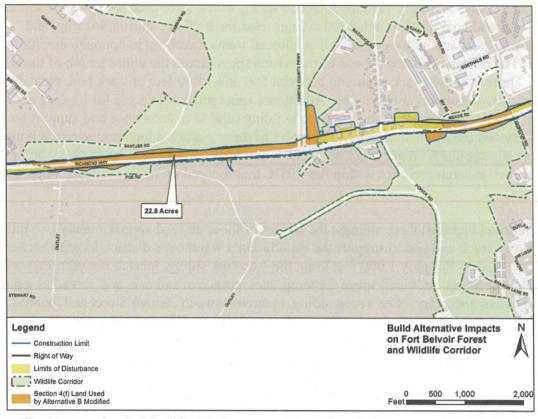


Figure 5B. Alternative B Modified Impacts on Fort Belvoir Forest and Wildlife Corridor

- project. The wildlife crossings allow the Corridor to maintain a continuous link between the JMAWR and Huntley Meadows Park and the ABWR on the Potomac River.
- 7. Both Beulah Street and Woodlawn Road traverse the Corridor on the North Post of Fort Belvoir; however, these streets are closed to the general public.
- 8. Certain facilities of the post are located within the Corridor, including utilities and a solid waste management unit (landfill).

## II.C. Fort Belvoir Military Railroad

a) Description of the Fort Belvoir Military Railroad: The Fort Belvoir Military Railroad (FBMRR) track bed extends roughly five miles across U.S. Army Garrison Fort Belvoir, as shown in Figure 2. The bed begins to the north of the installation in Newington at the original site of Accotink Station, where it previously connected with the Richmond-Fredericksburg & Potomac Railroad (RF&P). From the station site, the track bed continues south running closely adjacent to the Fairfax County Parkway, originally State Route 617. The bed proceeds south to the north of Accotink Village where the line crosses Beulah Street by the use of a concrete bridge (Facility No. 2298). Then, 0.4 miles later, the track bed passes above Route 1 via a concrete and steel bridge (Facility No. 1433). The bed maintains its southerly route as it travels parallel with Gunston Road, passing through the installation's warehouse/industrial district. The final stretch of the track bed terminates south of 23rd Street within the Engineer Research and Development Laboratories (ERDL), now known as the 300 Area.

In addition to the main track bed, the FBMRR included various supplementary track bed sections. These auxiliary sections included spurs, which were used to support maintenance buildings and coal trestles; industrial sidings used for stabling, storing, loading, and unloading cars; and passing sidings that allowed trains travelling in opposite directions to pass. The railroad enlisted the use of numerous spurs across the entire length of the track bed. Three of these spurs, spanning between 500 and 1,000 feet of track bed, were designed specifically to support coal trestles. Additional spurs provided access for loading and unloading to specific installation service buildings and to maintenance and support facilities that serviced the railroad directly. Examples of these include a locomotive repair building, engine storage shed, laundry facility, bakery, and warehouses. Rail spurs also were utilized to support research facilities within the ERDL that focused on testing railroad lines, cars, and engines.

The railroad included three sidings; the largest of these utilized approximately two miles of additional track and bed to support the installation's warehouse district, located between 12th and 21<sup>st</sup> Street. Roughly 1,000 feet long, the Accotink siding, located between Farrar Road and Beulah Street, provided space for temporary storage of rail cars and served as a passing siding when necessary. The Troop siding, located between Beulah Street and Route 1, functioned as a loading and unloading area for soldiers and equipment for the Engineer Replacement and Training Center (ETRC). The siding consisted of roughly 2,500 feet of track and bed and functioned as both an industrial siding and a passing siding.

The FBMRR track bed consists of three major elements: the right-of-way, the remnants of the railroad's permanent way, and the track foundation. The track right-of-way is defined as the narrow strip of cleared land that is designated specifically for the operation and

maintenance of the railroad. The FBMRR right-of-way is owned directly by the installation and has not been granted via an easement. The permanent way consists of the pairs of steel rails, wooden railroad ties, and the ballast in which the ties are embedded. The bottom portion of the ballast track bed is called the track foundation, which is in turn supported by a prepared earthworks formation called the sub-grade that is sloped slightly for drainage.

The right-of-way for the FBMRR still exists, but because the line was discontinued in 1990, scattered vegetation and downed trees now obstruct the track bed in many locations. In other locations, the right-of-way has been repurposed to provide a corridor for electrical lines and other utilities. Many of the steel rails and wooden railroad ties for FBMRR have been removed, with only a few portions of the original permanent way remaining intact. The ballast and track foundation remain mostly intact, with some portions having been demolished for road and parking lot construction spurred by new development and a stronger reliance upon the automobile. This is particularly apparent in the warehouse district, where almost all of the track bed associated with the primary line and the industrial siding has been covered by asphalt to provide vehicle access to the warehouses. Additionally, several of the spurs used for both coal trestles and other facilities have been demolished for new construction with only trace sections and foundations of the trestles remaining.

### b) Features and Functions:

- 1. **Figure 6** shows the relationship of the Fort Belvoir Military Railroad to the project (impacts of Alternatives B, B Modified, and C are identical at this location).
- 2. The construction of the Fort Belvoir railroad began in 1918 as two separate spur tracks allowing the military base to connect to existing steam and electric rail lines, providing access into Washington, DC. The military railroad was designed to branch off the existing Richmond-Fredericksburg & Potomac Railroad (RF&P). Owned and operated by the Army, the Fort Belvoir railroad connected to the RF&P line in Newington, at Long Branch Station (known by the military as Accotink Station).
- 3. A major construction campaign took place at Fort Belvoir during the 1940s because of World War II. To help support this new construction campaign, the rail system was upgraded at this time, and Fort Belvoir began numerous construction projects using the latest technology in engineering. The upgrading process included the demolition of three 1918 wood trestles, followed by their reconstruction into three new engineered bridges (Facility Nos. 1433, 2298, and 2486).
- 4. As recently as 1985, the Fort Belvoir Railroad was utilized in transporting coal from Fort Belvoir to other military installations. The entire coal supply for the Military District of Washington, DC was stored at Fort Belvoir's North Post. The military coal supply was transported solely by rail.
- 5. During the entire time of operation, the Fort Belvoir Railroad continued to serve as a military transport system. Even after the majority of the tracks were closed, portions of the rail system were used for military testing.
- 6. Records indicated that during the 1990s, sections of the track system located on the South Post were used by the Belvoir Research, Development and Engineering Center (BRDEC) to test rail equipment.
- 7. Due to the high cost of maintenance compared to the railroad's limited use, the status of Fort Belvoir's railroad system was reviewed in 1990 and it was decided to discontinue service.

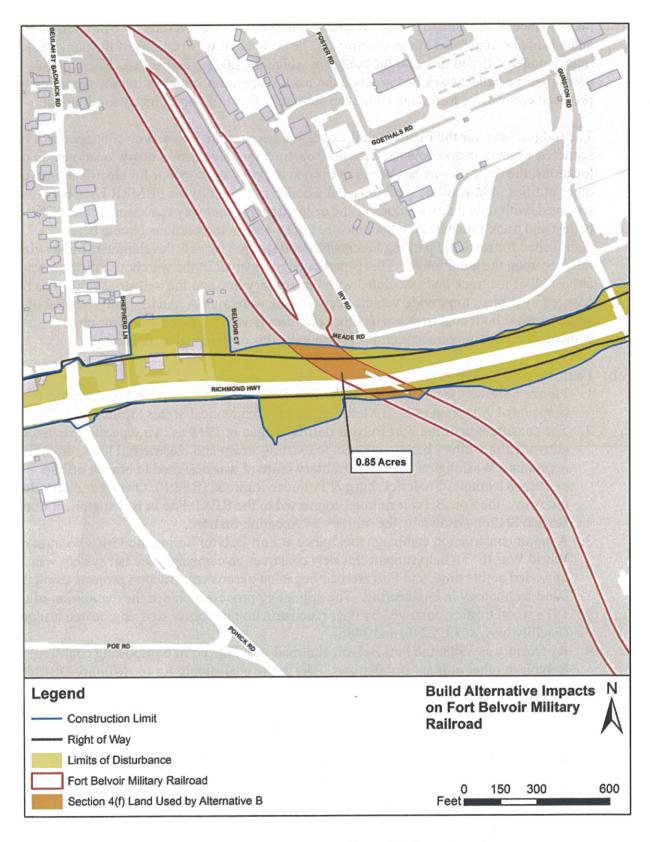


Figure 6. Fort Belvoir Military Railroad

8. The Fort Belvoir Military Railroad (FBMRR) track bed possesses the necessary significance in order to be considered eligible for inclusion in the NRHP under Criterion A as part of a multiple property listing as part of the FBMRR Historic District.

