FINAL

ENVIRONMENTAL ASSESSMENT

OF THE PROPOSED

VA HEALTH CARE CENTER

FREDERICKSBURG, VIRGINIA

U.S. DEPARTMENT OF VETERANS AFFAIRS

425 I STREET, NW

WASHINGTON, DC 20001

PREPARED BY:

TTL Associates, Inc.

August 25, 2020

EXECUTIVE SUMMARY

This environmental assessment (EA) has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic impacts associated with the U.S. Department of Veterans Affairs' (VA's) proposed establishment of a health care center (HCC) in the Fredericksburg, Virginia, area. This EA has been prepared as required in accordance with the National Environmental Policy Act of 1969 ([NEPA]; 42 United States Code 4321 et seq.), the President's Council on Environmental Quality Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), *Environmental Effects of the Department of Veterans Affairs Actions* (38 CFR Part 26), and in accordance with *VA NEPA Interim Guidance for Projects* (U.S. Department of Veterans Affairs 2010).

PROPOSED ACTION

VA's Proposed Action is to establish an approximately 426,722- square-foot[1], three- or four-story HCC with approximately 2,600 parking spaces in the Fredericksburg, Virginia, area. Two undersized leased Fredericksburg area VA clinics would be replaced by the new facility. The proposed HCC would also provide approximately 30,000 square feet of clinical space for the Department of Defense.

VA would select a developer to construct the HCC on a build-to-suit basis and then lease the facility to VA for up to 20 years. The developer (lessor) would be responsible to design and construct the facility in compliance with VA design requirements and applicable federal, state, and local regulations. VA contract design requirements ensure sustainable development by requiring the HCC development meet a minimum rating of two Green Globes for new construction and sustainable interiors and the buildings earn an Energy Star label. The facility would be staffed by VA, with facility management and maintenance provided by the lessor.

VA anticipates construction of the proposed HCC would begin in 2021 and the new facility would open in 2024 or 2025. The new HCC would provide primary care, mental health, and specialty care outpatient services to the area's Veterans. Outpatient health care services currently provided by the undersized and overcrowded Fredericksburg VA Clinic (130 Executive Center Parkway) and the Fredericksburg 2 VA Clinic (10401 Spotsylvania Avenue) would be relocated and consolidated at the new HCC. VA would no longer lease or operate these facilities once the proposed HCC is open and the existing leases expire.

PURPOSE AND NEED

The purpose of the Proposed Action is to provide enhanced and expanded primary care, mental health, and specialty care outpatient services to Veterans in the Fredericksburg, Virginia, area in an integrated, right-sized, energy-efficient facility. The proposed HCC would decompress the overcrowded Hunter Holmes McGuire VA Medical Center in Richmond, Virginia (Richmond VAMC), resulting in the improved delivery of health care services by reducing the workload at this facility. The Proposed Action would consolidate and expand outpatient services to Veterans in the region, allowing VA to provide area Veterans timely access to state-of-the-art health care and mental health services in a centralized, appropriately sized, modern facility commensurate with current and projected workloads. The proposed HCC would also facilitate collaboration and sharing of health care services with the Department of Defense.

The Proposed Action is needed to address current and future projected health care capacity and space gaps and operational inefficiencies that were identified through the VA Strategic Capital Investment Planning (SCIP) process. The Richmond VAMC is overcrowded and space-constrained and insufficient

[1] Building areas were calculated using the methodology of American National Standards Institute/Building Owners and Managers Association Office Area standard.

to meet the current and rapidly growing health care needs of area Veterans. The SCIP process identified an approximately 815,000-square-foot space gap for the Richmond VAMC and its supporting outpatient clinics. In addition, the Richmond and Fredericksburg area is one of the fastest growing markets in the VA health care system. Over the next 20 years, the number of Veterans enrolled is projected to increase more than 44 percent and the outpatient workload is projected to increase more than 71 percent. The two existing VA-leased outpatient clinics in the Fredericksburg area are undersized (total 26,000 square feet) and insufficient to meet the current and projected future health care needs of Veterans in the Fredericksburg area. Further, operating separate VA clinics in the area creates operational inefficiencies, integrates services poorly, and increases costs. In addition, the Richmond VAMC is located more than 50 miles south of Fredericksburg, requiring substantial travel time for Fredericksburg-area Veterans seeking outpatient health care services from the Richmond VAMC.

ALTERNATIVES

VA received three viable offers for development on two sites (Gateway Site and Hood Drive Site) on which to establish the proposed HCC. This EA examines in depth three Action Alternatives—the implementation of the Proposed Action at the Gateway Site (Gateway Site A or Gateway Site B) or the Hood Drive Site—and the No Action Alternative:

Action Alternatives

- Gateway Site: The Gateway Site consists of approximately 35 acres of land within the proposed 1500 Gateway Boulevard Development. The Gateway Site is located along the eastern side of Interstate 95, between Cowan Boulevard and Plank Road, and west of the proposed Gateway Boulevard extension in the City of Fredericksburg. The site is mostly undeveloped woodlands. The site was primarily farmland in the 1960s and 1970s with limited undeveloped woodlands along the eastern and northern boundaries, and has been gradually reforested since the 1980s. Two development plans (offers) are being considered for the Gateway Site:

  Alternative A: Gateway Site A – The Gateway Site A Alternative consists of approximately 35 acres. The HCC development would include a three-story HCC building located near the center of the site and approximately 2,600 surface parking spaces located north, east, and south of the HCC building. Site access would be provided by three drives from the proposed Gateway Boulevard extension.

  Alternative B: Gateway Site B – The Gateway Site B Alternative consists of approximately 33 acres. The HCC development would include a four-story HCC building located near the center of the site, a two-story parking garage north of the HCC building, and surface parking spaces located north, east, and south of the building. A total of approximately 2,600 parking spaces would be provided. Site access would be provided by three drives from the proposed Gateway Boulevard extension.

- Hood Drive Site: The Hood Drive Site consists of approximately 49 acres of land located along the eastern side of Interstate 95, south of Hood Drive, and east of U.S. Route 1 (also referred to as Jefferson Davis Highway) in an unincorporated area of Spotsylvania County. The site is mostly undeveloped, grassy land with small areas of shrubs/trees and a pond. The site includes a small parcel with a house (4708 Hood Drive) that was built in the early 1950s and a small parcel with a vacant gasoline station/convenience store (5313 U.S. Route 1) that was built in the early 1970s. The Hood Drive Site was mostly unimproved farmland with a farmstead in the northeastern portion from at least 1942 to the 1970s. With the exception of the north-central portion, the site gradually became reforested starting in the 1970s and was heavily wooded by 2003. The site was cleared of most of its vegetation between 2005 and 2006 in anticipation of commercial development. Earthwork for the commercial development began in late 2008 and ceased prior to completion in 2009. During that time, the southern portion of the site was heavily disturbed and

graded in preparation for development. Since 2009, the majority of the site has gradually become revegetated with grass and shrubs.

Alternative C: Hood Drive Site – The Hood Drive Site Alternative would consist of a four-story HCC building located near the center of the site and approximately 2,600 surface parking spaces located north, east, south, and west of the HCC building. A stormwater management pond would be located near the southern site boundary. Site access would be provided by two drives from U.S. Route 1 and one drive from Hood Drive. The main access drive would be from U.S. Route 1.

No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented. VA would continue to provide primary, mental health, and specialty care outpatient services at the Richmond VAMC and the two existing VA-leased clinics in the Fredericksburg area. The Action Alternative sites likely would remain vacant in the near future and ultimately may be developed by others for other commercial use, in accordance with local zoning. This alternative would limit VA's ability to provide health care services to U.S. Veterans in the region, and thus would not meet the purpose of or need for the Proposed Action. However, the No Action Alternative was evaluated in this EA as required under the Council on Environmental Quality regulations; it also provides a benchmark for comparing potential impacts of the Action Alternatives.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

The affected environment of the Action Alternative sites and their immediate surroundings, or the region of influence of the Proposed Action, is discussed in Section 3 of this EA.

The four considered alternatives are evaluated in this EA to determine their potential direct or indirect impact(s) on the physical, environmental, cultural, and socioeconomic aspects of the Proposed Action's region of influence. Technical areas evaluated in this EA are:

- *Aesthetics*
- *Air Quality*
- *Cultural and Historic Resources*
- *Geology and Soils*
- *Hydrology and Water Quality*
- *Wildlife and Habitat*
- *Noise*
- *Land Use*
- *Floodplains, Wetlands, and Coastal Zone Management*
- *Socioeconomics*
- *Community Services*
- *Solid Waste and Hazardous Materials*
- *Traffic, Transportation, and Parking*
- *Utilities*
- *Environmental Justice*
- *Cumulative Impacts*
- *Potential for Generating Substantial Controversy*

Potential Effects of the Action Alternatives

The Proposed Action would result in the impacts identified throughout Section 3 and summarized in the table below. These include short-term and/or long-term potential adverse impacts to aesthetics, air quality, cultural resources (Gateway Site), soils, hydrology and water quality, wildlife and habitat (Gateway Site), noise, land use (Hood Drive Site), wetlands, coastal zones, solid waste and hazardous materials, and transportation. All of these potential impacts are less than significant and would be further reduced through careful implementation of the general best management practices (BMPs); management, minimization, and mitigation measures; and compliance with regulatory requirements, as identified in Section 4.

National Historic Preservation Act (NHPA) compliance and consultation indicates that mitigation would be required for potential cultural resources impacts at the Gateway Site. One archaeological site that

represents a Confederate Civil War encampment with a likely artillery position encompasses much of the eastern portion of the Gateway Site (approximately eight acres) and is eligible for listing on the National Register of Historic Places (NRHP). VA has prepared and executed a procedural Programmatic Agreement under Section 106 of the NHPA with the Virginia Department of Historical Resources (Virginia State Historic Preservation Office [SHPO]) that establishes procedures to address potential adverse effects if the Gateway Site is selected for the proposed HCC. If the Gateway Site is selected and adverse effects cannot be avoided, VA would execute a Memorandum of Agreement with the Virginia SHPO, the Advisory Council on Historic Preservation, and other interested consulting parties with appropriate mitigation measures. Mitigation measures may include further exploration for data inventory and recovery, archaeological/historic publications, and/or archaeological monitoring during excavation work associated with the proposed HCC construction. With the completion of these NHPA mitigation measures, cultural resources impacts would be less than significant.

A traffic impact analysis (TIA) for the Hood Drive Site found that the traffic conditions at several the intersections near the site would operate at an unacceptable level of service (LOS) in 2025 without the proposed HCC at this site. Traffic generated by the proposed HCC at the Hood Drive Site would exacerbate these failing conditions and would cause other intersections to operate at an unacceptable LOS. However, the TIA found that that with the implementation of roadway improvements, the intersections in the vicinity of the Hood Drive Site would operate at an acceptable LOS. If the Hood Drive Site is selected for the proposed HCC, the developer would work with Spotsylvania County and Virginia Department of Transportation (VDOT), as applicable, during the HCC design to identify and implement roadway improvements to ensure that there would be no significant traffic impacts. Spotsylvania County has committed to funding the necessary local roadway network improvements if the Hood Drive Site is selected for the HCC. The developer would be responsible for funding improvements at the HCC entrance/exit drives.

A TIA for the 1500 Gateway Boulevard Development identified several improvements to area roadways and intersections that would be needed to mitigate the traffic impacts from the 1500 Gateway Boulevard Development, including the proposed HCC at the Gateway Site. The identified improvements are planned to be implemented by the City of Fredericksburg, the Gateway Site owner, and/or VDOT, and have been partially funded for implementation. The City of Fredericksburg anticipates VDOT Smart Scale funds will complete the funding for the roadway improvements. The City of Fredericksburg has committed to funding the improvements if Smart Scale funds are not received. The TIA found that with the implementation of the planned improvements, roads and intersections in the site area would operate at an acceptable LOS with the complete 1500 Gateway Boulevard Development, including the proposed HCC at the Gateway Site.

The Action Alternatives would result in beneficial short-term and long-term impacts to the local socioeconomic environment. Notably, a significant long-term beneficial effect to the health of U.S. Veterans in the region would occur should the new HCC be constructed at one of the Action Alternative sites.

Potential Effects of the No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented and no improvements to the current level of VA's regional health care services or capability would occur. No beneficial impacts attributable to the Proposed Action would occur and VA's ability to provide sufficient, requisite health care services to the region's Veterans would be compromised.

Summary of Impact Analysis

Resource Area	Action Alternatives		No Action
	Gateway Site	Hood Drive Site	
Aesthetics	New HCC would be an attractive three- or four-story building built in accordance with Fredericksburg development standards. No significant impact.	New HCC would be an attractive four-story building built in accordance with Spotsylvania County development standards. No significant impact.	None
Air Quality	Dust and particulate matter emissions during construction managed with BMPs. Vehicle and minor equipment emissions during operation. No significant impact.		Similar regional vehicle emissions
Cultural Resources	One archaeological site that represents a Confederate Civil War encampment eligible for listing on the NRHP encompasses approximately eight acres of the eastern portion of the Gateway Site. VA has executed a procedural Programmatic Agreement under Section 106 of the NHPA with the Virginia SHPO to address and mitigate the adverse effects. No significant impact with implementation of NHPA mitigation.	No NRHP-listed or eligible historic properties are present at or near the sites or would be affected. No impact.	None
Geology and Soils	Soil erosion and sedimentation impacts during construction managed with BMPs. No significant impact.		None
Hydrology and Water Quality	Stormwater runoff during construction managed through BMPs. Stormwater from the proposed development would discharge to stormwater management ponds located adjacent to (Gateway Site) or on (Hood Drive Site) the sites. No significant impact.		None

Resource Area	Action Alternatives		No Action
	Gateway Site	Hood Drive Site	
Wildlife and Habitat	Biological Survey identified no federally or state protected species. Site development would eliminate a mixed pine/hardwood forest that supports a diversity of species. No significant impact.	Biological Survey identified no federally or state protected species. No/negligible impact.	None
Noise	Short-term noise impacts during construction managed through BMPs. Minor operational impacts associated with vehicle traffic, HVAC systems, and grounds maintenance. No significant impact.		None
Land Use	Located within Planned Medical Development Center area. Health care facilities are a permitted use under current zoning and compatible with surrounding land use. No/negligible impact.	Located within mixed-use Commercial – Highway District (C-3) with the small residential parcel zoned residential (R-1). Health care facilities are a permitted use under the current C-3 zoning designation for the majority of the site but are not allowed under the current R-1 zoning designation. The residential parcel, proposed to be used as an access drive, would require rezoning. No significant impact.	None
Floodplains, Wetlands, and Coastal Zone Management	Small wetland (southeastern portion of the site) to be filled with permit approval from U.S. Army Corps of Engineers and Virginia Department of Environmental Quality (VDEQ). No floodplains located on the site or adjacent properties. Project would be implemented consistent with state coastal zone management program. No significant impact.	Wetland areas on the site would be impacted by the proposed HCC development. Would be permitted by U.S. Army Corps of Engineers if Waters of the U.S. and/or VDEQ if isolated. No floodplains located on the site or adjacent properties. Project would be implemented consistent with state coastal zone management program. No significant impact.	None
Socioeconomics	Short-term localized beneficial impact to employment during construction. Enhanced and expanded health care services would be a significant beneficial impact to Veterans in the Fredericksburg area.		Inadequate VA health care facilities - adverse impact to local Veterans

Resource Area	Action Alternatives		No Action
	Gateway Site	Hood Drive Site	
Community Services	Proposed HCC would not put a significant additional load on local community services. No/negligible impact.		None
Solid Waste and Hazardous Materials	No recognized environmental conditions identified. Potential impacts from petroleum and hazardous substance handling during construction and operation would be managed through BMPs. No significant impact.	Former gasoline station/convenience store in the eastern portion of site has residual impacted site soil and groundwater. Impacted soil and groundwater would be properly handled and managed during construction in accordance with VDEQ requirements. Potential impacts from petroleum and hazardous substance handling during construction and operation would be managed through BMPs. No significant impact.	None

Resource Area	Action Alternatives		No Action
	Gateway Site	Hood Drive Site	
Transportation and Parking	Minor short-term impact from construction traffic. A traffic impact analysis (TIA) found with proposed and partially funded Gateway Boulevard extension installation and other planned roadway improvements, area roads would operate at an acceptable level of service (LOS) with the proposed HCC. The City of Fredericksburg has committed to funding the remainder of the improvements, if necessary. Proposed HCC would include adequate on-site parking. No significant impact with the planned roadway improvements.	Minor short-term impact from construction traffic. A TIA found that the traffic conditions at intersections near the site would operate at an unacceptable LOS in 2025 without the proposed HCC. Traffic generated by the proposed HCC would exacerbate these failing conditions and would cause other intersections to operate at an unacceptable LOS. The TIA found that that with the implementation of roadway improvements, the intersections in the vicinity of the Hood Drive Site would operate at an acceptable LOS. Spotsylvania County has committed to funding these improvements if the Hood Drive Site is selected. Proposed HCC would include adequate on-site parking. No significant impact with the planned roadway improvements.	None
Utilities	Utilities likely adequate for the HCC already service the site area. Negligible impact.		None
Environmental Justice	Located in an area with a slightly higher minority population and slightly higher low-income population. Proposed Action would have little impact on any area residents. Low-income and minority Veterans would benefit from the proposed HCC. Negligible impact.		None

Cumulative Impacts

This EA also examines the potential cumulative effects of implementing each of the considered alternatives. This analysis finds that the Action Alternatives, with the implementation of the BMPs; management, minimization, and mitigation measures; and regulatory compliance measures specified in this EA, would not result in significant adverse cumulative impacts to the human environment.