#### II.D. Woodlawn Historic District

- a) Description of the Woodlawn Historic District: The Woodlawn Historic District is in the general location of the intersection of Route 1, Mount Vernon Memorial Highway, and Old Mill Road in Fairfax County, Virginia, as shown in Figure 2 and Figures 7A and 7
   B. At the onset of this project, the Virginia Department of Historic Resources Data Sharing System (VDHR DSS) records included the following contributing resources to the Woodlawn Historic District (VDHR# 029-5181):
  - Woodlawn Plantation (VDHR# 029-0056) Woodlawn once was the plantation house for a 2,000-acre estate that was carved out of George Washington's Mount Vernon. After the marriage of Major Lawrence Lewis, Washington's nephew, to Eleanor Custis, a granddaughter of Martha Washington raised at Mount Vernon, Washington provided for them to receive a large portion of his estate by planning and funding the plantation and house. Washington himself selected the Woodlawn house site, and he hired his friend Dr. William Thornton, the first architect of the United States Capitol, to be the architect. Construction of the plantation house began in 1800, and it was completed in 1805. Since 1951, the National Trust for Historic Preservation has administered the 126-acre Woodlawn Plantation property, which includes two parcels, one on each side of Route 1. The parcel on the north side of Route 1 also is designated a National Historic Landmark (NHL). The parcel on the south side of Route 1, which contains pasture and stables, is not part of the NHL designation. The entire NRHP-listed Woodlawn Plantation property on both sides of Route 1 contributes to the Woodlawn Historic District.
  - Grand View (Jacob Troth) House (VDHR# 029-0062) This dwelling was constructed in the 1850s. It is not individually eligible for the NRHP but is included within the boundaries of the NRHP-listed Woodlawn Plantation property and is a contributing resource to the Woodlawn Historic District.
  - Woodlawn Baptist Church (VDHR# 029-0070) and Cemetery (44FX1212) The early 1870s church burned and no longer exists; it was associated with a cemetery remaining onsite, along with the modern church. Both the church and the cemetery have previously been determined not eligible for individual listing in the NRHP, but the property on which the church stands, consisting of approximately 5.2 acres, and the cemetery are considered contributing elements to the Woodlawn Historic District. According to the Grave Marker Assessment and Ground Penetrating Radar Survey of the Woodlawn Baptist Church Cemetery (New South Associates, May 2012), the total number of graves at the site is between 176 and 179. The oldest marked graves date to the late 1870s, just a few years after the church obtained the property. Among the burials at Woodlawn Baptist Church Cemetery are several members of the Mason family, including church founders John and Rachel Mason. Several of their children, their spouses, and

<sup>&</sup>lt;sup>6</sup> VDHR concurred with this determination on August 30, 2012 and the National Register nomination package that FHWA is preparing for Woodlawn Historic District as part of this project will recommend that the church property and cemetery continue to be included as a contributing resources. The modern church building, which is not historic, would not be included as a contributing element.

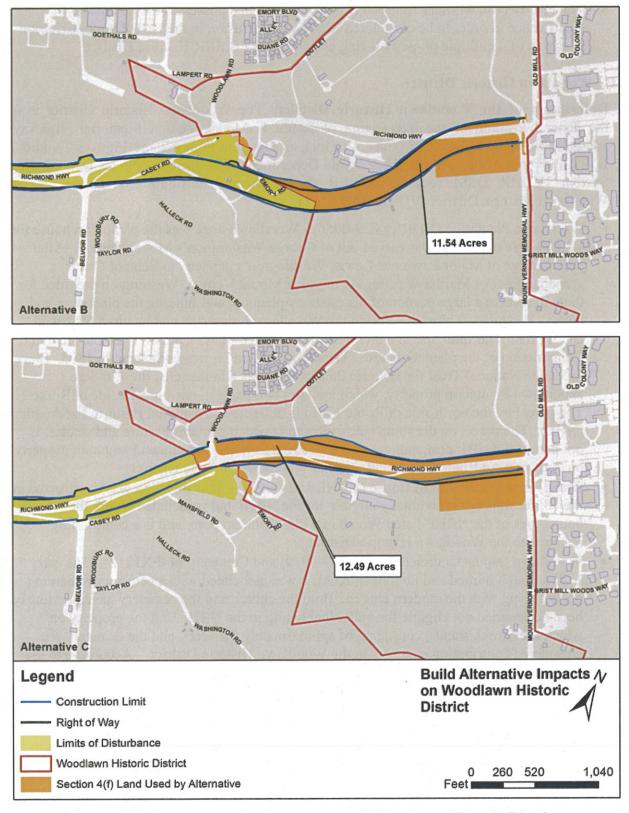


Figure 7A. Alternative B and C Impacts on Woodlawn Historic District

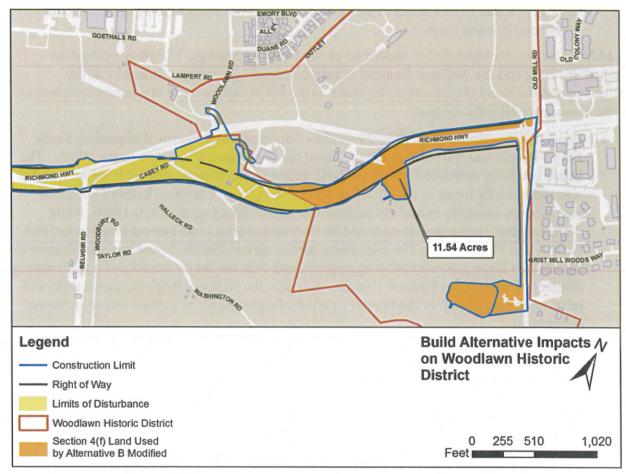


Figure 7B. Alternative B Modified Impacts on Woodlawn Historic District

grandchildren are also interred there, symbolizing the link between the cemetery and its historical roots.

- Woodlawn Quaker Meetinghouse (VDHR# 029-0172) and Cemetery (44FX1211) The
  Meetinghouse was constructed in the early 1850s and has associated with it a shed and
  cemetery. The property, containing approximately 2.4 acres, is individually listed in the
  NRHP and is also considered a contributing resource to the Woodlawn Historic District.
  The property owner, the Alexandria Monthly Meeting of the Religious Society of Friends
  (Friends), has granted a conservation easement on the property to the Virginia
  Department of Historic Resources.
- George Washington's Distillery and Gristmill (VDHR# 029-0330) Listed on the NRHP in 2003, the property also contributes to the Woodlawn Historic District. The Gristmill is located at 5514 Mount Vernon Memorial Highway, approximately 0.3 miles from Route 1. The property contains approximately 7 acres and is owned by the Mount Vernon Ladies Association.
- Community of Gum Springs While the Community of Gum Springs has historic ties to the Woodlawn Quaker Meetinghouse, and it may be eligible for inclusion on the NRHP as its own historic district or property, the two properties are physically separated by a considerable distance. Therefore, VDHR concurred on August 30, 2012 and FHWA will recommend in the National Register nomination package that it is preparing for Woodlawn Historic

District as a part of this project that the community is not a contributing resource to the Woodlawn Historic District.