AGENCY AND PUBLIC INVOLVEMENT

Agencies consulted for this EA include:

- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- U.S. Department of Agriculture Natural Resource Conservation Service
- Federal Highway Administration
- Virginia Department of Game and Inland Fisheries
- Virginia Division of Historical Resources (SHPO)
- Virginia Department of Environmental Quality, various divisions
- Virginia Department of Transportation
- Virginia Department of Forestry
- Virginia Department of Conservation and Recreation
- Virginia Department of Agriculture and Consumer Services
- Virginia Natural Heritage Resources
- Friends of the Rappahannock
- George Washington Regional Commission
- Fredericksburg Area Metropolitan Planning Organization
- Spotsylvania County (various divisions)
- City of Fredericksburg (various departments)

Responses were received from the U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, VDEQ Office of Environmental Impact Review, VDEQ Office of Drinking Water, Virginia Department of Conservation and Recreation, Virginia Department of Forestry, Spotsylvania County Economic Development Department, Spotsylvania County, and the City of Fredericksburg. Input provided by these agencies is summarized in Section 6. Agency information and comments have been incorporated into this EA, as and where appropriate. Copies of relevant correspondence can be found in Appendix B.

Four federally recognized Native American Tribes (Catawba Indian Nation, Delaware Nation of Oklahoma, Pamunkey Indian Tribe, and Monacan Indian Nation) were identified as having possible ancestral ties to the area of the sites. VA invited each of these Tribes to provide input regarding the Proposed Action and to participate in the Section 106 process. The Pamunkey Indian Tribe and the Monacan Indian Tribe have elected to participate and are Section 106 consulting parties.

VA published and distributed the Draft EA for a 30-day public comment period, as announced by a Notice of Availability published in the Free Lance Star, a local newspaper of general circulation, on July 12 and 15, 2020. A copy of the Draft EA was also made available on the Richmond VAMC website (www.richmond.va.gov/pressreleases/FredericksburgHCC_EA.asp). Six agencies (a member of the Stafford County Board of Supervisors, Spotsylvania County Department of Economic Development, Virginia Department of Agriculture and Consumer Services, Spotsylvania County Zoning Administrator, Spotsylvania County Administrator, and the Virginia Department of Environmental Quality Office of Local Government Programs) provided comments on the Draft EA; these comments were considered in preparing the Final EA, as appropriate, and are summarized in Section 5.

VA held a virtual public meeting on July 29, 2020, at 6 pm to present a summary of the Draft EA and to receive public input and comment on the Draft EA. Two members of the public attended the public meeting. Comments on the Draft EA received during the public meeting are also summarized and addressed in Section 5.

CONCLUSION

This EA concludes there would be no significant adverse impact, either individually or cumulatively, to the human environment associated with the any of the Action Alternatives, provided the BMPs;

management, minimization, and mitigation measures; and regulatory compliance measures described in this EA are implemented.

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ACRONYMS AND ABBREVIATIONS

AADT	annual average daily traffic
ACM	asbestos-containing materials
amsl	above mean sea level
BGS	below ground surface
BMP	best management practice
C-3	commercial – highway district
CBOC	community-based outpatient clinic
CEQ	President's Council on Environmental Quality
CFR	Code of Federal Regulations
CBPA	Chesapeake Bay Protection Act
CPBO	Chesapeake Bay Protection Ordinance (Spotsylvania County)
CZMA	Coastal Zone Management Act
dBA	decibels, A-weighted scale
DoD	Department of Defense
EA	environmental assessment
ESA	environmental site assessment
FCO	Fredericksburg Code of Ordinances
HCC	health care center
IPaC	USFWS Information for Planning and Conservation
JD	jurisdictional determination
LOS	level of service
MBTA	Migratory Bird Treaty Act
MU-5	mixed use
MUTCD	Manual on Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFA	no further action
NHPA	National Historic Preservation Act
NHR	Natural Heritage Resources
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
ODW	Office of Drinking Water
OEIR	Office of Environmental Impact Review
PA	programmatic agreement
PDMC	planned development medical center
R-1	residential
REC	recognized environmental condition
RMA	Resource Management Area
ROW	right-of-way
RPA	Resource Protection Area
SCCO	Spotsylvania County code of ordinances
SCIP	strategic capital investment planning
SFHA	special flood hazard area
SHPO	Virginia Department of Historic Resources (state historic preservation office)
SWPPP	stormwater pollution prevention plan
TIA	traffic impact analysis
U.S.	United States of America
USACE	U.S. Army Corps of Engineers

USC	U.S. Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
VA	U.S. Department of Veterans Affairs
VAFWIS	Virginia Fish and Wildlife Information Service
VAMC	VA medical center
VDCR	Virginia Department of Conservation and Recreation
VDEQ	Virginia Department of Environmental Quality
VDF	Virginia Department of Forestry
VDGIF	Virginia Department of Game and Inland Fisheries
VDOT	Virginia Department of Transportation
VPDES	Virginia Pollutant Discharge Elimination System
VRP	voluntary remediation program
VWP	Virginia Water Protection
WOTUS	Waters of the U.S.

1.0 INTRODUCTION, INCLUDING PURPOSE OF AND NEED FOR THE ACTION

1.1 Introduction

This environmental assessment (EA) has been prepared as required in accordance with the National Environmental Policy Act of 1969 ([NEPA]; 42 United States Code [USC] 4321 et seq.), the President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), *Environmental Effects of the Department of Veterans Affairs Actions* (38 CFR Part 26), and VA's *NEPA Interim Guidance for Projects* (U.S. Department of Veterans Affairs 2010). Federal agencies are required to consider the environmental effects of their proposed actions. This EA is required to determine if VA's Proposed Action would have significant environmental impacts.

This EA has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic impacts associated with VA's proposed construction and operation of an approximately 426,722-square-foot[2] health care center (HCC) with approximately 2,600 parking spaces, other required site improvements and amenities, and landscaped open space.

The HCC would be located on one of two sites (Gateway Site or Hood Drive Site) in the Fredericksburg, Virginia, area. Figure 1-1 depicts the general locations of the two sites.

In accordance with the cited regulations, this EA allows for public input into the federal decision-making process; provides federal decision-makers with an understanding of potential environmental effects of their decisions, before making these decisions; identifies measures the federal decision-maker could implement to reduce potential environmental effects; and documents the NEPA process.

1.2 Background

In 2018, Congress authorized VA, under the Veterans Access, Choice, and Accountability Act, to establish a new HCC in the Fredericksburg area, which would reduce space and workload pressures at the Hunter Holmes McGuire VA Medical Center in Richmond, Virginia (Richmond VAMC), and would consolidate and replace the two existing, undersized leased Fredericksburg VA clinics. The new HCC would enhance VA outpatient services by closing space and utilization gaps identified in the VA Strategic Capital Investment Planning (SCIP) process and would reduce patient wait times. The new HCC would expand and enhance primary care, mental health, and specialty care services in an appropriately sized and efficient state-of-the-art facility to meet the requirements of the VHA Health Care Uniform Benefits package. The proposed HCC would also provide clinical space for the Department of Defense (DoD), which would facilitate collaboration and sharing of services between VA and DoD.

The Richmond VAMC is part of the VA Mid-Atlantic Health Care Network. Four community-based outpatient clinics (CBOCs), located in Charlottesville, Fredericksburg (two), and Emporia, Virginia, support the Richmond VAMC. The two existing CBOCs in the Fredericksburg area are VA leased facilities: the Fredericksburg VA Clinic (130 Executive Center Parkway) and the Fredericksburg 2 VA Clinic (10401 Spotsylvania Avenue). The two Fredericksburg CBOCs total approximately 26,000 square feet. The Richmond VAMC and the associated clinics offer primary care, tertiary care, and long-term care in areas of medicine, surgery, psychiatry, physical medicine and rehabilitation, spinal cord injury,

[2] Building areas were calculated using the methodology of American National Standards Institute/Building Owners and Managers Association Office Area standard.

neurology, oncology, dentistry, geriatrics, and extended care services to Veterans in central and southern Virginia and parts of northern North Carolina.

The Richmond VAMC is overcrowded and space-constrained and insufficient to meet the current and rapidly growing regional Veteran health care needs. In addition, the two existing Fredericksburg CBOCs are undersized and insufficient to meet the current and projected future health care needs of Veterans in the Fredericksburg area.

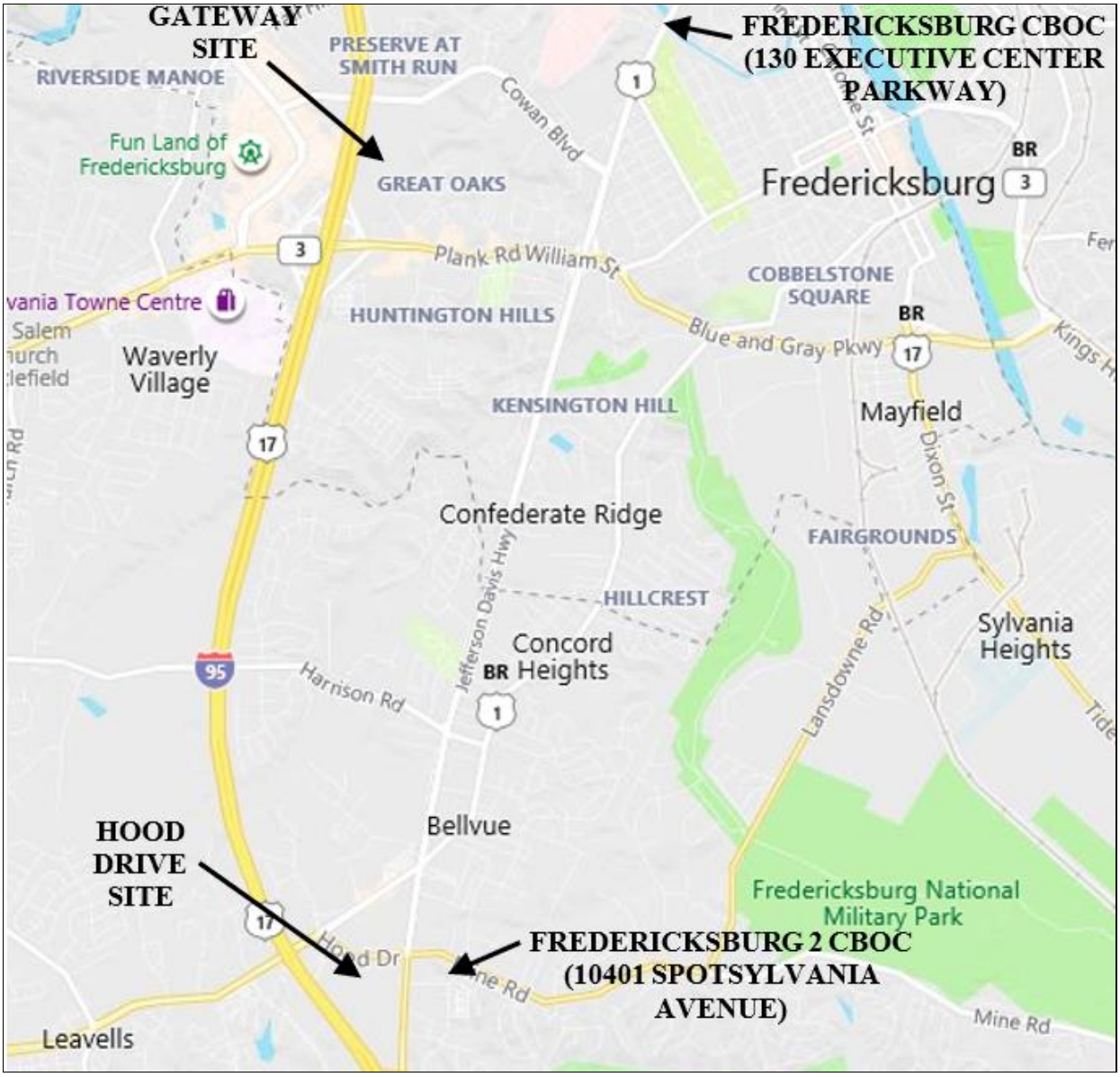

Figure 1-1 Regional Location Map

1.3 Purpose and Need

The purpose of the Proposed Action is to provide enhanced and expanded primary care, mental health, and specialty care outpatient services to Veterans in the Fredericksburg, Virginia, area in an integrated, right-sized, energy-efficient facility. The proposed HCC would decompress the overcrowded Richmond VAMC, resulting in the improved delivery of health care services by reducing the workload at this facility. The Proposed Action would consolidate and expand outpatient services to Veterans in the region, allowing VA to provide area Veterans timely access to state-of-the-art health care and mental health services in a centralized, appropriately sized, modern facility commensurate with current and projected workloads. The proposed HCC would also facilitate collaboration and sharing of health care services with DoD.

The Proposed Action is needed to address current and future projected health care capacity and space gaps and operational inefficiencies that were identified through the VA SCIP process. The Richmond VAMC is overcrowded and space-constrained and insufficient to meet the current and rapidly growing health care needs of area Veterans. The SCIP process identified an approximately 815,000-square-foor space gap for the Richmond VAMC and its supporting outpatient clinics. In addition, the Richmond and Fredericksburg area is one of the fastest growing markets in the VA health care system. Over the next 20 years, the number of Veterans enrolled is projected to increase more than 44 percent and the outpatient workload is projected to increase more than 71 percent. The two existing VA-leased outpatient clinics in the Fredericksburg area are undersized (total 26,000 square feet) and insufficient to meet the current and projected future health care needs of Veterans in the Fredericksburg area. Further, operating separate VA clinics in the area creates operational inefficiencies, poorly integrated services, and increased costs. In addition, the Richmond VAMC is located more than 50 miles south of Fredericksburg, requiring substantial travel time for Fredericksburg area Veterans seeking outpatient health care services from the Richmond VAMC.