In addition to the recommendation described above for Gum Springs, VDHR concurred on August 30, 2012 and the National Register nomination package will recommend that the following additions and modifications be made to the list of architectural properties contributing to the Woodlawn Historic District:

- Pope-Leighey House (VDHR# 029-0058) This single-story home designed by Frank Lloyd Wright was moved into the woods of the Woodlawn Plantation in the 1960s. The house is wholly contained within the NHL property and historic district boundary, and it was individually listed in the NRHP in 1970. Woodlawn Historic District's period of significance currently extends to include the Antebellum Period (1830-1860), while Pope-Leighey House was constructed in 1939 and moved to its current location in 1965. FHWA and other Section 106 consulting parties agreed that the house has significance to the nation's historic preservation movement, and thus should be considered a contributing element of Woodlawn Historic District. As such, the National Register nomination will recommend expansion of the district's period of significance to include this more recent component.
- Sharpe Stable Complex Dairy, Corncrib, Stable and Bank Barn (029-5181-0005) The Sharpe Stable Complex contains six structures built between ca. 1913 and 1997. Only four of the six structures are historic; the dairy, the corncrib, the bank barn, and the ca. 1955 stable. While the four historic buildings contribute to the Woodlawn Historic District, only the bank barn within the complex is recommended as individually potentially eligible for the NRHP. Elizabeth Sharpe had the three oldest structures a dairy, a corncrib, and a bank barn built during her ownership of Woodlawn (1905-1924). The dairy building has been extensively altered, but it still retains most of its overall exterior appearance. The corncrib retains a higher level of integrity, but it has also been slightly altered. The bank barn retains the highest level of integrity and is a rare example of a bank barn in Fairfax County. Out of the 48 properties recorded in the VDHR DSS in Fairfax County that mention a barn, only two list a bank barn, both of which postdate the bank barn at the Sharpe Stable Complex.
- Otis Tufton Mason House (VDHR #029-5181-0006) This expanded small midnineteenth-century rural dwelling housed the Mason family. The Mason family contributed to the intellectual and religious character of the surrounding community. While the house represents a common design for the period of construction and place, and it is not recommended as individually eligible for inclusion on the NRHP, the exterior of the house retains a high level of integrity.

On August 30, 2012, VDHR concurred that the boundaries of Woodlawn Historic District include the entire National Trust for Historic Preservation (NTHP) property including the limits of the National Historic Landmark on the north side of Route 1, the entire pasture/equestrian facility on the south side of Route 1, and the parcel of land between the Woodlawn Quaker Meetinghouse and the National Historic Landmark property currently being transferred to NTHP by the Army as part of the Mulligan Road project.

### b) Features and Functions

1. The boundaries of the district encompass approximately 140 acres.

- 2. The following activities take place on the property: At Woodlawn Plantation, there are tours, seasonal exhibits, school programs, picnics, needlework exhibitions, children's workshops, haunted history tours, Christmas at Woodlawn, and private events. The research library is available to scholars by appointment and includes particular strengths in Colonial and Federal decorative arts, slavery, and Virginia history and genealogy. Woodlawn Plantation's stables are leased to a private operator for equestrian activities. The Quaker Meetinghouse hosts religious meetings. The George Washington's Gristmill property contains a reconstruction of a gristmill and distillery and is open to the public. The Woodlawn Baptist Church conducts regular worship services for its members and visitors and maintains the cemetery.
- 3. Existing facilities at Woodlawn Plantation include the mansion, a museum shop, a parking lot, picnic grounds, gardens, stables, outbuildings, Grand View House, and the Pope-Leighey House. Facilities at the Woodlawn Quaker Meetinghouse include the meeting house, a shed (reconstructed in 2008 after storm damage), and a cemetery. Facilities at George Washington's Distillery and Gristmill include the reconstructed mill, a picnic area, and a parking lot.
- 4. The Woodlawn Plantation property on the Woodlawn Plantation NHL side of Route 1 is accessed by a main entrance off Route 1, which is presently opposite of the Mount Vernon Memorial Highway approach to the intersection. However, pursuant to the Section 106 Memorandum of Agreement for the Mulligan Road project currently under construction, the entrance will be relocated to a new driveway to be constructed off of the former Woodlawn Road. The Woodlawn Plantation property on the south side (stables side) of Route 1 is accessed by a driveway off of Route 1. The Quaker Meetinghouse is accessed from a driveway off of Fort Belvoir's Woodlawn Gate, the former Woodlawn Road. George Washington's Gristmill is accessed by a parking lot directly off Mount Vernon Memorial Highway. The Woodlawn Baptist Church property is accessed by a driveway off of Route 1.
- 5. The district has unusual characteristics: The northern portion of the Woodlawn Plantation is a designated National Historic Landmark. As such, it is subject to special statutory requirements in Section 110(f) of the National Historic Preservation Act. Under these requirements, federal agencies must, "to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to any National Historic Landmark that may be directly and adversely affected by an undertaking." Further, under regulations at 36 CFR 800.10(c), "The agency official shall notify the Secretary [of Interior] of any consultation involving a National Historic Landmark and invite the Secretary to participate in the consultation where there may be an adverse effect." FHWA notified the Department of Interior (DOI) of consultation involving Woodlawn Plantation and invited its participation in the consultation to resolve the adverse effects. DOI reviewed the Draft Section 4(f) Evaluation and offered comments and recommendations that have been incorporated in this Final Section 4(f) Evaluation.<sup>7</sup>
- 6. The National Trust for Historic Preservation (owner of Woodlawn Plantation) has engaged in a partnership with Arcadia Center for Sustainable Food and Agriculture, a non-profit organization dedicated to creating a more equitable and sustainable local food system. Arcadia Farm was established in 2010 on the grounds of Woodlawn Plantation

<sup>&</sup>lt;sup>7</sup> Letter from Lindy Nelson, Regional Environmental Officer, U.S. Department of the Interior Office of the Secretary, to Jack Van Dop, FHWA, dated August 8, 2012.

# III. Impacts to the Section 4(f) Properties

## III.A. Accotink Bay Wildlife Refuge

As shown in Figures 4A and 4B, Alternatives B and C would both use approximately 0.07 acres and Alternative B Modified would use approximately 0.27 acres of land from the Accotink Bay Wildlife Refuge in the form of easements from the Army to VDOT. Though portions of the Refuge close to the road may experience noise levels approaching or exceeding FHWA's Noise Abatement Criterion of 67 dBA, there are no trails or other human activity areas within that portion of the Refuge. Similarly, there are no human activity areas in the Refuge close enough to the road to experience any air quality impacts from the project. Access and safety should be improved due to the addition of a bike trail, sidewalk, and turn lanes where currently there are none.

#### III.B. Fort Belvoir Forest and Wildlife Corridor

As shown in Figures 5A and 5B, both Alternatives B and C would both use approximately 23.4 acres and Alternative B Modified would use approximately 22.8 acres of land from the Fort Belvoir Forest and Wildlife Corridor in the form of easements from the Army to VDOT. The portion of Route 1 adjacent to the Corridor crosses Accotink Creek and the design and elevation of the replacement bridge at this location could potentially affect wildlife movements between the Corridor side of the road to the Accotink Bay Wildlife Refuge side of the road. The proposed bridge would be designed to minimize adverse effects in this regard.

### III.C. Fort Belvoir Military Railroad

As shown in Figure 6, Alternatives B, B Modified, and C would all use approximately 0.85 acres of land from the Fort Belvoir Military Railroad historic property, including removal of the existing concrete and steel bridge over Route 1 and regrading of the railroad embankments in the bridge abutment areas.

### III.D. Woodlawn Historic District

Alternatives B and B Modified would shift the Route 1 alignment to the south to bypass (hence Southern Bypass Alignment) the Woodlawn Baptist Church and cemetery. Both would use approximately 11.54 acres of land from the Woodlawn Historic District, as shown in Figures 7A and 7B and **Table 1** below. Aside from the physical encroachment on the Woodlawn Historic District property, both alternatives would displace the Otis Mason House, a contributing resource to the District (but not individually eligible for the NRHP), and two non-contributing barns of the Sharpe Stable Complex (the four historic structures within the complex – the dairy, corncrib, bank barn, and ca. 1955 stable – would not be displaced). Additionally, the access to the parcels comprising the District would be altered, as shown in Attachment 3. Specific information on the impacts to Woodlawn Historic District and individual properties within its boundaries are summarized in Tables 3 and 4 in Section V.