1.4 Decision-Making

This EA has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic impacts associated with VA's proposed construction and operation of a new HCC in the Fredericksburg, Virginia area.

VA, as a federal agency, is required to incorporate environmental considerations into their decision-making process for the actions they propose to undertake. This is done in accordance with the regulations identified in Section 1.1.

Ultimately, VA will decide, in part based on the analysis presented in this EA and after having taken potential environmental, cultural, and socioeconomic effects into account, whether VA should implement one of the Action Alternatives identified for the Proposed Action, and, as appropriate, carry out management, minimization, and mitigation measures to reduce effects on the environment.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 Introduction

This Section provides information on the Proposed Action and its alternatives, including those that VA initially considered, but eliminated, and the reasons for eliminating them. The screening criteria and process developed and applied by VA to hone the number of viable sites are described, providing an understanding of VA's rationale for analyzing the three Action Alternatives in this EA.

2.2 Proposed Action

VA's Proposed Action is to establish an approximately 426,722-square-foot three- or four-story HCC with approximately 2,600 parking spaces, other required site improvements and amenities, and landscaped open space in the Fredericksburg, Virginia, area. The new HCC would provide primary care, mental health, and specialty care outpatient services to Fredericksburg area Veterans.

VA established the size of the facility required for this proposal based on the number of Veterans currently receiving outpatient health care services at the Richmond VAMC and the two existing, VA-leased Fredericksburg clinics, and the number of Veterans forecasted to require such services over the anticipated 20-year life of the proposed HCC. The proposed HCC would also provide approximately 30,000 square feet of clinical space for DoD, which would facilitate collaboration and sharing of services. VA would select a developer who would construct the proposed HCC for VA on a build-to-suit basis, and then lease it to VA for up to 20 years.

No detailed design plans for the proposed HCC are currently available as this project would be executed as a build-to-suit lease. The developer (lessor) would be responsible to design and construct the facility, in compliance with VA design requirements and applicable federal, state, and local regulations. The HCC would comply with the Americans with Disabilities Act and meet all requirements set forth in Executive Order 13834, Efficient Federal Operations. The facility would be designed and built to VA design criteria and in accordance with local building and zoning codes.

The VA contract design requirements ensure that the HCC development would be sustainably developed by requiring it to meet a minimum rating of two Green Globes for new construction and sustainable interiors and to earn an Energy Star label.

VA anticipates the design and construction of the proposed HCC would begin in 2021 and the new facility would open in 2024 or 2025. VA would no longer lease or operate the two existing leased Fredericksburg VA clinics once the proposed HCC is open and the existing leases expire.

The HCC would operate Monday through Friday from 6:00 am to 8:00 pm and Saturday and Sunday from 7:00 am to 5:00 pm, except on federal holidays. Staff, patients, volunteers, and other guests would primarily be drawn from the Richmond VAMC (outpatient health care services only) and the current Fredericksburg area VA clinics; however, additional VA staff would be required for the expanded services at the new, much larger facility. The HCC would be available to Veterans and service members from all branches of the U.S. Armed Forces who meet the criteria for treatment at a VA facility.

2.3 Alternatives Development

VA undertook a sequential planning and screening process, seeking viable alternatives for the Proposed Action. The process and its results are summarized below:

- After identifying the inadequacies of the Richmond VAMC and the two leased Fredericksburg area VA clinics to meet the current and increasing demand for primary, mental health, and

specialty care outpatient services by area Veterans, VA examined these facilities for their potential to support the Proposed Action. The Richmond VAMC is overcrowded and space-constrained with no available space for new construction or expansion and is located approximately 50 miles from the Fredericksburg area. The two existing leased Fredericksburg VA clinics cannot be expanded beyond their current sizes. In addition, continued operation of two separate facilities would not enable VA to provide centralized, consolidated health care services. As such, VA determined that the existing facilities could not be expanded, modified, or renovated to meet the purpose and need for the Proposed Action.

- VA then advertised (via a pre-solicitation) for developable land (for new construction) or existing buildings of sufficient size located within a delineated area along the Interstate 95 corridor near Fredericksburg that would accommodate an approximately 378,461-square-foot HCC with 2,600 on-site parking spaces.
- VA received several responses (expressions of interest) to this advertisement. VA evaluated each of these sites based on surrounding land uses; location of nearest emergency response services; aesthetic quality; current zoning; accessibility to highways, public transportation, shopping, restaurants, and other features; utility availability; overall site condition; site shape and size; topography; floodplains; and visible environmental issues/features. Based on this analysis, VA determined that there appeared to be sufficient potentially suitable locations for the proposed HCC within the delineated area.
- VA then advertised through a Request for Lease Proposals for the development and lease of a new 426,722-square-foot, minimum three-story clinical building with 2,600 parking spaces within the delineated area. In response to the solicitation, VA received three offers within the competitive range for the proposed HCC development at two sites (Gateway Site and Hood Drive Site). These sites are described in Section 2.4.

2.4 Alternatives Evaluated in this EA

As described in Section 2.3, VA received three viable offers for two sites (two for the Gateway Site and one for the Hood Drive Site) on which to establish the proposed HCC:

- **Gateway Site**: The Gateway Site consists of approximately 35 acres of land within the proposed 1500 Gateway Boulevard Development. The Gateway Site is located along the eastern side of Interstate 95, between Cowan Boulevard and Plank Road, and west of the proposed Gateway Boulevard extension in the City of Fredericksburg. The Gateway Site is identified by the City of Fredericksburg as part of Parcel Numbers 7769-94-7825 and 7779-03-1528. The site is mostly undeveloped woodlands. The site was primarily farmland in the 1960s and 1970s with limited undeveloped woodlands along the eastern and northern boundaries, and has been gradually reforested since the 1980s. The Gateway Site is depicted on Figures 2-1 and 2-2.
- **Hood Drive Site**: The Hood Drive Site consists of approximately 49 acres of land located along the eastern side of Interstate 95, south of Hood Drive, and east of U.S. Route 1 in an unincorporated area of Spotsylvania County. The Hood Drive Site is identified by Spotsylvania County as Parcel Numbers 35-A-113, 35-A-114, and 36-A-10. The site is mostly undeveloped, grassy land with small areas of shrubs/trees and a pond. The site includes a small parcel with a house (4708 Hood Drive) that was built in the early 1950s and a small parcel with a vacant gasoline station/convenience store (5313 U.S. Route 1) that was built in the early 1970s. The Hood Drive Site was mostly unimproved farmland with a farmstead in the northeastern portion from at least 1942 to the 1970s. With the exception of the north-central portion, the site gradually became reforested starting in the 1970s and was heavily wooded by 2003. The site was cleared of most of its vegetation between 2005 and 2006 in anticipation of commercial development.

Earthwork for the commercial development began in late 2008 and ceased prior to completion in 2009. During that time, the southern portion of the site was heavily disturbed and graded in preparation for development. Since 2009, the majority of the site has gradually become revegetated with grass and shrubs. The Hood Drive Site is depicted on Figures 2-3 and 2-4.

This EA examines in depth three Action Alternatives—the implementation of the Proposed Action at the Gateway Site (Gateway Site A or Gateway Site B) or the Hood Drive Site—and the No Action Alternative.

2.4.1 Alternative A: Gateway Site A

The Gateway Site A Alternative consists of approximately 35 acres. The HCC development would include a three-story HCC building located near the center of the site and approximately 2,600 surface parking spaces located north, east, and south of the HCC building. Site access would be provided by three drives from the proposed Gateway Boulevard extension.

2.4.2 Alternative B: Gateway Site B

The Gateway Site B Alternative consists of approximately 33 acres. The HCC development would include a four-story HCC building located near the center of the site, a two-story parking garage north of the HCC building, and surface parking spaces located north, east, and south of the building. A total of approximately 2,600 parking spaces would be provided. Site access would be provided by three drives from the proposed Gateway Boulevard extension.

2.4.3 Alternative C: Hood Drive Site

The Hood Drive Site Alternative would consist of a four-story HCC building located near the center of the site and approximately 2,600 surface parking spaces located north, east, south, and west of the HCC building. A stormwater management pond would be located near the southern site boundary. Site access would be provided by two drives from U.S. Route 1 and one drive from Hood Drive. The main access drive would be from U.S. Route 1.

2.4.4 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented. VA would continue to provide primary, mental health, and specialty care outpatient services at the Richmond VAMC and the two existing VA-leased clinics in the Fredericksburg area until their leases expire. The Action Alternative sites likely would remain vacant in the near future and ultimately may be developed by others for other commercial use, in accordance with local zoning. This alternative would limit VA's ability to provide health care services to U.S. Veterans in the region, and thus would not meet the purpose of or need for the Proposed Action. However, the No Action Alternative was evaluated in this EA as required under the CEQ regulations; it also provides a benchmark for comparing potential impacts of the Action Alternatives.

2.5 Alternatives Eliminated from Further Consideration

As described in Section 2.3, VA screened out some offers received in response to the Request for Lease Proposals. Each of the offers, with the exception of the Gateway A, Gateway B, and Hood Drive offers, failed to meet the screening criteria or was not within the competitive range.

VA considered modification or renovation of the existing Fredericksburg VA clinics; however, these leased facilities cannot be expanded beyond their current sizes.

VA considered building a new VA-owned facility in the Fredericksburg area; however, a new VA-owned facility would limit VA's ability to relocate services in the future and adapt to changes in Veterans health

care needs and demographics. A VA-owned facility would also require land acquisition and construction, increasing the cost and lengthening the implementation timeline.

VA considered the renovation of another VA-owned vacant or underutilized facility; however, local VA planners determined no other available VA-owned facilities of sufficient size and suitable for renovation are located in the Fredericksburg area.

VA also considered contracting out all primary, mental health, and specialty care outpatient services to private health care providers in the Fredericksburg area. However, this alternative is not cost-effective and would not guarantee clear access and consistent standard and continuity of care. There also may not be sufficient, qualified, private-sector providers in the Fredericksburg area to accommodate the Veteran workload.

VA considered the acquisition of an existing facility in the Fredericksburg area through purchase; however, market research and interviews with local VA planners indicated that a suitable facility for possible acquisition and subsequent renovation that would meet all project requirements does not exist in the delineated area of the proposed HCC. In addition, a VA-owned facility would limit VA's ability to relocate services in the future and adapt to changes in regional Veterans health care needs.

For the reasons stated above, these other alternatives were eliminated from further consideration.