Sight-line profiles were prepared for Alternative B to assist in visualizing the proposed roadway widening in the Woodlawn area, as shown in **Attachment 5**. Alternatives B and B Modified would likely result in the conversion of 2.89 and 3.13 acres, respectively, of land currently in use

as road right-of-way for Route 1 back to a use compatible with the Historic District and National Historic Landmark. The reversion of these 2.89 and 3.13 acres would essentially reduce the total use of land area for road right-of-way for Route 1 from 11.54 acres to 8.65 and 8.41 acres, respectively.

Alternative C would widen existing Route 1 through the Woodlawn Historic District. It would require the use of approximately 12.49 acres of land, as shown in Figure 7A and itemized in **Table 2**.

Table 1. Alternatives B and B Modified Section 4(f) Use in Woodlawn Historic District

	Permanent Right-of- Way/Easement (acres)	Conversion of Road Right-of-Way* (acres)	TOTAL
CHEST HAND TO SELECT THE HEAD	B / B Modified	B / B Modified	B / B Modified
Woodlawn Quaker Meetinghouse	0.00	n/a	0.00
Woodlawn Baptist Church	0.75 / 0.67	n/a	0.75 / 0.67
Woodlawn Plantation National Historic Landmark	0.59 / 0.87	n/a	0.59 / 0.87
Woodlawn Historic District/ Stables Parcel	10.20 / 10.00	n/a	10.20 / 10.00
Total Woodlawn Historic District	11.54 / 11.54	2.89 / 3.13	8.65 / 8.41

Table 2. Alternative C Section 4(f) Use in Woodlawn Historic District

	Permanent Right-of- Way/Easement (acres)	Conversion of Road Right-of-Way* (acres)	TOTAL
Woodlawn Quaker Meetinghouse	0.00	n/a	0.00
Woodlawn Baptist Church	0.49	n/a	0.49
Woodlawn Plantation National Historic Landmark	3.90	n/a	3.90
Woodlawn Historic District/ Stables Parcel	8.10	n/a	8.10
Total Woodlawn Historic District	12.49	0	12.49

<sup>\*</sup>Subject to Commonwealth Approval.

A modified widening of Route 1, on existing alignment, between Mount Vernon Memorial Highway and Belvoir Road (modified segment of Alternative C) was investigated. This modified Alternative C segment shifted the widening towards the Woodlawn Baptist Church rather than into the area of the National Historic Landmark property, thereby reducing the area of roadway right-of-way use of historic landmark property but increasing the use of area from the eligible historic district property by an approximately equal area. This modification results in placing the road right-of-way in very close proximity to the Woodlawn Baptist Church building.

## IV. Avoidance Alternatives

In accordance with Section 4(f), consideration must first be given to whether there is a feasible and prudent alternative to the use of Section 4(f) property. For this undertaking, the following alternatives would avoid all Section 4(f) properties:

- a) No-Build Alternative. The No-Build Alternative assumes that no transportation improvements would be undertaken and Route 1 would remain in its existing configuration (i.e., four lanes undivided). Regular maintenance would be performed to preserve the structural integrity of the pavement and the existing bridges. However, this alternative would not satisfy the purpose and need for the project because it would not provide the needed additional transportation capacity on Route 1 through Fort Belvoir. This alternative is therefore not prudent.
- b) Transportation System Management (TSM) Alternative. "TSM" generally means implementation of relatively low-cost actions to improve efficiency of existing transportation systems. Examples include traffic controls, signal synchronization, turn lanes, parking management, access management, operational modifications, flexible work hours, van pools, transit scheduling, bicycle and pedestrian improvements, modifying driver behavior with incentives, pricing, or restrictions. Although such actions are important elements in the overall transportation plan for any urbanized area, there are none alone or in combination that would meet the identified needs for this study because they would not provide the additional capacity needed to serve existing traffic demand and to safely accommodate the forecasted traffic that is expected in the study area due to regional growth and the BRAC relocations to Fort Belvoir Main Post. This alternative is therefore not prudent.
- elements of the overall regional transportation system, and in fact are being developed independently of this highway project, as described further in the Environmental Assessment, there are none that would preclude the need to construct the proposed Route 1 improvements. This alternative is therefore not prudent. Indeed, the proposed improvements would allow transit usage in the corridor to be more fully realized by reducing congestion, providing space for more user-friendly transit facilities such as bus stop shelters, and improving pedestrian mobility and safety with the addition of continuous sidewalks. In addition, the alternatives evaluated in the Environmental Assessment preserve right-of-way in the median for transit, in accordance with the Fairfax County Comprehensive Plan, which includes a Route 1 cross-section with six lanes and an at-grade transitway in the median.
- d) Alternative Alignments to the North Telegraph Road/Mulligan Road Alternative. Shifting the alignment farther to the north would entail shifting to or beyond Telegraph Road in order to avoid all Section 4(f) properties. As shown on Figure 2, the Fort Belvoir Military Railroad historic property and the Fort Belvoir Wildlife Corridor extend to Telegraph Road. This Alternative would entail improvements to Telegraph Road from Route 1 to Mulligan Road (currently under construction), with traffic then being routed along Mulligan Road to get back to Route 1. Such a facility would not meet the needs for the project because it would entail circuitous routing and would not provide the needed additional transportation capacity on Route 1 through Fort Belvoir. This alternative is therefore not prudent. Except for the Mulligan Road corridor, there are no other alignments that would connect Telegraph Road and Route 1 without also using Section 4(f) property.

e) Woodlawn Avoidance Alternative. Constructing a bypass of the Woodlawn Historic District to avoid use of this Section 4(f) property, as shown in Figure 8, would align the road to the south through Fort Belvoir, crossing Mount Vernon Memorial Highway south of the Woodlawn property and the George Washington Gristmill property, passing through a portion of the Mount Vernon Country Club, and rejoining existing Route 1 to the north. This alternative would have extensive impacts to existing development on Fort Belvoir, impacts to Dogue Creek, and impacts to residential and commercial developments east of Mount Vernon Memorial Highway. This alternative is therefore not prudent.

# V. All Possible Planning to Minimize Harm

Minimization measures were incorporated into the project to minimize the impact to the Section 4(f) resources.

## V.A. Accotink Bay Wildlife Refuge

- a) Minimize encroachment: Alternatives B, B Modified, and C both establish the centerline of the proposed widening such that only minimal encroachment (0.07 for Alternative B and C or 0.27 acres for Alternative B Modified) onto the Refuge land would be required. Complete avoidance of the property is constrained by engineering considerations involving a transition from widening mostly to the south side of existing Route 1 (in order to avoid the Inlet Cove community) and mostly to the north side of existing Route 1 to avoid the Refuge property. Even if a further shift could be practically accomplished, it would only increase the use of Fort Belvoir Wildlife Corridor land, which also is subject to Section 4(f). Temporary construction easements beyond the permanent right-of-way limits also would be necessary. The amount of encroachment onto the Refuge property would be the minimum necessary to accommodate the proposed road widening, consistent with sound engineering principles and safety. The proposed cross-section of the road was agreed upon through an agreement between VDOT and Fort Belvoir representatives and is consistent with Fairfax County's Comprehensive Plan.
- b) Other measures: In accordance with Fort Belvoir's tree protection policy, trees removed because of this action would be replaced on a 2:1 basis. Construction of one or more wildlife underpasses in the vicinity of Route 1's crossing of Accotink Creek would help maintain and enhance wildlife habitat connection between the Forest and Wildlife Corridor north of Route 1 and the Refuge south of Route 1. Such underpasses could be achieved in a variety of ways. One would be to provide the underpass in conjunction with the new bridge over Accotink Creek. The proposed bridge would be longer and higher than the existing bridge, which would provide sufficient clearance for the largest animals that would be expected (white-tail deer). The bridge also would provide more than adequate accommodation of fish passage. Another way would be to install a bottomless concrete box culvert at some distance away from the Accotink Creek bridge. Such an underpass was installed when the Fairfax County Parkway (Route 286, formerly 7100) was constructed. Smaller pipe culverts also would be installed, which could be used by small mammals, reptiles, and amphibians. The exact dimensions and placements of such wildlife passages would be determined during the detailed project design in consultation with representatives of Fort Belvoir to identify the optimum configurations. Finally, the Fort's ongoing native habitat restoration program could serve as a framework for

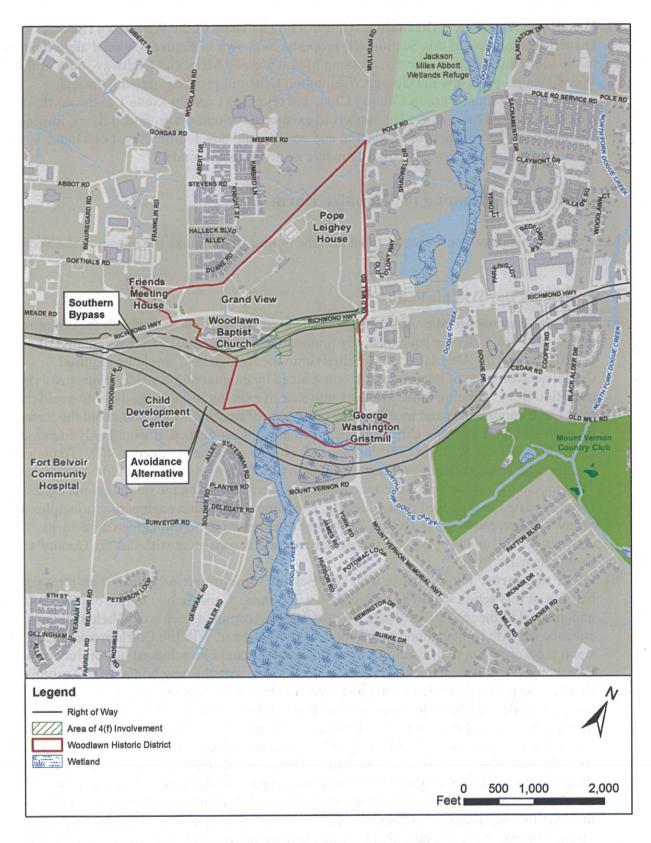


Figure 8. Woodlawn Avoidance Alternative

- restoring an area in the Refuge as compensation for impacts, with such an area to be identified in future coordination with Fort Belvoir representatives. The multi-use path and sidewalk planned as part of the proposed project would enhance opportunities for public viewing, access, and enjoyment of the Refuge.
- c) Maintenance of traffic: Traffic flow would be maintained during construction so that access to the Refuge would not be interrupted.
- **d)** Turn lanes and traffic control: The project would improve access to Pohick Road and enhance safety and the ease of ingress and egress to the Refuge and Fort Belvoir.
- e) Erosion and sediment control: Temporary and permanent erosion and sediment controls would be installed during construction to minimize any detrimental effects of project-generated sediment on Refuge land. The practices recommended in the 1992 Virginia Erosion and Sediment Control Handbook will be used for this project.
- f) Stormwater management: Temporary and permanent stormwater management measures, including vegetative controls, detention basins, and filtration systems, would be implemented for this project to minimize potential short-term and long-term effects on water quality. These measures would reduce or detain discharge volumes and remove pollutants.
- **g)** Additional coordination: Additional coordination with Fort Belvoir representatives will be undertaken to ensure consistency with the views of officials with jurisdiction over the property and to develop design details for mitigation measures.

#### V.B. Fort Belvoir Forest and Wildlife Corridor

- a) Minimize Encroachment: The amount of encroachment into the Corridor would be the minimum necessary to accommodate the proposed alignment of Route 1 consistent with sound engineering principles and safety.
- b) Access: The impacted area will not impact access to the Corridor.
- c) Other measures: See discussion above regarding provisions for wildlife passage.
- d) Maintenance of Traffic: Traffic flow would be maintained during construction and should not impact the Corridor, which lies adjacent to the construction activity.
- e) Erosion and Sediment Control: Temporary and permanent erosion and sediment controls would be installed during construction to minimize any detrimental effects of project-generated sediment within the Corridor. The practices recommended in the 1992 Virginia Erosion and Sediment Control Handbook will be used for this project.
- f) Additional coordination: Additional coordination will be conducted with Fort Belvoir Directorate of Installation Support Environmental and Natural Resources Division to address and minimize adverse affects and potential mitigation for the Corridor. Coordination will continue throughout the design process.

## V.C. Fort Belvoir Military Railroad

- a) Minimize Encroachment: The amount of encroachment on the railroad corridor would be the minimum necessary to accommodate the proposed alignment of Route 1 consistent with sound engineering principles and safety.
- b) **Documentation:** The existing railroad bridge would be fully documented prior to relocation or demolition. Copies of the documentation would be provided to VDHR, Fort Belvoir, Fairfax County, and other interested parties.
- c) Additional coordination: Additional coordination would be undertaken with VDHR, Fort Belvoir, and others as appropriate regarding the methods and details of documentation.

#### V.D. Woodlawn Historic District

- a) Minimize Encroachment: The amount of encroachment into the district would be the minimum necessary to accommodate the proposed widening and alignment of Route 1, consistent with sound engineering principles and safety.
- b) Access: The main entrance to the Woodlawn Plantation NHL is being relocated as part of the Mulligan Road project. The new entrance would be off of Woodlawn Road; the existing main entrance would be closed. The entrance to Woodlawn Baptist Church also would be relocated, with a new connection off of Woodlawn Road. The Woodlawn Road intersection with Route 1 will remain signalized.
- c) Maintenance of Traffic: Traffic flow would be maintained during construction so that access to properties both within and adjacent to the District would not be interrupted.
- d) Turn lanes and traffic control: The project would provide medians, turn lanes, and traffic signals at Woodlawn Road and at Mulligan Road/Mount Vernon Memorial Highway.
- e) Erosion and Sediment Control: Temporary and permanent erosion and sediment controls would be installed during construction to minimize any detrimental effects of project-generated sediment on District land. The practices recommended in the 1992 Virginia Erosion and Sediment Control Handbook will be used for this project.
- f) Landscaping: Landscaping would be developed in coordination with the Trust and other consulting parties.
- g) Additional coordination: Additional coordination has been held with the Section 106 consulting parties. Through the Section 106 process, FHWA ensures that consulting parties have and will continue to have the opportunity to provide input on proposed measures to minimize harm and on the final design details. A Programmatic Agreement (PA) pursuant to 36 CFR 800.6 has been executed and is included as Attachment 6. A summary of mitigation agreed upon in the PA for all historic properties within the project's architectural Area of Potential Effect (APE) is provided in Table 3 and for cultural resources within the archaeological APE in Table 4.

# VI. Least Overall Harm Analysis

Pursuant to 23 CFR 774.3(c), if the avoidance analysis determines that there is no feasible and prudent avoidance alternative, then only the alternative that causes the least overall harm to the Section 4(f) property may be approved. All of the action alternatives considered were evaluated to determine which alternatives would cause the least overall harm to the Section 4(f) property. This section evaluates those alternatives, including alternatives that would eliminate or reduce the use of individual Section 4(f) properties. The least overall harm is determined by balancing seven factors as listed in 23 CFR 774.3(c)(1) and discussed further below.