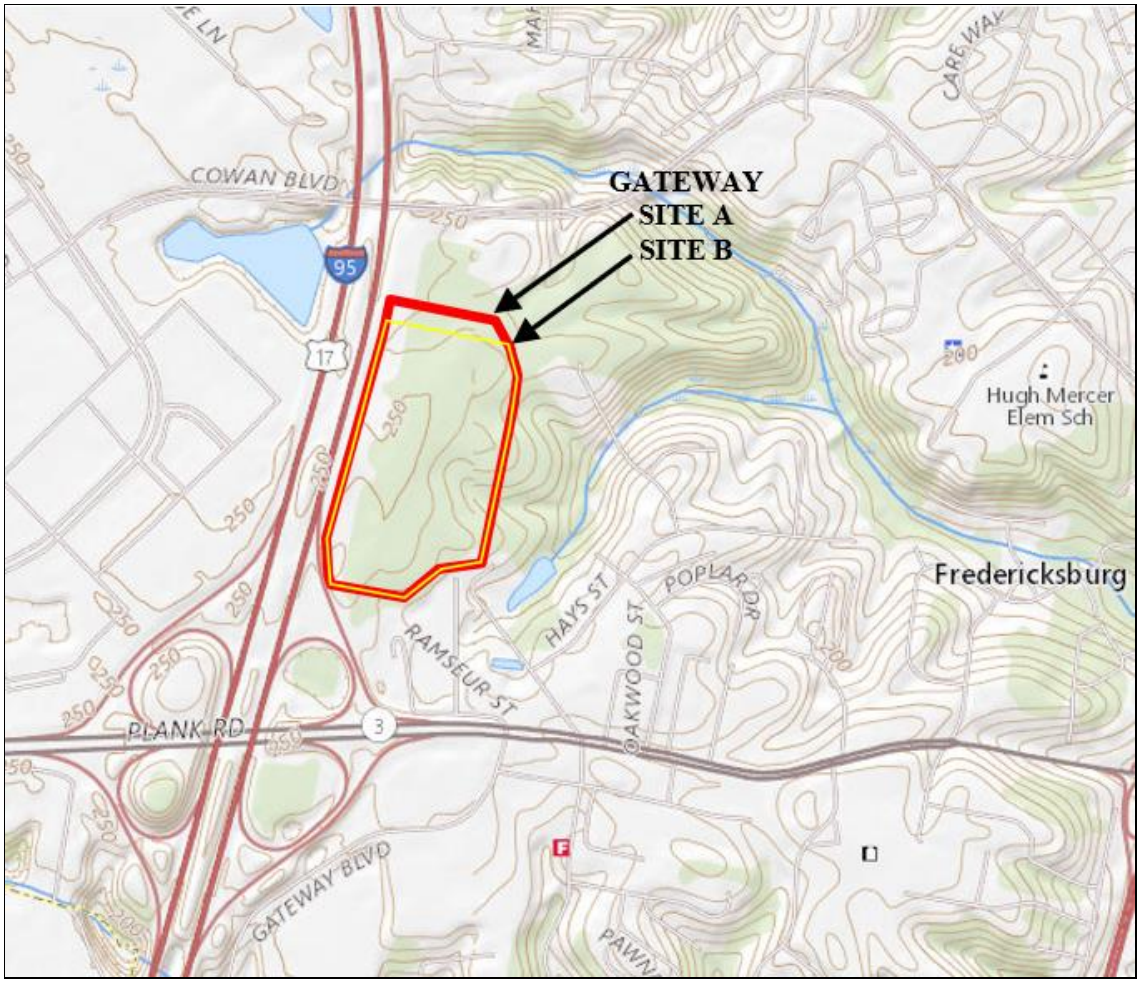

Figure 2-1 Gateway Site Topographic Map

Figure 2-2 Gateway Site Aerial Photograph

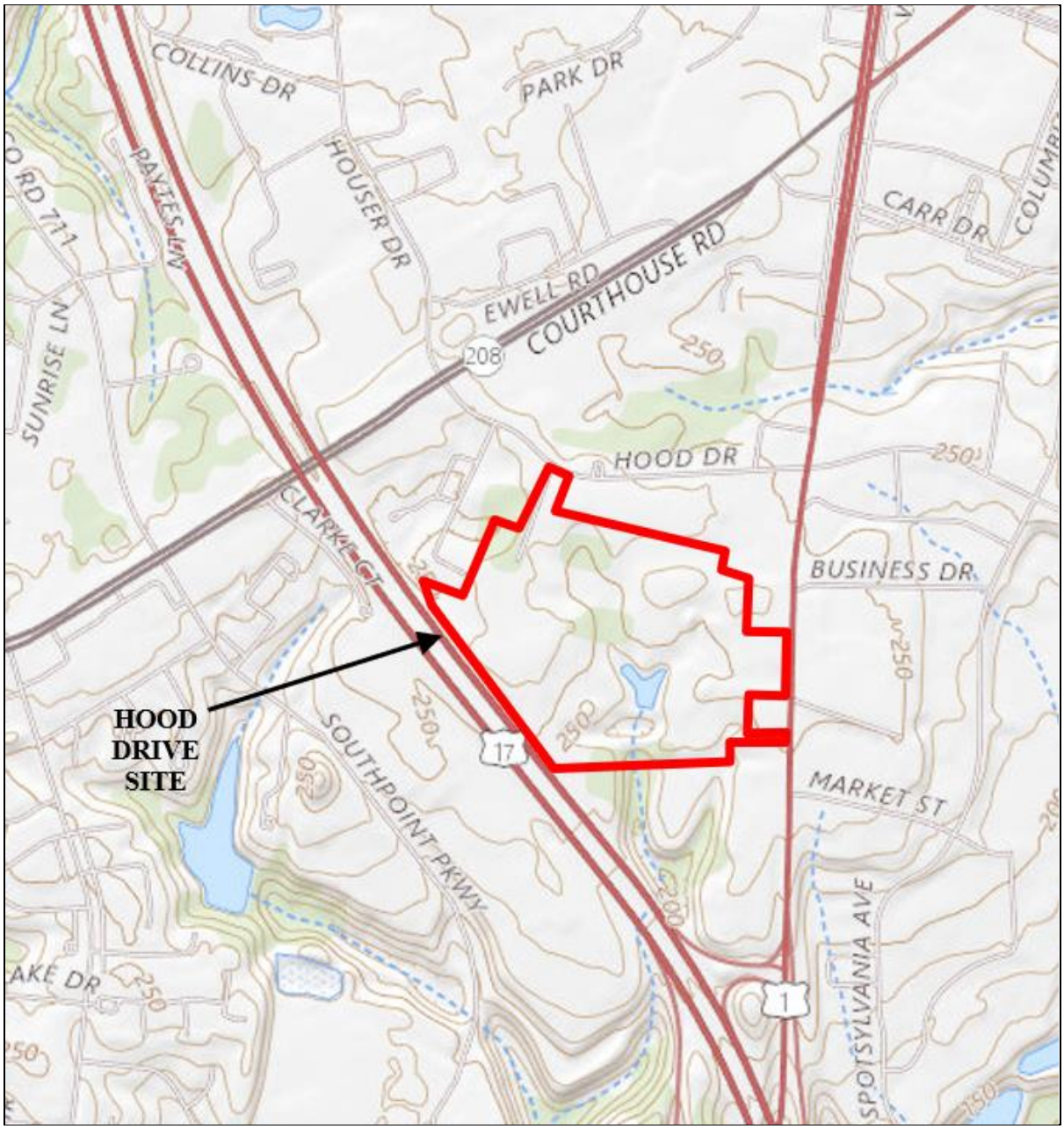

Figure 2-3 Hood Drive Site Topographic Map

Figure 2-4 Hood Drive Site Aerial Photograph

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

This Section describes the baseline (existing) environmental, cultural, and socioeconomic conditions at the two Action Alternative sites (see Figures 1-1 through 2-4) and their general vicinities (that is, the Proposed Action's region of influence), with emphasis on those resources potentially impacted by the Proposed Action. Under each resource area (Sections 3.2 through 3.16), the potential direct and indirect effects of implementing the Proposed Action at the two sites (three Action Alternatives) and the No Action Alternative are identified. Potential cumulative impacts are discussed in Section 3.17.

In this EA, impacts are identified as either significant, less than significant (that is, impacts that would not be of the context or intensity to be considered significant under the CEQ regulations), or no/negligible impact. As used in this EA, the terms "effects" and "impacts" are synonymous. Where appropriate and clearly discernible, each impact is identified as either adverse or beneficial.

The CEQ regulations specify that in determining the significance of effects, consideration must be given to both "*context*" and "*intensity*" (40 CFR 1508.27):

Context refers to the significance of an effect to society as a whole (human and national), to an affected region, to affected interests, or to just the locality. Significance varies with the setting of the Proposed Action.

Intensity refers to the magnitude or severity of the effect and whether it is beneficial or adverse.

In this EA, the significance of potential direct, indirect, and cumulative effects has been determined through a systematic evaluation of each considered alternative in terms of its effects on each individual environmental resource component.

Resource areas considered in this EA are as follows:

- *Aesthetics*
- *Air Quality*
- *Cultural and Historic Resources*
- *Geology and Soils*
- *Hydrology and Water Quality*
- *Wildlife and Habitat*
- *Noise*
- *Land Use*
- *Floodplains, Wetlands, and Coastal Zone Management*
- *Socioeconomics*
- *Community Services*
- *Solid Waste and Hazardous Materials*
- *Traffic, Transportation, and Parking*
- *Utilities*
- *Environmental Justice*
- *Cumulative Impacts*
- *Potential for Generating Substantial Controversy*

3.2 Aesthetics

Gateway Site

The Gateway Site is located in a mixed use (commercial and residential), largely developed suburban area approximately 2.2 miles west of the center of the City of Fredericksburg (see Figure 1-1 Regional Location MapFigure 1-1). The Gateway Site includes approximately 35 acres of undeveloped woodlands with a small clearing in the southeastern corner. The Gateway Site is depicted on Figure 2-1 and Figure 2-2.

Adjacent to the Gateway Site are additional undeveloped woodlands to the north, additional undeveloped woodlands and a small vacant school to the east, commercial properties (moving and storage facilities) to the south, and Interstate 95 to the west, beyond which are commercial properties including the Central Park Shopping Center.

Hood Drive Site

The Hood Drive Site is located in a mixed-use, primarily commercial with limited residential, mostly developed, suburban area approximately 4.5 miles southwest of the center of the City of Fredericksburg (see Figure 1-1). The Hood Drive Site includes approximately 49 acres of mostly undeveloped, grassy land with small areas of shrubs/trees and a pond. The Hood Drive Site also includes a small parcel with a house (4708 Hood Drive) and a small parcel with a vacant gasoline station/convenience store (5313 U.S. Route 1). The Hood Drive Site is depicted on Figure 2-3 and Figure 2-4.

Adjacent to the Hood Drive Site is undeveloped grassy and wooded land to the north and, across Hood Drive, two residential properties and additional undeveloped wooded land; commercial properties, including gasoline stations, an automotive repair garage, a restaurant, and motels to the east; undeveloped wooded land and a motel to the south; and undeveloped grassy and wooded land, residential properties, an electrical contractor business, and Interstate 95 to the west, with commercial properties across Interstate 95.

3.2.1 Effects of the Action Alternatives

VA's closure of the two leased clinics owned by others would have no aesthetics impacts. These facilities would likely be leased by others for another commercial use.

Gateway Site

The Proposed Action at the Gateway Site would result in less-than-significant aesthetic impacts. The Gateway Site is located in an area of mostly commercial and residential properties and would be part of an approximately 88-acre business park development (1500 Gateway Boulevard Development) between Plank Road (south) and Cowan Boulevard (north). The new HCC would be attractive three-story medical office building (Gateway Site A) or four-story medical office building with a two-story parking garage (Gateway Site B) that would be designed and constructed in a way that is visually consistent with the existing commercial development along Interstate 95 and the planned development of the surrounding area, and built in accordance with the Fredericksburg Unified Development Ordinance and Fredericksburg Code of Ordinances (FCO). Existing on-site green space would be reduced and views from the surrounding areas would be altered by the HCC development. However, visual effects would be minimized through attractive HCC design and landscaping.

Hood Drive Site

The Proposed Action at the Hood Drive Site would result in less-than-significant aesthetic impacts. The Hood Drive Site is located in a largely developed area of mostly commercial properties undergoing revitalization under the guidance of Spotsylvania County. The new HCC would be attractive an four-story medical office building that would be designed and constructed in a way that is visually consistent with the existing commercial development of the surrounding area and the Interstate 95 corridor, and built in accordance with the Spotsylvania County Code of Ordinances (SCCO). Existing on-site green space would be reduced and views from the surrounding areas would be altered by the HCC development. However, visual effects would be minimized through attractive HCC design and landscaping.

3.2.2 Effects of the No Action Alternative

Under the No Action Alternative, no aesthetics impacts by VA would result. The Action Alternative sites would likely be developed for commercial use by others, consistent with local zoning. Aesthetics impacts similar to those associated with the Proposed Action could occur, depending on the use of the sites.

3.3 Air Quality

3.3.1 Ambient Air Quality

The ambient air quality in an area can be characterized in terms of whether it complies with the primary and secondary National Ambient Air Quality Standards (NAAQS). The Clean Air Act requires the U.S. Environmental Protection Agency (USEPA) to set NAAQS for pollutants considered harmful to public health and the environment. NAAQS are provided for the following principal pollutants, called "criteria pollutants" (as listed under Section 108 of the Clean Air Act):

- Carbon monoxide
- Lead
- Nitrogen oxides
- Ozone
- Particulate matter, divided into two size classes:
  - Aerodynamic size less than or equal to 10 micrometers
  - Aerodynamic size less than or equal to 2.5 micrometers
- Sulfur dioxide

Areas are designated by the USEPA as "attainment", "non-attainment", "maintenance", or "unclassified" with respect to the NAAQS. Regions in compliance with the standards are designated as attainment areas. In areas where the applicable NAAQS are not being met, a non-attainment status is designated. Areas that have been classified as non-attainment but are now in compliance can be re-designated maintenance status if the state completes an air quality planning process for the area. Areas for which no monitoring data are available are designated as unclassified and are by default considered to be in attainment of the NAAQS. According to the USEPA Green Book (U.S. Environmental Protection Agency 2020), the City of Fredericksburg and Spotsylvania County are currently in full attainment of the NAAQS.

3.3.2 Sensitive Receptors

Sensitive air quality receptors in the vicinity of Action Alternative sites include the residential areas located approximately 400 feet east of the Gateway Site and the limited residential properties located adjacent to the northwest and west of the Hood Drive Site. No other sensitive air quality receptors were identified in the vicinity of the Action Alternative sites.

3.3.3 Effects of the Action Alternatives

Air emissions generated from the Proposed Action would have less-than-significant direct and indirect, short-term and long-term adverse impacts to the existing air quality environment around the selected Action Alternative site. Impacts would include short-term and long-term increased air emission levels as a result of construction activities and operation of the proposed HCC and onsite activities.

Construction activities would be performed in accordance with federal and state air quality requirements. Construction-related emissions are generally short-term, but may still have adverse impacts on air quality, primarily due to the production of dust. Dust can result from a variety of activities, including excavation, grading, and vehicle travel on paved and unpaved surfaces. Dust from construction can lead to adverse health effects and nuisance concerns, such as reduced visibility on nearby roadways. The amount of dust is dependent on the intensity of the activity, soil type and conditions, wind speed, and dust suppression

activities used. Implementing dust control measures (best management practices [BMPs]) significantly reduces dust emissions from construction. Construction-related emissions also include the exhaust from the operation of construction equipment, including diesel particulate matter. The use of newer construction equipment with emissions controls and minimizing the time that the equipment is idling (BMPs) reduces construction equipment exhaust emissions. Implementation of BMPs, discussed in Section 4, would minimize these anticipated less-than-significant adverse, short-term construction-related, air quality impacts.

Operational (long-term) air quality impacts from the HCC would include emissions from equipment, such as boilers and generators, and vehicle emissions from patients and staff driving to and from the HCC. The proposed HCC would have daily site visits by approximately 4,000 staff, patients, volunteers, and other guests. As such, there would be a localized, less-than-significant increase in vehicle air emissions at the selected Action Alternative site. However, regional vehicle emissions would be similar to current emissions or reduced, as most patients and staff that would use the proposed HCC currently travel to the existing Richmond VAMC (50 miles from Fredericksburg) and two leased Fredericksburg area clinics.

A Title V operating permit is not anticipated to be required for the proposed HCC's boiler equipment, generators, and other equipment as this equipment is not anticipated to emit more than 100 tons per year of any individual or combination of hazardous air pollutants. VA's selected developer would secure any required air emissions permits from Virginia Department of Environmental Quality (VDEQ) Air Division.

VA's closure of the existing leased clinics would have negligible air quality effects. These facilities would likely be leased by others for commercial use with similar operational air emissions.

3.3.4 Effects of the No Action Alternative

Under the No Action Alternative, no air quality impacts related to construction or operation of the proposed HCC would result. Should the Action Alternative sites ultimately be developed for use by others, air quality impacts could occur, depending upon the future use.

3.4 Cultural and Historic Resources

Gateway Site

The Gateway Site is mostly undeveloped woodlands with a small clearing in the southeastern corner associated with a small vacant school. The site was primarily farmland in the 1960s and 1970s with limited undeveloped woodlands along the eastern and northern boundaries and has been gradually reforested since the 1980s.

A Phase I archaeological survey was completed by Dovetail Cultural Resources Group in February 2018 for the 88-acre 1500 Gateway Boulevard Development area (Dovetail Cultural Resources Group 2018). The archaeological survey fieldwork consisted of a pedestrian survey of the entire 88-acre area, the excavation of 758 shovel test pits, and a metal detector survey. The survey identified two archaeological sites on the 88-acre property dating to the Civil War: Sites 44SP0783 and 44SP0784.

Site 44SP0783 occupies an area of approximately 9.5 acres. Approximately 8 acres of the archaeological site is located on the eastern portion of the Gateway Site; the remainder of the archaeological site is located east of the Gateway Site. The artifacts and heat-altered soils found at this site suggest the site represents the remains of a Civil War encampment, with the heat-altered soils representing "fire boxes" that are often found adjacent to huts in Civil War winter encampments. Specific military materials recovered include bullets, a nipple protector for an Enfield rifle, rivets, a small door to a portable stove, and many cut nails likely representative of the troops' winter cabins.

Civil War Sites Advisory Commission 2002 maps and Virginia Department of Historic Resources (Virginia SHPO) files indicate that the project area is within the study area of a number of Civil War battlefields, including Chancellorsville, The First and Second Battles of Fredericksburg, and Salem Church. Based on their historical research, Dovetail determined Site 44SP0783 was likely a winter encampment of troops under the command of Confederate General Anderson during the winter of 1862 to 1863. In addition, Dovetail indicated some deeply buried metal munitions discovered at the site likely represent an artillery position associated with the Hays/Hoke-Grant and the Hays/Hoke-Neill engagement of the Battle of Chancellorsville in May 1863. Dovetail recommended Site 44SP0783 is potentially eligible for listing on the National Register of Historic Places (NRHP).

Site 44SP0784 occupies an approximately 0.4-acre area and is located approximately 400 feet northeast of the Gateway Site. Many of the artifacts identified at this archaeological site are military related. Dovetail indicated this site appears to be representative of a short-term Civil War occupation, possibly a picket or sentry post related to nearby Site 44SP0783. Dovetail recommended Site 44SP0784 is potentially eligible for listing on the NRHP.

A management summary/reconnaissance-level architectural survey was completed by Dovetail in February 2019 for the 88-acre 1500 Gateway Boulevard Development (Dovetail Cultural Resources Group 2019). The architectural survey identified three architectural resources within 500 feet of the 1500 Gateway that were determined to be listed or eligible for listing on the NRHP. These are the Chancellorsville Battlefield, the Second Battle of Fredericksburg, and the Bank's Ford/Salem Church Battlefield.

In March 2019, Virginia SHPO reviewed the Dovetail Phase I archaeological and architectural summary reports and concurred with Dovetail's recommendations that Sites 44SP0783 and 44SP0784 are potentially eligible for listing on the NRHP and the three area Civil War battlefields are listed/eligible for listing on the NRHP.

The Virginia Department of Conservation and Recreation (VDCR) maintains a conservation easement with Central Virginia Battlefields Trust for an 11.2-acre property to the east of the Gateway Site; however, VDCR stated the Proposed Action is not anticipated to negatively affect this easement. The conservation easement is associated with a parcel approximately 150 feet northeast of the Gateway Site that is now owned by the City of Fredericksburg and was established to protect archaeological resources associated with the Civil War. Site 44SP0784 is located adjacent to the 11.2-acre conservation easement property.

Hood Drive Site

The Hood Drive Site is mostly undeveloped, grassy land with small areas of shrubs/trees and a pond. The site includes a small parcel with a house (4708 Hood Drive) that was built in the early 1950s and small parcel with a vacant gasoline station/convenience store (5313 U.S. Route 1) that was built in the early 1970s. The Hood Drive Site was mostly unimproved farmland with a farmstead in the northeastern portion from at least 1942 to the 1970s. With the exception of the north-central portion, the site gradually became reforested starting in the 1970s and was heavily wooded in 2003. The majority of the trees were removed from the site in 2005 and 2006 in anticipation of development. Earthwork for a planned commercial development began at the Hood Drive Site in late 2008 and ceased prior to completion in early 2009. During that time, the southern portion of the site was heavily disturbed and graded in preparation for development. Since 2009, the site has gradually become revegetated with grass and shrubs.

A Phase IA cultural resource survey was completed by Dovetail in January 2020 for the Hood Drive Site (Dovetail Resources Group 2020). The Dovetail report identified 15 architectural resources greater than 50 years in age located within the vicinity of the Hood Drive Site. Eleven of these resources had previously been evaluated by the Virginia SHPO, including the on-site house at 4708 Hood Drive, and

were determined not to be NRHP eligible. The four remaining resources, including a circa 1963 foundation in the northeastern portion of the Hood Drive Site, had not been previously evaluated. Dovetail recommended formal architectural documentation of all 15 resources, either because they had been last surveyed greater than five years ago or had not previously been surveyed. Dovetail noted, based on a preliminary evaluation, none of the 15 resources appeared to be eligible for the NRHP. The Dovetail report stated that the southern portion of the Hood Drive Site had been heavily disturbed and has little to no potential for intact archaeological resources. Dovetail indicated the northern portion of the Hood Drive Site (approximately 26 acres) has the potential for intact subsurface archaeological resources and recommended additional archaeological investigation of this area.

In June 2020, Environmental Research Group, LLC, completed a Phase I archaeological survey of the undisturbed areas of the Hood Drive Site on behalf of VA. The field activities included an intensive pedestrian survey of the study area and shovel testing at 50-foot intervals. The archaeological survey identified four archaeological sites containing 45 artifacts, including two prehistoric scatters, one historic artifact scatter, and one historic residential foundation and artifact scatter. Environmental Research Group concluded that none of the identified archaeological resources are eligible for NRHP.

In July 2020, Row 10 Historic Preservation Solutions completed an architectural evaluation of the built resources at and in the vicinity of the Hood Drive Site and determined none of them were eligible for listing on the NRHP.

3.4.1 Effects of the Action Alternatives

VA's closure of the existing leased clinics would have no cultural resources impacts.

Gateway Site

Based on the results of Dovetail's Phase I archaeological survey, archaeological site 44SP0783, a likely Confederate 1862-1863 winter encampment during the Civil War with a likely artillery position associated with the Battle of Chancellorsville in May 1863, occupies approximately eight acres in the eastern portion of the Gateway Site. VA has determined this archaeological site is eligible for listing on the NRHP. Based on the size and location of the archaeological site, it likely cannot be avoided by the proposed HCC development at the Gateway Site. The large-scale excavation and grading associated with the HCC development would have an adverse effect on this NRHP-eligible historic property. National Historic Preservation Act (NHPA) mitigation would be required for potential cultural resources impacts at the Gateway Site.

The proposed HCC development at the Gateway Site would not likely impact archaeological site 44SP0784, which is located approximately 400 feet away from the Gateway Site. The NRHP-listed/eligible battlefields in the Gateway Site area are expansive, covering thousands of acres, including downtown Fredericksburg, the Interstate 95 corridor, and other densely developed areas. These battlefields are listed/eligible for listing based on their association with a notable event (Civil War battles), not their architectural merit. The proposed HCC development at the Gateway Site would not diminish the characteristics that render these battlefields eligible for the NRHP. The Proposed Action would have no adverse effect on these battlefields.

Hood Drive Site

Based on the findings of the architectural and archaeological surveys, no historic properties listed on the NRHP or eligible for listing on the NRHP are known to be present on the Hood Drive Site or would be impacted by the Proposed Action at the Hood Drive Site.

NHPA Section 106 Consultation

On July 16, 2020, VA initiated NHPA Section 106 consultation with the Virginia SHPO, the Advisory Council on Historic Preservation, City of Fredericksburg Community Planning and Building Department,

Spotsylvania County Department of Planning and Zoning, and other potentially interested parties (National Park Service Fredericksburg & Spotsylvania National Military Park; American Battlefield Trust, Fredericksburg Area Museum; Historic Fredericksburg Foundation, Inc.; Rappahannock Valley Civil War Round Table; Spotsylvania Historical Society; the Central Virginia Battlefields Trust; Preservation Virginia; and federally recognized Native American Tribes [Catawba Indian Nation, Delaware Nation of Oklahoma, Pamunkey Indian Tribe, and Monacan Indian Nation]) regarding the proposed development of the HCC. As part of this effort, VA submitted information detailing the cultural resources identification efforts and findings for the Gateway and Hood Drive sites. In addition, VA prepared and executed a procedural Programmatic Agreement (PA) with the Virginia SHPO for the Proposed Action. The PA states that if the Hood Drive Site is selected for the proposed HCC, no further consultation is required, as there would be no adverse historic property effects. The PA also identifies the steps and procedures VA would implement to mitigate potential adverse effects if the Gateway Site is selected for the proposed HCC. As part of the PA procedures, a Memorandum of Agreement would be negotiated and developed if the Gateway Site is selected that would detail the mitigation measures, which may include, for example, further exploration for data inventory and recovery, archaeological/historic publications, and/or archaeological monitoring during excavation work associated with the proposed HCC construction. With the completion of these NHPA mitigation measures, cultural resources impacts would be less than significant.

3.4.2 Effects of the No Action Alternative

Under the No Action Alternative, no cultural resources impact related to construction by VA would occur. Should the Action Alternative sites be developed by others, cultural resources impacts could result.

3.5 Geology and Soils

According to *A Tapestry of Time and Terrain* (U.S. Geological Survey 2000), the Action Alternative sites are located within the Embayed physiographic section of the Coastal Plain physiographic province of the Atlantic Plain physiographic region. The Coastal Plain is composed of wedge-shaped semi-consolidated to unconsolidated sediments deposited over Cretaceous Period crystalline bedrock. The covering sedimentary wedge is comprised of late Jurassic and Cretaceous clay, sand, and gravel eroded off the Appalachian highlands, carried eastward by rivers and deposited in deltas at the margin of the newly formed Atlantic Ocean basin. During the late Tertiary and Quaternary, sand, silt, and clay, which cover much of the Coastal Plain, were deposited during interglacial high stands of the sea under conditions similar to those that exist in the modern Chesapeake Bay and its tidal tributaries (USGS 1997).

The Action Alternative sites are not located in an area with known karstification (creation of cavities due to dissolving rock), nor are the Action Alternative sites in an area with known fault lines.

Gateway Site

The Fredericksburg and Salem Church, Virginia U.S. Geological Survey (USGS) Topographic Quadrangles (both dated 2018) indicated that surficial topography of the Gateway Site slopes to the east with elevations ranging from approximately 250 feet above mean sea level (amsl) in the western portion of the site to approximately 220 feet amsl along the eastern site boundary. The nearest surface water bodies depicted on the topographic map are a small pond and stream located adjoining to the east of the southern portion of the site. Figure 2-1 depicts the topography of the Gateway Site and the surrounding area.

A review of soil survey information provided by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey indicated soils at the site are Dystrochrepts-Udults complex, sloping (17C); Dystrochrepts-Udults complex, moderately steep (17D); Dystrochrepts-Udults complex, steep (17E); Goldsboro sandy loam (24); Mattaponi sandy clay loam, 7 to 15 percent slopes, eroded (21C2); Savannah sandy loam, 2 to 7 percent slopes (36B); Udorthents-Udifluvents

complex, gently sloping (45B); and Urban land-Udults complex, smoothed (46). These soils are characterized as moderately well-drained to excessively drained sand, loam, and clay. The Gateway Site soils are shown on Figure 3-1.

According a geotechnical study prepared by Froehling and Robertson, Inc. dated May 28, 2019, soil borings at the proposed 88-acre 1500 Gateway Boulevard Development area, conducted outside of the 35-acre HCC Gateway Site, encountered fill materials (silt, sand, and clay), alluvial soils (silt, sand, and clay), and residual soils (silt, sand, and clay) to a depth of 45 feet below ground surface (bgs), the maximum depth explored (Froehling & Robertson, Inc. 2019).

Figure 3-1 Gateway Site Soils Map

Hood Drive Site

The Spotsylvania, Virginia USGS Topographic Quadrangle (dated 2018) and the Guinea, Virginia USGS Topographic Quadrangle (dated 2018) indicated that surficial topography of the Hood Drive Site slopes to the south with elevations ranging from approximately 260 feet amsl in the northern portion of the site to approximately 220 feet amsl in the south-central portion. The nearest surface water bodies depicted on the topographic map are a small pond and intermittent stream located on the southern portion of the Hood Drive Site. Figure 2-3 depicts the topography of the Hood Drive Site and the surrounding area.

A review of soil survey information provided by the USDA NRCS Web Soil Survey indicated soils at the site are Dystrochrepts-Udults complex, sloping (17C); Dystrochrepts-Udults complex, moderately steep (17D); Dystrochrepts-Udults complex, steep (17E); Goldsboro sandy loam (24); Mattaponi sandy clay

loam, 7 to 15 percent slopes, eroded (21C2); Savannah sandy loam, 2 to 7 percent slopes (36B); Udorthents-Udifluvents complex, gently sloping (45B); and Urban land-Udults complex, smoothed (46). These soils are characterized as moderately well-drained to excessively drain sand, loam, and clay. The Hood Drive Site soils are shown on Figure 3-2.

In June 2020, ATC Group Services, LLC completed a Limited Phase II environmental site assessment (ESA) for the vacant gasoline station/convenience store (5313 U.S. Route 1) located in the eastern portion of the Hood Drive Site. Soils encountered during the limited Phase II ESA consisted of gray to brown sandy clay or clayey coarse sand to at least 14 feet bgs, the maximum extent explored.

Figure 3-2 Hood Drive Site Soils Map

3.5.1 Prime and Unique Agricultural Land Soils

Prime and unique farmlands are regulated in accordance with the Farmland Protection Policy Act (7 USC 4201, *et seq*.) to ensure preservation of agricultural lands that are of statewide or local importance. Soils designated as prime agricultural land are capable of producing high yields of various crops when managed using modern farming methods. Prime agricultural land is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. Unique agricultural lands are also capable of sustaining high crop yields and have special combinations of favorable soil and climate characteristics that support specific high-value foods or crops.

According to the USDA NRCS Web Soil Survey, the Dystrochrepts-Udults complex, sloping (17C); Dystrochrepts-Udults complex, moderately steep (17D) complex; and Mattaponi sandy clay loam, 7 to 15 percent slopes, eroded (21C2) soils at the Action Alternative sites are classified as farmland of statewide importance; and the Goldsboro sandy loam soils at the Action Alternative sites are classified as prime farmland. However, the Action Alternative sites are both located in an area identified by the U.S. Census Bureau as an "urbanized area" and are exempt from the Farmland Protection Policy Act.

3.5.2 Effects of the Action Alternatives

No major changes to topography would occur at the selected Action Alternative site due to the Proposed Action. The HCC would generally be designed in concert with the selected site's current topography. Some cutting and filling is anticipated on the Gateway Site. Grading would cut soil from the ridge in the western portion of the Gateway Site, which would be placed in the low-lying areas in the eastern portion of the site and other properties within the 1500 Gateway Boulevard Development area where fill is needed. It is anticipated that the entire 88-acre 1500 Gateway Boulevard Development area would be rough graded at the same time, in one phase. No substantial cutting or filling is anticipated on the Hood Drive Site, other than for general site leveling and stormwater detention.

Less-than-significant impacts to geology are anticipated. The Action Alternative sites are not located in an area where karst conditions and associated sinkholes are present. No active significant faults are known to extend through the subsurface geology at the Action Alternative sites. As such, no impacts associated with seismic hazards are identified. No mineral resource impacts are anticipated, as the Proposed Action would not involve the commercial extraction of mineral resources, nor affect mineral resources considered important on a local, state, national, or global basis. In addition, the Proposed Action would not impact prime agricultural land.

During construction, less-than-significant, direct and indirect, short-term soil erosion and sedimentation impacts would be possible as the selected site is graded and proposed building, parking areas, entrance road, and other project components are constructed. Construction would remove the vegetative cover, disturb the soil surface, and compact the soil. The soil would then be susceptible to erosion by wind and surface runoff. Exposure of the soils during construction has the potential to result in increased sedimentation to stormwater management systems and offsite discharges of sediment-laden runoff. However, such potential adverse erosion and sedimentation effects would be prevented through utilization of appropriate BMPs (Section 4) and adherence to the terms of an approved VDEQ-issued Virginia Pollutant Discharge Elimination System (VPDES) permit, including the development and implementation of a site-specific stormwater pollution prevention plan (SWPPP).

Additionally, the City of Fredericksburg maintains an erosion and sediment control ordinance (Article V of Chapter 78 of the FCO) that would require all land-disturbing activities at the Gateway Site to have a Land Disturbing Permit, including an erosion and sediment control plan approved by the City.

Spotsylvania County also maintains an erosion and sediment control ordinance (Chapter 8 of the SCCO) that would require all land-disturbing activities at the Hood Drive Site to have a Land Disturbing Permit, including an erosion and sediment control plan approved by the County.

Once construction is complete, no long-term erosion and sedimentation impacts would be anticipated. No long-term soil erosion impacts would occur as a result of increased impervious surfaces onsite; these effects would be mitigated by including appropriately designed stormwater management systems as part of final site design.

VA's closure of the existing leased clinics would have no geology and soils impacts.

3.5.3 Effects of the No Action Alternative

Under the No Action Alternative, no construction by VA's selected developer would occur. No impacts to soils, topography, or geology would occur at the Action Alternative sites as a result of VA's actions. However, the Action Alternative sites would likely be developed by others for commercial use and impacts similar to those identified above could occur.

3.6 Hydrology and Water Quality

3.6.1 Surface Waters

VDEQ Office of Drinking Water (ODW) stated that the Action Alternative sites are not within one mile of any public water wells and are not within the watersheds of any public surface water intakes.

Gateway Site

The Gateway Site drains towards Smith Run and unnamed tributaries to Smith Run, which are located within the Rappahannock River – Hazel Run watershed of the Lower Rappahannock River.

A Perennial Flow Evaluation and Resource Protection Area (RPA) Determination was completed for the 88-acre 1500 Gateway Boulevard Development by Bowman Consulting, dated October 26, 2018 (Bowman Consulting 2018a). The Perennial Flow Evaluation and RPA Determination concluded that there are no perennial streams or RPAs on the proposed HCC Gateway Site; however, two perennial streams (Smith Run and unnamed), six intermittent streams (all unnamed), and five wetland areas (including a pond) are located on the 1500 Gateway Boulevard Development property to the east of the Gateway Site. Both perennial streams include an associated RPA (100-foot buffer) that do not extend on to the Gateway Site. One intermittent stream forms near the southeastern boundary of the Gateway Site and continues off-site to the east. A small on-site wetland area associated with the intermittent stream was identified in the southeastern portion of the site. Refer to Section 3.10 for additional information pertaining to wetlands.