- i. The ability to mitigate adverse impacts to the Section 4(f) property (including any measures that result in benefits to the property).
  - In the areas adjacent to the Accotink Bay Wildlife Refuge, the Fort Belvoir Forest and Wildlife Corridor, and the Fort Belvoir Military Railroad, Alternatives B, B Modified, and C are the same or similar; therefore, the ability to mitigate adverse impacts to the Section 4(f) properties is the same. Alternatives B and B Modified, both before and after mitigation, would result in less harm to the activities, attributes, and features of the Woodlawn Historic District than would Alternative C (see Tables 3 and 4 for mitigation proposed for Alternative B Modified). Specifically, the overall acreage of Section 4(f) land used by Alternative B Modified in the Woodlawn Historic District would be less, the acreage of land from the National Historic

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Chiectulal Al E	Mitigation Included in the Programmatic Agreement for Alternative B Modified <sup>8</sup>	<ul> <li>FHWA would facilitate design workshops among VDOT, Fairfax County, the Army, the</li> </ul>	SHPO, the Trust, Woodlawn Baptist Church, and Friends to evaluate alternative	designs for proposed reduction of adverse effects to specific contributing properties	and to the District as a whole. Features to be discussed would include, but are not be	Ħ	A Shared-use driveway, a portion of which will be controlled and frightnamed by  VEOT sequiples appeared to the Trief Moodlaws Bostist Church and Woodlaws	VDO1, providing access to the Hast, Woodlawii Baptist Charch, and Woodlawii Olasker Meetinghouse.	Construction of a signalized intersection at Woodlawn Road to provide safe access	to the Trust, Woodlawn Baptist Church, and Woodlawn Quaker Meetinghouse	properties within Woodlawn Historic District.	<ul> <li>Landscaping needed to rehabilitate the setting, screen and reduce the visibility of</li> </ul>	the highway, and maintain viewsheds, to the greatest extent possible, for all	Woodiawh Filstoric District properties, ilicituding plantings within and outside VDOI right-of-way	Circulation patterns within the District, including vehicular, pedestrian, and		Trail and the Washington-Rochambeau Revolutionary Route National Historic Trail,	and the abandoned section of Route 1.	<ul> <li>Fabrication and installation of interpretive signage related to the District and its</li> </ul>	contributing properties.	<ul> <li>Reducing the width of the roadway section, reducing the impacts of the new road</li> </ul>	construction, and determining future usage of the section of the existing route i	CONTIDOR that may be abandoned.  Do establishment of appropriately designed fencing on Trust property.		Location and design of stormwater management points of diamage areas that     minimize the total disturbance of natural venetation and soil within the boundaries.	and viewshed of the Woodlawn Historic District so as to minimize adverse effects.	<ul> <li>Design of "gateway" features and elements, at the boundaries of and within the</li> </ul>	Woodlawn Historic District, to create a context-sensitive setting that is distinctive	from other non-historic portions of Route 1 and Mount Vernon Memorial Highway.	Gateway features shall include, but not be limited to, landscaping, lighting, the size	and location of stdewarks, trails, lettices, and sights.  Droposals for the relocation of the Otis Mason House and possible relocation of the	non-historic Woodlawn Stables commercial equestrian facility. If equestrian-	related structures are not relocated on Trust property, proposals for an appropriate	driveway entrance from Mount Vernon Memorial Highway to the NTHP property south of Route 1 will be discussed.	The appropriateness and feasibility of sound abatement measures, if such	
Table 3. Summary of Mingation for Historic Properties within the Architectural Archite	Impacts Under Alternative C	Visual and auditory	impacts; physical	destruction of a portion	of the historic	landscape for widening	of existing road and	management	infrastructure; physical	relocation of Grand	View House;	exhumation and	relocation of graves	Baptist Church	cemetery.																	8 2 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
ation for Historic Fr	Impacts Under Alternative B and B Modified	Alteration of the	viewshed; visual and	auditory impacts;	changes in relationship	among the contributing	properties; physical	of the historic	landscape for a road	and stormwater	management	infrastructure;	relocation of the two	Stables structures to	another location within	the Historic District;	physical relocation of	Otis T. Mason House;	and changes in land	use and circulation	patterns.															
nary of Milig	NRHP/NHL Status	NRHP eligible	)																					,												
Table 3. Sumn	Resource	Woodlawn	National	Register-Eligible	Historic District	VDHR # 029-	5181																							di d						

<sup>8</sup> Mitigation measures included in the Final Programmatic Agreement dated November 19, 2012.

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Pope-Leighey House VDHR # 029- 0058	Woodlawn Plantation VDHR # 029- 0056		Resource
NRHP listed, contributing to Woodlawn Historic District	NHL/NRHP listed		NRHP/NHL Status
No adverse impacts.	Taking of Woodlawn Plantation property; physical destruction of a portion of the historic landscape for a road and stormwater management infrastructure; changes in land use and access between different parts of the property; alteration of the viewshed; auditory impacts; and cumulative impacts from the construction of the proposed project and the widening of Old Mill Road in combination with the Mulligan Road construction project.		Impacts Under Alternative B and B Modified
No adverse impacts.	Taking of Woodlawn Plantation property; physical destruction of a portion of the historic landscape for widening of existing road and stormwater management infrastructure; visual and auditory impacts; and cumulative impacts from the construction of the proposed project and the widening of Old Mill Road in combination with the Mulligan Road construction project.		Impacts Under Alternative C
See mitigation for adverse impacts to woodlawn Historic District.	<ul> <li>FHWA would provide and oversee the distribution of project funding to mitigate for impacts to Woodlawn NHL. These mitigation measures are directly relevant to the adverse effects of the project on the Trust's ability to manage and maintain this historic property, and to the adverse effects of the project on the experience of visitors to the site. These mitigations are provided to benefit any structure or landscape within the NHL boundaries including the Woodlawn Plantation, Grand View, and Pope-Leighey House. The following is a list of mitigation measures that will be provided within the boundaries of Woodlawn NHL:         <ul> <li>Water and sewer service to serve the property for regular operations and safety.</li> <li>Installation of natural gas service.</li> <li>Installation of a sanitary sewer service line sufficient to serve the Woodlawn property.</li> </ul> </li> <li>FHWA would install an underpass beneath Route 1 adjacent to the Sharpe Stable Complex buildings that would otherwise be diminished due to the Undertaking. The underpass would be built to allow limited farm equipment and vehicular access between the NHL and remainder of the Woodlawn property that is listed on the National Register of Historic Places. FHWA would also provide an appropriate driveway entrance from Mount Vernon Memorial to the Trust pastureland.</li> </ul>	<ul> <li>In an effort to minimize the adverse effects of the Undertaking on the Woodlawn Historic District, consistent with Section 4(f) of the Department of Transportation Act, NEPA, and NHPA, to enhance the experience of visiting and traveling through the Woodlawn Historic District, and to provide a safer environment for motorists, pedestrians, and cyclists, FHWA, VDOT, and the County shall work together, in consultation with the SHPO, the Trust, and other parties to the Programmatic Agreement, to reduce the width of the right-of-way and roadway section to the maximum extent possible through the Woodlawn Historic District.</li> <li>FHWA would complete draft SHPO Intensive Level Survey for the following properties contributing to the District: 1. Sharpe Stables Complex (Dairy, Corncrib, Stable, and Bank Barn); 2. Grand View.</li> <li>FHWA would complete measured drawings of the following individually listed or eligible properties within the District: 1. Woodlawn Quaker Meetinghouse; 2. Pope-Leighey House; 3. George Washington's Grist Mill.</li> </ul>	Mitigation Included in the Programmatic Agreement for Alternative B Modified <sup>8</sup>