No other surface waters were identified on or immediately adjacent to the Gateway Site. Stormwater at the Gateway Site generally infiltrates into onsite soils or flows over ground towards the east.

Hood Drive Site

The Hood Drive Site is located in the Rappahannock River/Massaponax Creek watershed and the Lower Rappahannock River-Massaponax Creek-Muddy Creek-Hazel Run-Motts Run-Claiborne Run sub-watershed. The Hood Drive Site generally slopes from north to south, with a natural drainage in the south-central part of the Site that was dammed in the late 1950s, forming a pond that remains today (1950s pond). Two ephemeral drainage channels (remnants of the original natural drainage) form on the site and drain from the northeast and northwest to the pond. As part of the planned, but never completed, commercial development of the Hood Site in 2008, a rectangular stormwater management pond was constructed south of the 1950s pond. The 1950s pond now discharges to the rectangular pond. An outlet structure was installed in the rectangular pond that directs surface water to an unnamed, modified intermittent stream that flows southwest from the Hood Drive Site, under Interstate 95, via a culvert, and to the south towards Massaponax Creek.

Two small stormwater management features are also located near the southwest and northwest corners of the Hood Drive Site, adjacent to and/or in the Interstate 95 right-of–way (ROW) and discharge off-site to the Interstate 95 ROW.

No other surface waters were identified on or in the immediately adjacent areas to the Hood Drive Site. Stormwater at the Hood Drive Site generally infiltrates into onsite soils or flows over ground towards the south.

Spotsylvania County stated that the Hood Drive Site is not known to contain any rivers or RPAs, and is not within a Dam Break Inundation Zone.

3.6.2 Groundwater

According to the Groundwater Atlas of the United States, the Chickahominy-Piney Point (upper) and Aquia (lower) portions of the Castle Hayne-Aquia aquifer in the Northern Atlantic Coastal Plain aquifer system are the principal aquifers in the vicinities of the Action Alternative sites and are comprised of sands of varying ages separated by a silt and clay confining unit that ranges in thickness from a few feet (thinly confined) to more than 460 feet (fully confined). The Virginian Aquifer in the Fredericksburg area ranges up to 800 feet to 900 feet in thickness.

Groundwater was encountered during the Froehling and Robertson geotechnical study of the 1500 Gateway Boulevard Development at depths between 3 feet bgs and 27 feet bgs; however, none of the soil borings completed were located on the 35-acre Gateway Site.

Groundwater encountered during the ATC limited Phase II ESA for the Hood Drive Site was located between 3.5 bgs and 14 feet bgs.

3.6.3 Effects of the Action Alternatives

The proposed HCC would be a slab-on-grade building serviced by the municipal water system. Therefore, it is not anticipated that groundwater would be impacted by the Proposed Action. If shallow groundwater is encountered during construction, appropriate groundwater engineering controls would be utilized to ensure no adverse effects to groundwater. As such, impacts to groundwater are anticipated to be less than significant.

The small wetland in the southeastern portion of the Gateway Site and the 1950s pond and associated wetlands at the Hood Drive Site would be impacted by the proposed development of the HCC. These impacts are discussed in Section 3.10.

The Action Alternatives would not result in significant impacts to surface waters, provided that the BMPs described in Section 4 are implemented. These BMPs would control construction-related impacts of soil erosion and sedimentation and would provide proper stormwater management following the completion of the Proposed Action. Each site would include on-site stormwater collection and management systems that would convey stormwater to stormwater management ponds. The stormwater management systems would be designed and constructed in accordance with Virginia Stormwater Management Program requirements. Anticipated stormwater management for each site is described below.

Gateway Site

Stormwater from the proposed HCC development at the Gateway Site would be collected from the development areas and routed through two underground filtering systems in the eastern portion of the Gateway Site and to a regional stormwater management pond that would be constructed southeast of the site across Gateway Boulevard. The stormwater management pond would be under the control of the 1500 Gateway Boulevard Development landowner and would be designed to accommodate the proposed HCC and the other developments associated with the 1500 Gateway Boulevard Development. The stormwater management pond would discharge (via a controlled outlet) to the intermittent tributaries of Smiths Run.

Hood Drive Site

Stormwater from the proposed HCC development at the Hood Drive Site would be collected from the development areas and routed to a stormwater management pond that would be constructed from the existing, partially completed, rectangular stormwater management pond in the southern portion of the site. The stormwater management pond would discharge (via a controlled outlet) to the modified intermittent

stream south of the Hood Drive Site. An additional, smaller stormwater pond would be located in the western portion of the site. This stormwater management pond would discharge (via a controlled outlet) to a drainage ditch along the east side of Interstate 95.

3.6.4 Effects of the No Action Alternative

Under the No Action Alternative, no construction by VA's selected developer would occur. No impacts to water resources at the Action Alternative sites would occur as a result of VA's actions. However, should the sites be developed for commercial use by others, impacts similar to those identified for the Action Alternatives could occur.

3.7 Wildlife and Habitat

Gateway Site

The Gateway Site consists of approximately 35 acres of undeveloped woodlands with a small clearing in the southeastern corner associated with a small, vacant, off-site school. The western portion of the Site consists of a planted, predominantly loblolly pine forest. The eastern portion of the site consists of a mixed pine and hardwood forest. The areas surrounding the Gateway Site consist of undeveloped wooded land, the vacant school, commercial properties, and Interstate 95. The vegetative communities on the Gateway Site could support wildlife species associated with partially developed suburban Fredericksburg areas.

In a June 2020 letter, the Virginia Department of Forestry (VDF) stated the Gateway Site was likely historically clear cut for agricultural use and has gradually reforested. VDF stated the western portion of the Gateway Site, along Interstate 95, primarily consists of an artificial (planted), overstocked loblolly pine community and recommended that this area be clear cut. VDF stated that the remaining portions of the Gateway Site consist primarily of a mixed pine and hardwood community, a common community in Virginia. VDF stated that the mixed pine and hardwood community is healthy, is experiencing normal community progression, supports a great deal of diversity in variety of tree species, and likely supports a wide variety of game and non-game species.

In a June 2020 letter, VDCR stated that implementing the Proposed Action at the Gateway Site would fragment an Ecological Core C5 area (least ecologically relevant) as identified in the Virginia Natural Landscape Assessment and recommended efforts to minimize edges in remaining fragments, retain natural corridors that allow movement between fragments, and designing the intervening landscape to minimize its hostility to native wildlife.

The Fredericksburg Chesapeake Bay Preservation Overlay District map shows that the Gateway Site is not located in a designated Chesapeake Bay Preservation Act (CBPA) Resource Protection Area (RPA). However, the site is identified as being located in a CBPA Resource Management Area (RMA) under the "whole lot provision" of the city ordinance – when a portion of a lot or site is within the overlay district boundary, the entire lot or site is considered within the overlay district boundary.

Hood Drive Site

The Hood Drive Site consists of approximately 49 acres of mostly undeveloped, grassy land with small areas of shrubs/trees, a pond, and wetland areas. The site also includes a small parcel with a house and a small parcel with a vacant gasoline station/convenience store. The area surrounding the Hood Drive Site consists of commercially properties (gasoline stations, an automotive repair garage, motels and a restaurant, undeveloped grassy and some wooded land, residences, and Interstate 95. The vegetative communities on the Hood Drive Site could support wildlife species associated with mostly developed suburban Fredericksburg areas.

VDF stated the Hood Drive Site is located in a heavily developed area, was clear cut in 2005, and has been heavily "worked" (graded) since 2005. According to VDF, the Hood Drive Site is subject to a high noise level from Interstate 95 and identified habitats are neither unique nor rare.

The Spotsylvania County Public Parcel Viewer internet application did not identify the Hood Drive Site as being located in a designated RPA; however, the Chesapeake Bay Preservation Ordinance of Spotsylvania County (CBPO) states that all areas in Spotsylvania County not located in RPAs are designated as RMAs.

3.7.1 Threatened and Endangered Species

As part of the preparation of this EA, the U.S. Fish and Wildlife Service (USFWS), VDF, the VDCR Natural Heritage Resources (NHR) program, and the Virginia Department of Game and Inland Fisheries (VDGIF) Virginia Fish and Wildlife Information Service (VAFWIS) were contacted to identify the potential for the presence of state or federally listed species on or in the vicinity of the Action Alternative sites.

Gateway Site

VA obtained a protected species list for Gateway Site through the USFWS Information for Planning and Conservation (IPaC) internet application. The IPaC report indicated the Gateway Site is within the range of one federally listed threatened clam species (yellow lance) and one federally listed threatened plant species (small-whorled pogonia). The IPaC report did not identify any critical habitat of protected species on or near the site. Table 3-1 below provides a summary of the federally protected species, their habitat requirements, and the potential presence of their required habitat at the Gateway Site based on research (Bowman Consulting 2018b) (Bowman Consulting 2018c) and a biological survey completed by TTL Associates, Inc. in June 2020.

Table 3-1 Federally Listed Species in the Vicinity of the Gateway Site

Species	Federal Status	Habitat	Potential Habitat Present at the Site
Clams			
Yellow lance (*Elliptio lanceolata*)	Threatened	Small streams to medium-sized rivers with sandy to gravel substrates and clean, moderately flowing water with high dissolved oxygen. Site is outside proposed critical habitat.	No
Plants			
Small-whorled pogonia (*Isotria medeoloides*)	Threatened	Relatively open canopy on acidic soils of dry to mesic second-growth deciduous and deciduous-coniferous with an open understory and sparse herbaceous layer. No designated critical habitat.	No

No federally listed protected species, or critical habitat for such species, were identified for the Gateway Site.

The IPaC report also identified three bird species protected under the Migratory Bird Treaty Act (MBTA) for the Gateway Site area. Based on the habitat requirements of the MBTA species and the Probability of Presence Summary provided as part of the IPaC report, the three bird species are unlikely to be present on the Gateway Site during their respective breeding seasons.

A June 2020 VDCR letter stated that natural heritage resources have not been documented within the boundaries of the Gateway Site, including a 100-foot buffer. In addition, VDCR stated that the proposed HCC would not impact any state-listed plants and insects.

Information from the VDCR NHR program and the VAFWIS identified nine state-protected species in the vicinity of the Gateway Site. The biological survey evaluated the habitat requirements of these species and determined no potential suitable habitat exists at the Gateway Site for any of the species other than the northern long-eared bat, the little brown bat, and the tri-colored bat.

The VDGIF Northern Long-eared Bat Winter Habitat and Roosts internet application did not identify any known northern long-eared bat winter habitat or roosts within 75 miles of the Gateway Site. The VDGIF Little Brown Bat and Tri-colored Bat Winter Habitat and Roosts internet application did not identify any known little brown bat and tri-colored bat winter habitat or roosts within 70 miles of the Gateway Site. Therefore, although potentially suitable habitat (forests/wooded areas) for these bat species is present, northern long-eared bat, little brown bat, and tri-colored bat are unlikely to be present at the Gateway Site.

Hood Drive Site

VA obtained a protected species list for Hood Drive Site through the USFWS IPaC internet application. The IPaC report indicated the Hood Drive Site is within the range of one federally listed threatened clam species (yellow lance) and one federally listed threatened mammal species (northern long-eared bat). The IPaC report did not identify any critical habitat of protected species on or near the site. Table 3-2 provides a summary of the federally protected species, their habitat requirements, and the potential presence of their required habitat at the Hood Drive Site based on research and a biological survey completed by TTL in June 2020.

Table 3-2 Federally Listed Species in the Vicinity of the Hood Drive Site

Species	Federal Status	Habitat	Potential Habitat Present at the Site
Clams			
Yellow lance (*Elliptio lanceolate*)	Threatened	Small streams to medium-sized rivers with sandy to gravel substrates and clean, moderately flowing water with high dissolved oxygen. Site is outside proposed critical habitat.	No
Mammals			
Northern long-eared bat (*Myotis septentrionalis*)	Threatened	Forested/wooded habitats containing potential roosts, as well as linear features, such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable	No

Species	Federal Status	Habitat	Potential Habitat Present at the Site
		amounts of canopy closure. No designated critical habitat.	

No federally listed protected species, or the critical habitat for such species, were identified for the Hood Drive Site.

The IPaC report also identified seven bird species protected under the MBTA for the Hood Drive Site area. Based on the habitat requirements of the MBTA species and the Probability of Presence Summary provided as part of the IPaC report, the seven bird species are unlikely to be present on the Hood Drive Site during their respective breeding seasons.

Information from the VDCR NHR program and the VAFWIS, identified nine state-protected species in the vicinity of the Hood Drive Site. The biological survey evaluated the habitat requirements of these species and determined no potential suitable habitat exists at the Hood Drive Site for any of the species other than the loggerhead shrike.

The loggerhead shrike (a bird) forages in open areas with scattered shrubs and trees. It impales its larger prey on thorny bushes or barbed wire and typically forages where impaling sites are located. Marginal loggerhead shrike foraging habitat is present at the Hood Drive Site. However, no loggerhead shrike nesting habitat is present at the site.

3.7.2 Effects of the Action Alternatives

Based on the information obtained from the biological survey reports for the Action Alternative sites, no federally listed protected species, or the critical habitat for such species, were identified. The Proposed Action is not likely to have adverse effects on federally listed protected species.

Although Spotsylvania County stated that there are no known conservation areas or natural resource concerns on the Hood Drive Site, the CBPO states RMAs may require a water quality impact assessment, as determined by the CBPO administrator; this assessment would be undertaken by the developer if this site is selected, in compliance with this county ordinance. For either selected site, the developer would comply with city, county, and/or state regulations and ordinances implementing the CBPA, ensuring there would be no significant impacts to resources protected under the CBPA.

VA's closure of the existing leased clinics would have no wildlife and habitat impacts.

Gateway Site

Based on the information obtained from the VDF, VDCR NHR, and VDGIF and site observations, no state-listed species were identified for the Gateway Site. While potential habitat was identified for three state-protected bat species, they are unlikely to be present.

The mixed pine and hardwood forest on the eastern portion of the Gateway Site support a diversity of species and the Gateway Site was identified within an Ecological Core area (C5 – least ecologically relevant). The proposed HCC development at the Gateway Site would eliminate the diverse natural wooded habitat at the site. However, this habitat is common in Virginia and no federally listed protected species or state-protected species are likely to be present or impacted. Wildlife and habitat impacts would be less than significant.

Hood Drive Site

Based on the information obtained from the VDF, VDCR NHR, and VDGIF, and site observations, no state listed species were identified for the Hood Drive Site. Marginal loggerhead shrike foraging habitat is present at the Hood Drive Site. However, no loggerhead shrike nesting habitat is present at the site. The proposed HCC development at the Hood Drive Site would result in limited potential foraging habitat loss for the loggerhead shrike, habitat that is common in Virginia, and no impact to other state listed protected species.

Although no suitable northern long-eared bat habitat is present at the Hood Drive Site, because USFWS identified the northern long-eared bat as potentially present at the site, VA obtained USFWS concurrence (included in Appendix D) with a finding of "may affect – not likely to adversely affect" this species under the USFWS Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions. This has completed VA's Endangered Species Act Section 7 responsibilities for this site.

3.7.3 Effects of the No Action Alternative

Under the No Action Alternative, no impacts to biological resources by VA would occur. However, should the Action Alternative sites ultimately be developed by others, impacts similar to those identified under the Proposed Action could occur.

3.8 Noise

Gateway Site

The existing noise environment around the Gateway Site is moderate with noise from vehicle traffic on Interstate 95, located along the western site boundary, and more distant vehicle noise from Plank Road (approximately 800 feet south of the site). No other notable noise-generating sources are present in the immediate vicinity of the Gateway Site. As such, the noise environment of the Gateway Site can be characterized as that typical of a partially developed suburban area.

Hood Drive Site

The existing noise environment around the Hood Drive Site is moderate with noise from vehicle traffic on Interstate 95, located along the southwestern site boundary, and U.S. Route 1, located along the eastern site boundary. No other notable noise-generating sources are present in the immediate vicinity of the Hood Drive Site. As such, the noise environment of the Hood Drive Site can be characterized as that typical of a developed suburban area.

3.8.1 Sensitive Receptors

Sensitive noise receptors in the vicinity of Action Alternative sites include residential areas located approximately 400 feet east of the Gateway Site and the limited residential properties located adjacent to the west and northwest of the Hood Drive Site.

3.8.2 Effects of the Action Alternatives

The Proposed Action would have short-term impacts to the existing noise environment due to construction activities. Noise generating sources during construction activities would be associated primarily with standard construction equipment and construction equipment transportation. These increased noise levels could directly affect the neighboring areas. Construction activities would be conducted in accordance with the FCO (Gateway Site) or SCCO (Hood Drive Site) noise control ordinances.

Construction activities generate noise by their very nature and are highly variable, depending on the type, number, and operating schedules of equipment. Construction projects are usually executed in stages, each

having its own combination of equipment and noise characteristics and magnitudes. Construction activities are expected to generally be typical of other similar construction projects and would include mobilization, site preparation, excavation, placing foundations, utility development, heavy equipment movement, and paving roadways and parking areas. The most prevalent noise source at typical construction sites is the internal combustion engine. General construction equipment using engines includes heavy, medium, and light equipment such as excavators; roller compactors; front-end loaders; bulldozers; graders; backhoes; dump trucks; water trucks; concrete trucks; pump trucks; utility trucks; cranes; and lube, oil, and fuel trucks.

Peak noise levels vary at a given location based on line-of-sight, topography, vegetation, and atmospheric conditions. In addition, peak noise levels would be variable and intermittent because each piece of equipment would only be operated when needed. However, peak construction noise levels would be considerably higher than existing noise levels. Relatively high peak noise levels in the range of 93 to 108 dBA (decibels, A-weighted scale) would occur on the active construction site, decreasing with distance from the construction areas. Generally speaking, peak noise levels within 50 feet of active construction areas and material transportation routes would most likely be considered "striking" or "very loud", comparable to peak crowd noise at an indoor sports arena. At approximately 200 feet, peak noise levels would be loud, approximately comparable to a garbage disposal or vacuum cleaner at 10 feet. At 0.25 miles, construction noise levels would generally be quiet enough to be considered insignificant, although transient noise levels may be noticeable at times. Table 3-3 presents peak noise levels that could be expected from a range of construction equipment during proposed construction activities.

Combined peak noise levels when several loud pieces of equipment are used in a small area at the same time are expected to occur rarely, if ever, during the project. However, under these circumstances, peak noise levels could exceed 90 dBA within 200 feet of the construction area, depending on equipment being used.

Although noise levels would be quite loud in the immediate area, the intermittent nature of peak construction noise levels would not create the steady noise level conditions for an extended duration that could lead to hearing damage. Construction workers would follow standard federal Occupational Safety and Health Administration requirements to prevent hearing damage.

Areas that could be most affected by noise from construction are those closest to the construction footprint, including the residences located approximately 400 feet east of the Gateway Site and the residences adjacent to the west and northwest of the Hood Drive Site. Indoor noise levels would be expected to be 15-25 decibels lower than outdoor levels. In addition, BMPs (described in Section 4) would be implemented to reduce noise impacts. Direct construction noise impacts would be temporary and less than significant.

Indirect impacts include noise from workers commuting and material transport. Area traffic volumes and noise levels would increase slightly as construction employees commute to and from work at the project area, and delivery and service vehicles (including trucks of various sizes) transit to and from the site. Persons in the project area would experience temporary increases in traffic noise during daytime hours. These effects are not considered significant because they would be temporary, intermittent, and similar to existing traffic noise levels in the area.

Table 3-3 Peak Noise Levels Expected from Typical Construction Equipment

Source	Peak Noise Level (dBA, attenuated)							
	Distance from Source (feet)							
	0	**50**	**100**	**200**	**400**	**1,000**	**1,700**	**2,500**
Heavy truck	95	84-89	78-93	72-77	66-71	58-63	54-59	50-55

Dump truck	108	88	82	76	70	62	58	54
Concrete mixer	108	85	79	73	67	59	55	51
Jack-hammer	108	88	82	76	70	62	58	54
Scraper	93	80-89	74-82	68-77	60-71	54-63	50-59	46-55
Bulldozer	107	87-102	81-96	75-90	69-84	61-76	57-72	53-68
Generator	96	76	70	64	58	50	46	42
Crane	104	75-88	69-82	63-76	55-70	49-62	45-48	41-54
Loader	104	73-86	67-80	61-74	55-68	47-60	43-56	39-52
Grader	108	88-91	82-85	76-79	70-73	62-65	58-61	54-57
Pile driver	105	95	89	83	77	69	65	61
Forklift	100	95	89	83	77	69	65	61
Combined Peak Noise Level (Bulldozer, Jackhammer, Scraper)								
Combined Peak Noise Level	**Distance from Source**							
	50 feet	**100 feet**	**200 feet**	**¼ mile**	**½ mile**			
	103	97	91	74	68			
Source: (Tipler 1976)								

No significant long-term noise impacts are anticipated with the operation of the proposed HCC. The HCC would be quiet medical office facility with operational noise from HVAC systems typical of other comparably sized commercial buildings and grounds maintenance noise (such as lawn mowing or leaf blowers). Proposed operational activities at the new HCC would also include vehicle traffic to and from the selected Action Alternative site. The vehicle traffic would not produce excessive noise, is consistent with the existing noise environment of the Action Alternative site areas, and would not produce a significant adverse noise impact on surrounding land uses.

3.8.3 Effects of the No Action Alternative

Under the No Action Alternative, the noise environment of the Action Alternative sites would not be altered by the activities of VA. However, the development of the Action Alternative sites by others could produce similar construction noise impacts as identified under the Proposed Action. Operational noise impacts would be dependent on the specific use of the sites.

3.9 Land Use

Gateway Site

The Gateway Site consists of approximately 35 acres of undeveloped woodlands with a small clearing in the southeastern corner associated with a vacant, off-site former school. Adjacent to the north, east, and south of the site are additional undeveloped woodlands. Farther east are residences and southeast is the vacant small school. Commercial properties (moving and storage facilities) are located south of the Gateway Site and to west of the site, across Interstate 95 (Central Park Shopping Center).

According to the Fredericksburg Community Planning and Building Department, the Gateway Site is currently zoned Planned Development Medical Center (PDMC). Health care facilities are a permitted use under the current zoning designation for the Gateway Site.

Surrounding properties to the north, east, and south of the Gateway Site, which are also part of the 88-acre 1500 Gateway Boulevard Development area, are also zoned PDMC. Properties farther east are zoned residential (R2) and the commercial properties to the south are zoned Commercial Highway (CH). Properties adjoining to the west of the Gateway Site, across Interstate 95, are currently zoned Planned Development – Commercial (PD-C). Zoning designations for the Gateway Site and surrounding properties are shown on Figure 3-3.

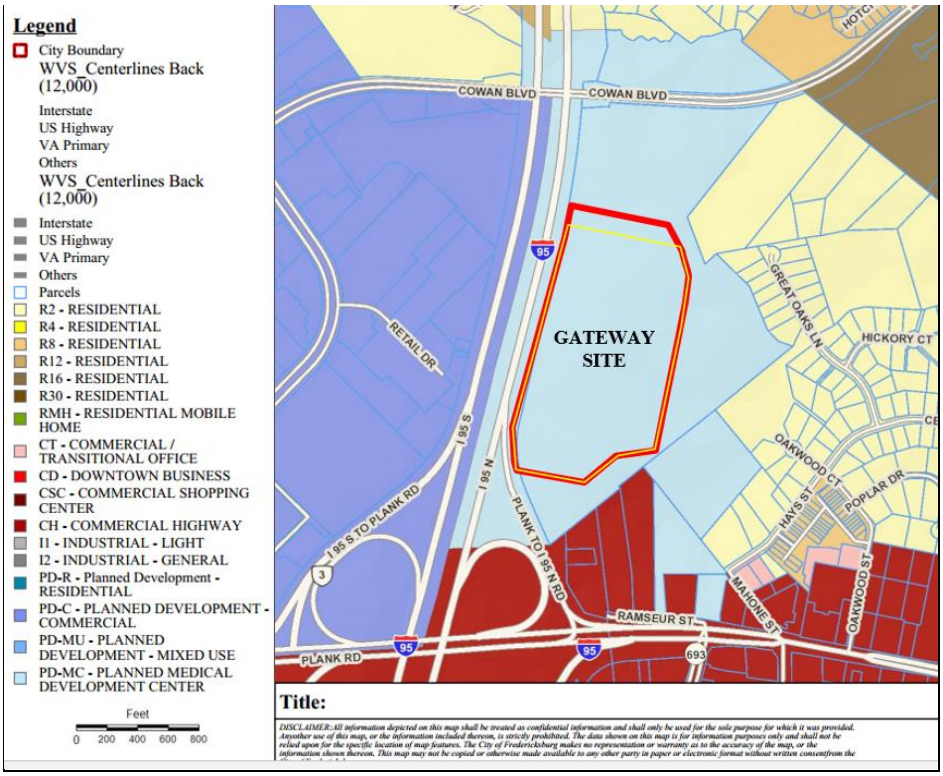

Figure 3-3 Gateway Site Zoning Map

Hood Drive Site

The Hood Drive Site consists of approximately 49 acres of mostly undeveloped, grassy land with small areas of shrubs/trees and a pond. The Hood Drive Site also includes a small parcel with a house (4708 Hood Drive) and a small parcel with a vacant gasoline station/convenience store (5313 U.S. Route 1). Adjacent to the north of the Hood Drive Site is undeveloped grassy and wooded land, and across Hood Drive are two residential properties and additional undeveloped wooded land. Adjacent to the east of the site are commercial properties, including gasoline stations, an automotive repair garage, a restaurant, and motels. Adjacent to the south of the Hood Drive Site are undeveloped wooded land and a motel. Adjacent to the west of the site are undeveloped grassy and wooded land, residential properties, an electrical contractor business, and Interstate 95. Across Interstate 95 to the west are commercial properties.

According to the Spotsylvania County Zoning Division, the majority of the Hood Drive Site is zoned Commercial Highway (C-3) with the northern corner of the primary parcel and the small residential parcel (4708 Hood Drive) zoned residential (R-1). Health care facilities are permitted under the current C-3 zoning designation for the majority of the Hood Drive Site. The Spotsylvania County Zoning Administrator stated that, although health care facilities are not permitted as part of the R-1 Zoning

designation, it does not preclude the placement of an access road to serve the HCC, and neither rezoning nor a zoning variance would be required to construct the proposed HCC access road through the R-1 zoned property.

The neighboring properties to the north, east, and south of the Hood Drive Site are currently zoned C-3, with the small residential area to the north and northwest zoned R-1. Properties to the west are zoned Commercial 2 (C-2) and properties to the southwest, across Interstate 95, are currently zoned C-3 and Mixed Use 5 (MU-5). Zoning designations for the Hood Drive Site and surrounding properties are shown on Figure 3-4.

Spotsylvania County stated that the Hood Drive Site is centrally located within the County's designated Primary Development area that is intended for growth and development in a variety of suburban, semi-urban, and urban scale densities with redevelopment of aged sites, including the Royal Farms gasoline station adjoining to the east of the Hood Site, an upcoming Chick-fil-A restaurant across U.S. Route 1 from the Hood Drive Site, and a locally relocated Pizza Hut. The Hood Drive Site is also located in the County's Opportunity Zone, an area intended to revitalize economically distressed communities by utilizing private investments. The Hood Drive Site is also located in the County's Technology Zone, an area that serves new and existing businesses whose primary purpose is the research, development, or manufacture and/or design of technology products, processes, or related services.

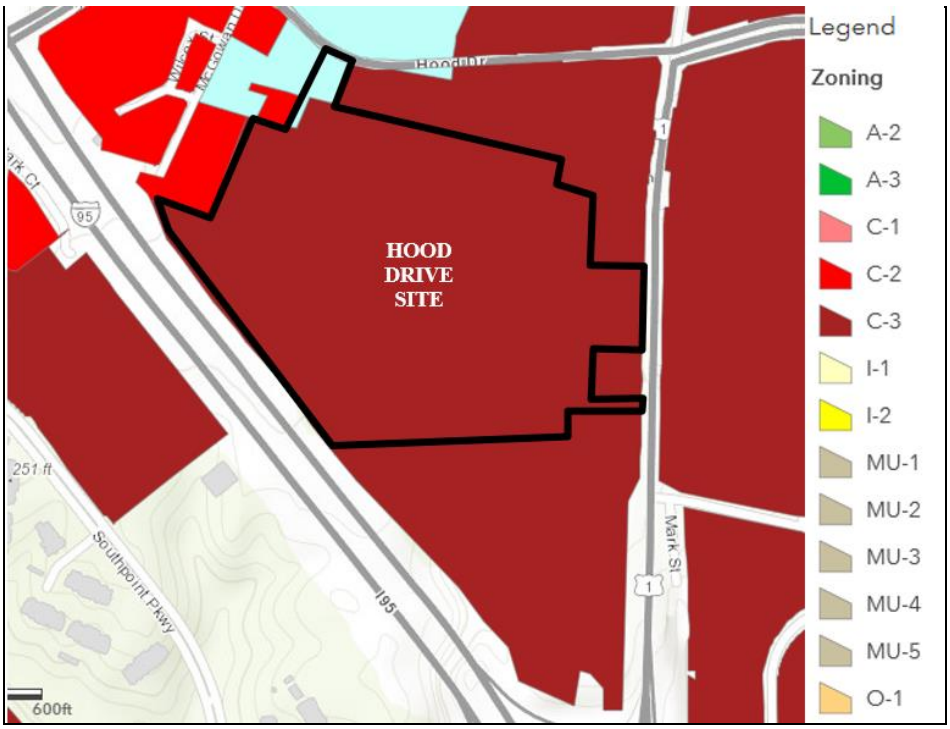

Figure 3-4 Hood Drive Site Zoning Map

3.9.1 Effects of the Action Alternatives

VA's closure of the existing leased clinics would have negligible land use impacts.

Gateway Site

The Proposed Action at the Gateway Site would be consistent with local zoning and compatible with surrounding land use and would have negligible land use effects. No adverse onsite building function or architecture impacts are anticipated. The HCC would be designed and constructed in accordance with City of Fredericksburg building codes and zoning ordinances.

Hood Drive Site

The Proposed Action at the Hood Drive Site would be compatible with surrounding land use and mostly consistent with local zoning. The small residential parcel, proposed to be used for a HCC access drive, would require rezoning from its current R-1 zoning designation to a zoning designation suitable for medical facilities or a zoning variance for the access drive. Land use effects of the Proposed Action at the Hood Drive Site would be less than significant. No adverse onsite building function or architecture impacts are anticipated. The HCC would be designed and constructed in accordance with Spotsylvania County building codes and zoning ordinances.