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Table 3. Sam	Surry to Carry	Impacts During of Tringers and Impacts Under	nacte Ilnder	1 NA CRANCO CULTA NA 1 NA
Resource	Status	Alternative B and B Modified	Alternative C	Mitigation Included in the Programmatic Agreement for Alternative B Modified <sup>8</sup>
Grand View VDHR # 029- 0062	NRHP eligible, contributing to Woodlawn Historic	No adverse impacts.	Physical relocation of Grand View House to another location within the Woodlawn Historic District.	See mitigation for adverse impacts to Woodlawn Historic District.
Woodlawn Baptist Church VDHR # 0029- 0070	The church building is not eligible, but the property is contained within Woodlawn Historic District	See adverse effects to Woodlawn Historic District.	See adverse effects to Woodlawn Historic District.	<ul> <li>FHWA would facilitate discussions for the granting of an easement from the Army to the Church allowing limited usage of the land on Fort Belvoir located adjacent to the church and bounded by the realigned Route 1 and new access road.</li> <li>Removal of pavement from the church's existing driveway to restore historic character.</li> <li>Landscaping.</li> <li>Documentation of the cemetery and a grave location survey (Grave Marker Assessment and Ground Penetrating Radar Survey of the Woodlawn Baptist Church Cemetery, May 2012).</li> <li>Additional activities impacting the Woodlawn Baptist Church, including the relocation of church signs and relocation/replacement of utilities. Noise abatement and other details will be determined separately from this Agreement by FHWA, the Woodlawn Baptist Church, and other parties, as appropriate to the specific activity.</li> </ul>
George Washington's Distillery and Grist Mill VDHR # 029-	NRHP listed, contributing to Woodlawn Historic District	No adverse impacts.	No adverse impacts.	See mitigation for adverse impacts to Woodlawn Historic District.
Otis Tufton Mason House VDHR # 029- 5181-0006	Contributing to Woodlawn Historic District	The realigned portion of Route 1 would go through the property.	No adverse impacts.	<ul> <li>Relocation of the house according to Virginia Department of Historic Resources guidelines for moving historic buildings.</li> <li>FHWA would ensure that Consulting Parties have the opportunity to provide input regarding the proposed relocation site, including site improvements such as access and parking area, during the design workshops described in the mitigation for adverse impacts to Woodlawn Historic District.</li> </ul>
Sharpe Stable Complex Bank Barn VDHR # 029- 5181-0005	NRHP eligible	Changes in land use would impact the historic setting of the barn; visual and auditory impacts.	Visual and auditory impacts as widened roadway would be located closer to structures in complex.	See mitigation for adverse impacts to Woodlawn Historic District.

Table 3. Summary of Mitigation for Historic Properties within the Architectural APE

		altered and destroyed.		5648	
<ul> <li>Design and installation of interpretive historic markers.</li> <li>Repairs to damaged sections of FBMRR track hed north of Telegraph Road.</li> </ul>		limits of construction will be physically		VDHR # 029-	
<ul> <li>Historic American Engineering Record (HAER) Level I documentation of the railroad bed within the APE.</li> </ul>	Same as Alternative B and B Modified.	The portion of the railroad bed within the	NRHP eligible	Fort Belvoir Military Railroad	
and in addition to the HAER Level I documentation described above, FHWA would update VDHR's Data Sharing System (DSS) file on the rail bridge to indicate that the bridge has been demolished and to reference the HAER Level I documentation.					
relocation and installation.  If a canable and willing party cannot be identified EHWA would demolish the bridge.		recipient cannot be identified.			
monetary incentive to ownership. If the bridge is relocated, FHWA would submit to the Army and the SHPO photographs of the bridge at its new location following its		may be permanently destroyed if a suitable		VUHR # 029- 5425	
<ul> <li>HWA would develop a marketing plan to determine it there is a capable party willing to relocate and assume ownership of the bridge. FHWA would offer a one-time</li> </ul>	allu D Modilled.	current location and		Railroad Bridge	
Historic American Engineering Record (HAER) Level I documentation of the bridge.	Same as Alternative B	The bridge would be	NRHP eligible	Fort Belvoir	
	St. (Novigil Style Note that Little and	and auditory impacts.			
	And the State of t	Complex; and visual			
		Sharpe Stable			
		associated with the		5181-0005	
	structures in complex.	to pastureland		VDHR # 029-	
A CONTRACTOR OF THE CONTRACTOR	located closer to	modification of access	District	Stable	
	roadway would be	historic setting;	Historic	Corncrib and	
	impacts as widened	that will impact the	to Woodlawn	Complex Dairy,	
See mitigation for adverse impacts to Woodlawn Historic District.	Visual and auditory	Changes in land use	Contributing	Sharpe Stable	
Mitigation Included in the Programmatic Agreement for Alternative B Modified <sup>8</sup>	Alternative C	B Modified	Status	Resource	
1807C NO 0072	Impacts Under	Alternative B and	NRHP/NHL		
		Impacts Under			

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Resource	NRHP Status	Impacts Under Alternative B and B Modified	Impacts Under Alternative C	Mitigation Proposed in the Programmatic Agreement for Alternative B Modified <sup>8</sup>
Woodlawn		The precise effects to these deposits cannot	Same as Alternative B and B Modified.	Update and complete an archaeological survey of the entire National Trust for Historic Preservation Property (conducted by the Chicora Foundation, Inc. in 1999). This
Archaeological		be determined at		information will be used to guide the design of mitigation measures so that impacts to any
Deposits VDHR#		present. However, installation of water,		significant deposits can be avoided or minimized.
44FX1146	1	sewer, and gas service		
		that is proposed as		
		mitigation for adverse	r   //	
		impacts to Woodlawn		
		Plantation has the		
		potential to directly		
		impact these deposits.		
Woodlawn	Contributing	No adverse impacts.	Widening of the	None.
Baptist Church	to Woodlawn		roadway would require	
Cemetery	Historic		the exhumation and	
VDHR	District		relocation of graves	
#44FX1212			within the cemetery.	
Woodlawn		No adverse impacts.	No adverse impacts.	None.
Quaker	1 (0)			
Meetinghouse				
Cemetery				
VDHR				
#44FX1211				

Landmark portion of the District would be less, the displacement of graves in the contributing Woodlawn Baptist Church cemetery would be avoided, the distance to the Woodlawn Quaker Meetinghouse would be greater, and the impact to the Woodlawn Baptist Church property would be less than Alternative C.

ii. The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify the Section 4(f) property for protection.

Alternatives B, B Modified, and C would have the same or similar impacts to the Accotink Bay Wildlife Refuge, the Fort Belvoir Forest and Wildlife Corridor, and the Fort Belvoir Military Railroad. Alternatives B and B Modified would require the use of approximately 11.54 acres of land from the Woodlawn Historic District; Alternative C would require the use of approximately 12.49 acres of land (see Figures 7A and 7B). However, under Alternatives B and B Modified, the reversion of approximately 2.89 and 3.13 acres, respectively, of current Route 1 right-of-way to non-road use lands essentially reduces the net use of the Woodlawn Historic District to 8.65 and 8.41 acres, respectively (see Table 1). Alternatives B and B Modified would avoid displacement of graves in the Woodlawn Baptist Church cemetery; Alternative C would require relocation of approximately 100 graves. Alternatives B and B Modified would shift the alignment farther away from the Woodlawn Quaker Meetinghouse. Overall, Alternative B Modified presents more opportunities to mitigate adverse impacts, as itemized in Tables 3 and 4, including measures that would result in benefits to the contributing resources that comprise the Woodlawn Historic District.

The cumulative impacts of this project are discussed in Section 4 of the Environmental Assessment. With respect to historic properties, Alternative B Modified would result in less cumulative impact to the NHL Woodlawn Plantation property when considered in combination with the Mulligan Road project that is currently underway. With the Southern Bypass Alignment proposed as part of Alternative B Modified, impacts to the NHL property are limited to less than one acre along Route 1 approaching the Mulligan Road/Mount Vernon Memorial Highway intersection, which will be reconstructed as part of the Mulligan Road project. Under Alternative C, almost four acres of NHL land would be used along the existing Route 1 alignment, resulting in a cumulative impact of over six acres when combined with the Mulligan Road project. 9

iii. The relative significance of the Section 4(f) property.

Alternatives were analyzed that would avoid the use of each of the Section 4(f) properties. Constructing all of the widening along the north side of Route 1 to avoid use of the Accotink Bay Wildlife Refuge would increase impacts to the Fort Belvoir Forest and Wildlife Corridor, which also is a Section 4(f) property of equal significance. The Fort Belvoir Forest and Wildlife Corridor and Fort Belvoir Military Railroad are located on the north and south side of Route 1; therefore, the alignment could not be shifted to avoid use of this Section 4(f) property.

Several individually NRHP-listed properties contribute to the Woodlawn Historic District, including Woodlawn Plantation. The northern Woodlawn Plantation parcel has been designated a National Historic Landmark, and so is accorded a higher degree of significance and protection under the National Historic Preservation Act and as a Section 4(f) property. Alternatives B and B Modified include the Southern Bypass. The Southern Bypass would still

<sup>&</sup>lt;sup>9</sup> The impact to Woodlawn Plantation from the Mulligan Road project is estimated at 2.51 acres, a small portion of which overlaps with the acreage impact estimated as part of this project along Route 1 approaching the Mulligan Road/Mount Vernon Highway intersection.

use land from a portion of the Woodlawn Historic District, but would largely bypass the Woodlawn Baptist Church property, including the cemetery. The alignment would be shifted away from the Quaker Meetinghouse and Woodlawn Plantation building and minimize the use of land from the National Historic Landmark portion of Woodlawn Plantation. Alternatives B and B Modified would use approximately 0.59 and 0.87 acres, respectively, of land from the National Historic Landmark parcel; in contrast, Alternative C would use approximately 3.90 acres of land.

iv. The views of the official(s) with jurisdiction over the Section 4(f) property.

The Virginia Department of Historic Resources (VDHR), which serves as the State Historic Preservation Office (SHPO) in Virginia, has jurisdiction over the Section 4(f) property. In a letter dated July 9, 2012, VDHR stated that they are not prepared to concur with FHWA's Section 4(f) evaluation and requested that FHWA carefully consider the practicability for limited improvements along Route 1 from Belvoir Road to Mount Vernon Memorial Highway/Mulligan Road.

FHWA's subsequent response on July 20, 2012 indicated that with regard to implementing all planning to minimize harm to 4(f) (historic) properties, FHWA, VDOT and Fairfax County agreed to reduce the Fairfax County Comprehensive Plan requirements for Route 1 from a designated 176 feet wide right-of-way and 58 feet wide median to 148 feet wide right-of-way with a 32 feet wide median. In addition, the letter noted that Alternative B was developed as a minimization alternative to Alternative C (minimization of impact to historic property). Alternative B ultimately uses significantly less historic district property for public roadways, avoids relocation of a large number of graves, and locates Route 1 farther away from the National Historic Landmark and Quaker Meetinghouse, as compared to Alternative C.

Finally, the letter concluded that FHWA will continue to identify ways to minimize and mitigate project impacts as the project moves into the design-build phase, as indicated in the Section 106 Programmatic Agreement with the provision of design workshops. Review of more detailed design issues and possible roadway, stormwater management, and traffic control design exceptions/waivers can be most appropriately considered during initial development of design-build plans.

v. The degree to which the alternative meets the purpose and need for the project.

Build Alternatives B, B Modified, and C would equally meet the purpose and need for the project.

vi. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f).

As documented in the EA, impacts to natural (wetlands, floodplains, endangered species, etc.) and human (relocations, air and noise quality, etc.) resources are similar among the build alternatives. Alternatives B and B Modified would require the use of more Army land on Fort Belvoir than would Alternative C.

vii. Substantial differences in costs among the alternatives.

Under Alternative A, Route 1 would remain in its existing configuration, and only regular maintenance would be performed to preserve the structural integrity of the pavement and the existing bridges. There would be minimal maintenance costs associated with Alternative A.

The build alternatives are similar except at the Telegraph Road and Fairfax County Parkway intersections and within the Woodlawn Historic District. Under Alternatives B and B Modified, Route 1 would be widened to six lanes along the existing alignment, with the exception being the Southern Bypass, and at-grade intersections would be constructed at Telegraph Road and Fairfax County Parkway. The cost associated with both Alternatives B and B Modified would be approximately \$99 million. Under Alternative C, Route 1 would be widened to six lanes along the existing alignment and grade-separated interchanges would be constructed at Telegraph Road and Fairfax County Parkway. The cost associated with Alternative C would be approximately \$124 million dollars.

The flyover intersection options at Telegraph Road and Fairfax County Parkway are part of Alternative C, resulting in a substantial increase in the cost estimate for Alternative C. Therefore, for the sake of cost comparison between the two alternatives, it would not be proper to simply compare the total cost of Alternatives B and B Modified vs. Alternative C. A more appropriate cost estimate comparison would be to compare the estimated cost of each individual alignment option for the segment of Route 1 between Mount Vernon Highway and Belvoir Road. This cost estimate comparison indicates that these two alignment options are substantially the same cost.

## VII. Consultation and Coordination

Officials with jurisdiction over the Section 4(f) properties have been consulted throughout the duration of project development. They include:

- Advisory Council on Historic Preservation
- U.S. Army Garrison Fort Belvoir owners of Accotink Bay Wildlife Refuge, Fort Belvoir Wildlife Corridor, and Fort Belvoir Military Railroad.
- U.S. Department of Interior has responsibilities regarding National Historic Landmarks, such as a portion of Woodlawn Plantation.
- Virginia Department of Historic Resources State Historic Preservation Office for review of historic property issues.

Most of the coordination with these entities occurred through a series of meetings, both individually and collectively, to discuss issues of concern, project alternatives, design variations, and impacts. Section 4 of the Environmental Assessment provides additional information on the six Consulting Parties meetings (a seventh was held on July 31, 2012 following the completion of the EA) that were held during the course of the study and the individual meetings with the National Trust for Historic Preservation, Woodlawn Baptist Church, and Pohick Church, among others. Section 4 also describes the extensive coordination with local, state, and federal agencies on the Route 1 improvements, and the inclusive public involvement program, which included three public meetings. Local, state, and federal agencies and the general public were contacted early in the study and asked to identify issues of concern and to provide information about environmental resources within the study area. The agency and public comments received in response to these coordination efforts were instrumental in defining the scope of the EA. In addition, throughout the process, the public was notified about study findings via the project website (http://www.efl.fhwa.dot.gov/projects/environment.aspx) and given opportunities to provide comments about transportation needs, potential alternatives, and environmental concerns.

The Draft Section 4(f) Evaluation was sent to the Department of Interior for review and comment concurrently with the release of the EA to the public for a minimum of 45 days in accordance with 23 CFR 774.5.<sup>10</sup>

## VIII. Summary

FHWA's Eastern Federal Lands Highway Division, in cooperation with Fairfax County, U.S. Army Garrison Fort Belvoir, and the Virginia Department of Transportation, is conducting studies to address deficiencies in the 3.4-mile-long section of U.S. Route 1 between Telegraph Road (Route 611) and Mount Vernon Memorial Highway (Route 235) in Fairfax County, Virginia. The purpose of the project is to expand roadway capacity to accommodate travel demand, facilitate access to medical and other facilities on Fort Belvoir, implement facilities for pedestrian and bicycle travel, and provide space for future transit services pursuant to Fairfax County's Comprehensive Plan.

Four alternatives have been considered, including the No-Build Alternative (Alternative A) and three build alternatives (Alternatives B, B Modified, and C). The No-Build Alternative would not meet the purpose and need for the project; Alternatives B, B Modified, and C would equally meet the purpose and need. As described within this Section 4(f) evaluation, Accotink Bay Wildlife Refuge, Fort Belvoir Forest and Wildlife Corridor, Fort Belvoir Military Railroad, and Woodlawn Historic District meet the criteria for protection under Section 4(f) and would be "used" by Build Alternatives B, B Modified, or C. Alternative B Modified has been selected as the Preferred Alternative as it minimizes public road right-of-way use of lands currently designated as a National Historic Landmark and properties listed, or eligible for listing, on the National Register of Historic Places in accordance with Section 4(f) of the Department of Transportation Act and Section 110(f) of the National Historic Preservation Act. The minimization strategies proposed as part of Alternative B Modified include the relocation of Route 1 farther away from the Woodlawn Plantation National Historic Landmark, the Woodlawn Quaker Meetinghouse and Cemetery, and the Woodlawn Baptist Church Cemetery.

Approved:

Melisa L. Ridenour, Division Engineer, EFLHD Da

<sup>&</sup>lt;sup>10</sup> Comments and recommendations on the EA and Draft Section 4(f) were received by letter from Lindy Nelson, Regional Environmental Officer, U.S. Department of the Interior Office of the Secretary, to Jack Van Dop, FHWA, dated August 8, 2012.