3.9.2 Effects of the No Action Alternative

Under the No Action Alternative, no land use impacts due to VA's Proposed Action would occur. The Action Alternative sites would likely be developed by others for commercial use in accordance with local zoning regulations. The land use impacts (and associated community benefits) of any future proposed developments would depend upon the use proposed.

3.10 Wetlands, Floodplains, and Coastal Zone Management

3.10.1 Wetlands

This section discusses wetlands at or near the Action Alternative sites and surface waters (streams) as they pertain to wetlands. Additional information regarding surface waters is provided in Section 3.6.

Gateway Site

No wetlands were identified at the Gateway Site on the USFWS National Wetland Inventory online wetland mapper; however, a wetlands investigation completed in October 2018 for the 88-acre 1500 Gateway Boulevard Development area that includes the Gateway Site identified a small palustrine forested wetland in the southeast portion of the Gateway Site (Figure 3-5) (Bowman Consulting 2018d). The small wetland is the origin of an intermittent stream that continues offsite to unnamed tributaries of Smith Run, east of the site. In May and June 2020, TTL completed a wetland determination/delineation for the Gateway Site on behalf of VA, which confirmed the wetland area identified at the Gateway Site in 2018. No other wetlands were identified at the Gateway Site.

The Gateway Site wetland and other wetlands identified east of the site within the 88-acre 1500 Gateway Boulevard Development area received a Jurisdictional Determination (JD) from the U.S. Army Corps of Engineers (USACE) in December 2018 and were determined to be Waters of the U.S. (WOTUS) (U.S. Army Corps of Engineers 2018). A USACE/VDEQ joint permit application for taking or filling these wetlands, including the small wetland on the Gateway Site, was submitted by Hylton Venture, LLC (current owner of the 88-acre area) in April 2020 to USACE for the proposed 88-acre development (Bowman Consulting 2020).

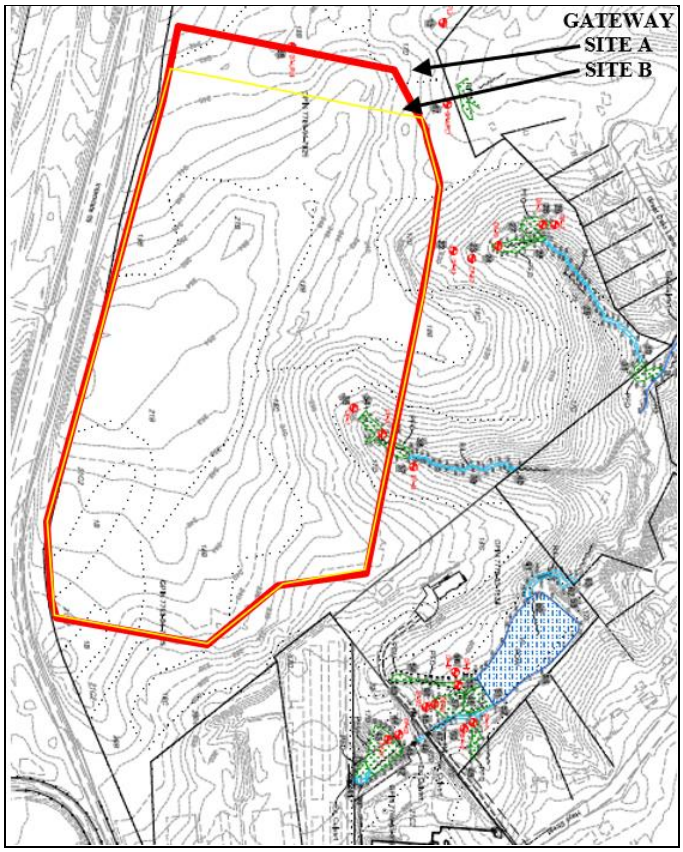

Figure 3-5 Gateway Site Wetland Delineation Map

Hood Drive Site

The Hood Drive Site generally slopes from north to south, with a natural drainage in the south-central part of the site that was dammed in the late 1950s, forming a pond that remains today. Two ephemeral drainage channels (remnants of the original natural drainage) form on the site and drain from the northeast and northwest to the pond.

In 2006, a wetlands delineation was conducted for a proposed commercial center development of the Hood Drive Site. The delineation identified 0.92 acres of wetlands at the site, consisting of approximately 0.74 acres of open water (the 1950s farm pond) and the 0.18 acres of palustrine forested wetland around the perimeter of the pond. On June 16, 2006, USACE Norfolk District Office conducted a JD at the Hood Drive Site and concluded the identified wetlands were isolated and not jurisdictional WOTUS.

In 2006, the commercial center developer applied for a Virginia Water Protection (VWP) General Permit from VDEQ for the wetland impacts associated with the planned commercial development. The development plans included the installation of an approximately 3.6-acre, east-west oriented, stormwater management pond south of the 1950s farm pond. The southern portion of the farm pond was to be incorporated into the proposed stormwater management pond. VDEQ issued the VWP General Permit on September 27, 2006, and, in 2013, granted an extension of the permit to September 26, 2020.

Earthwork for the commercial center development began in late 2008 and ceased prior to completion in early 2009. The rectangular stormwater management pond was partially completed south of the 1950s pond during the 2008-2009 development preparation earthwork. The 1950s pond now discharges to the rectangular pond and an outlet structure installed in the rectangular pond directs surface water to an unnamed, modified intermittent stream that flows southwest from the Hood Drive Site, under Interstate 95, via a culvert, and to the south towards Massaponax Creek.

In May and June 2020, TTL completed a wetland determination/delineation for the Hood Drive Site on behalf of VA. TTL identified six wetland areas on the site, including the 1950s pond and the rectangular pond in the southern portion of the site, the natural drainage channels to the northeast and northwest of the 1950s pond, and two small areas near the northwestern and southwestern corners of the site that appear to be associated with stormwater management features.

Based on the length of time since the 2006 USACE JD and the changed hydrology of the Hood Drive Site since the 2006 JD, a request for a Preliminary JD (PJD) was submitted to the USACE Norfolk District Office in July 2020 for the wetlands identified on the Hood Drive Site. On August 11, 2020, USACE responded to the PJD request with a determination that wetlands at the Hood Drive Site are jurisdictional WOTUS. The developer may accept the PJD determination or submit additional information to USACE as part of a JD request. If USACE concludes that the Hood Drive Site wetlands are WOTUS, any direct or indirect impacts would require a Section 404 permit from the USACE and VDEQ and a Section 401 Water Quality Certification permit from the VDEQ. If the wetlands are determined to be isolated, a new VWP General Permit from VDEQ would be required after the current state permit expires on September 26, 2020.

Figure 3-6 Hood Drive Site Wetland Delineation Map

3.10.2 Floodplains

The Federal Emergency Management Agency National Flood Hazard Flood Layer FIRMette internet mapping application was used to determine if the Action Alternative sites or surrounding properties are located in designated floodplains.

The Action Alternative sites and surrounding properties are not located within the 100-year or 500-year floodplain. No floodplains are located within 2,000 feet of either site (FEMA 2020).

3.10.3 Coastal Zone

The Coastal Zone Management Act (CZMA) was promulgated to control nonpoint pollution sources that affect coastal water quality. The CZMA of 1990, as amended (16 USC 1451 et seq.), encourages states to

preserve, protect, develop, and where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats. In Virginia, the CZMA is administered by the VDEQ Coastal Zone Management Program.

The City of Fredericksburg and Spotsylvania County are both located within a designated coastal management area and are subject to the Coastal Zone Management Rules. VA, as a federal agency, must coordinate with the VDEQ to ensure that the selected Action Alternative is consistent with the VDEQ's Coastal Zone Management Program.

3.10.4 Effects of the Action Alternatives

The Proposed Action would have no floodplain impacts; no floodplains are located on the Action Alternative sites or the surrounding properties.

Both Action Alternative sites are located within a designated coastal zone, VA conducted a federal consistency zone determination that evaluated the Action Alternatives relative to the enforceable policies of the Coastal Zone Management Rules and determined the Proposed Action would be consistent with these policies. The Federal Consistency Determination is included as Appendix E. VDEQ is in the process of reviewing the Federal Consistency Determination. Compliance with the enforceable policies of the VDEQ Coastal Zone Management Program rules, ensuring the Proposed Action would have less than significant coastal zone impacts.

VA's closure of the leased clinics would have no wetland, floodplains, or coastal zone impacts.

Gateway Site

The Proposed Action would result in impacts to regulated wetlands at the Gateway Site. A small palustrine forested wetland was identified in the southeast portion of the site and determined to be a WOTUS. A USACE/VDEQ joint permit application for taking or filling the Gateway Site wetland and other WOTUS identified within the 88-acre 1500 Gateway Boulevard Development area was submitted by Hylton Venture, LLC in April 2020 to USACE/VDEQ for the proposed 88-acre development. Hylton Venture, LLC and/or VA's selected developer would obtain the required permits and implement the permit-required mitigation measures, which would likely include the purchase of wetland credits to preserve other off-site wetlands. With the completion of the permit-required mitigation measures, wetland impacts at the Gateway Site would be less than significant.

Hood Drive Site

The Proposed Action would result in impacts to regulated wetlands at the Hood Drive Site. Six wetland areas were identified on the Hood Drive site, including the 1950s and rectangular ponds identified in the southern portion, the natural drainage channels to the northeast and northwest of the 1950s pond, and two small areas near the northwestern and southwestern corners of the site.

VA submitted a request for a PJD to the USACE Norfolk District Office for the wetlands identified on the Hood Drive Site in July 2020 and, in response, USACE determined that wetlands at the Hood Drive Site are jurisdictional WOTUS. The developer may accept the PJD determination or submit additional information to USACE as part of a JD request. If USACE concludes that the Hood Drive Site wetlands are WOTUS, any direct or indirect impacts would require a Section 404 permit from the USACE and VDEQ and a Section 401 Water Quality Certification permit from the VDEQ. If the wetlands are determined to be isolated, a new VWP General Permit from VDEQ would be required for the proposed HCC development. VA's selected developer would obtain the required permits and implement the permit-required mitigation measures, which would likely include the purchase of wetland credits to preserve other off-site wetlands. With the completion of the permit-required mitigation measures, wetland impacts at the Hood Drive Site would be less than significant.

3.10.5 Effects of the No Action Alternative

Under the No Action Alternative, no impacts to wetlands, floodplains, or coastal zones would occur as a result of the Proposed Action. The Action Alternative sites would likely be developed for commercial use by others, which could result in wetlands and coastal zone impacts, depending on the future development.

3.11 Socioeconomics

The following subsections identify and describe the socioeconomic environment of the City of Fredericksburg, Spotsylvania County, and the State of Virginia. The data provide an understanding of the socioeconomic factors that have developed the area. Socioeconomic areas of discussion include the local demographics of the area, regional and local economy, and local recreation activities. Data used in preparing this section were collected from the 2010 Census of Population and Housing (U.S. Census Bureau), subsequent U.S. Census Bureau data, and the U.S. Department of Commerce Bureau of Economic Analysis.

Demographics

The City of Fredericksburg and the State of Virginia have similar minority populations. Spotsylvania County has a slightly lower minority population than those of the City of Fredericksburg and the State of Virginia. Minority populations specific to the Action Alternative site areas are discussed in Section 3.16 (Environmental Justice). Persons under 18 years of age and over 65 years of age, and high school graduation rates are generally similar between the City of Fredericksburg, Spotsylvania County, and the State of Virginia (Table 3-4).

Table 3-4 Demographic Data for Fredericksburg, Spotsylvania County, and Virginia

Area	All Individuals (2019 Estimate)	Population Under 18 Years of Age (2019)	Population Over 65 Years of Age (2019)	Minority (2019)	High School Graduates (2014-2018)	Veterans (2014-2018)
Virginia	8,535,519	22.0%	15.4%	38.5%	89.3%	684,480
Spotsylvania County	136,215	24.7%	14.3%	32.6%	90.2%	13,514
Fredericksburg	29,036	20.9%	10.6%	40.2%	89.7%	2,021

Note: People of Hispanic or Latino origin may be of any race
Source: U.S. Census Bureau, 2010 Census, Profile of General Demographic Characteristics, 2014-2018 (U.S. Census Bureau 2020)

Employment and Income

The City of Fredericksburg has a slightly lower median household income and slightly larger population below the poverty line than the State of Virginia as a whole and Spotsylvania County has a higher median household income and smaller population below the poverty line than the State of Virginia as a whole (Table 3-5). Household incomes specific to the Action Alternative site areas are discussed in Section 3.16.

Table 3-5 Regional Income for Fredericksburg, Spotsylvania County, and Virginia

Area	Number of Households (2014-2018)	Median Household Income (2014-2018)	Population Below Poverty Level	Unemployment Rate (April 2020)
Virginia	3,128,415	$71,564	10.7%	11.2%

Spotsylvania County	43,677	$85,330	7.5%	11.1%
Fredericksburg	10,582	$63,274	14.1%	12.1%

Source: U.S. Census Bureau, 2010 Census, Profile of General Demographic Characteristics, 2014-2018 (U.S. Census Bureau 2020) and U.S. Bureau of Labor Statistics, Unemployment rate in States and Local Areas (U.S. Bureau of Labor Statistics 2020)

Commuting Patterns

Residents of the Fredericksburg area are largely dependent on personal automobiles for transportation to and from work. Other methods of transit include public transportation (the bus system known as FRED, which connects to Virginia Railway Express and Amtrak trains), carpooling, and walking. The average commuting time in Fredericksburg and Spotsylvania County was approximately 29 to 39 minutes in 2018.

Protection of Children

Because children may suffer disproportionately from environmental health risks and safety risks, EO 13045, *Protection of Children From Environmental Health Risks and Safety Risks*, was introduced in 1997 to prioritize the identification and assessment of environmental health risks and safety risks that may affect children and to ensure that federal agencies' policies, programs, activities, and standards address environmental risks and safety risks to children. This section identifies the distribution of children and locations where numbers of children may be proportionately high (such as schools, childcare centers, family housing) in areas potentially affected by the Proposed Action.

Children are not regularly present at either of the Action Alternative sites. However, children may be present in the off-site residential areas located near the Action Alternative sites. No open schools, playgrounds, or childcare centers are located in the immediate area of either of the Action Alternative sites. The small former school located southeast of the Gateway Site is vacant.

3.11.1 Effects of the Action Alternatives

The Proposed Action is anticipated to result in short-term, direct, beneficial impacts to local employment and personal income. Construction of the proposed new HCC would provide additional temporary construction jobs in the private sector, thus providing short-term socioeconomic benefit to the selected site area.

The Proposed Action would result in significant long-term beneficial health impacts by providing a new HCC that would enhance the health care services provided to regional U.S. Veterans.

No adverse health or safety risks to children are anticipated to result from construction or operation of the new HCC. Children are not regularly present at the Action Alternative sites. In addition, once operational, children would only be present at the HCC as visitors; all Veterans are above the age of 18. Construction areas would be secured to prevent unauthorized access by children from the nearby residential areas. The construction contractor would limit and control construction dust and noise as discussed in Section 4, thereby minimizing adverse effects to children in the area.

VA's closure of the existing leased clinics would have negligible socioeconomic impacts. These facilities would likely be leased for another commercial use.

3.11.2 Effects of the No Action Alternative

The No Action Alternative would result in no construction and no increased short- or long-term economic benefit due to VA's action. The Action Alternative sites would likely be developed by others for commercial use in accordance with local zoning. The socioeconomic impacts of any future developments would depend on the proposed use.

Most importantly, the inability of VA to provide adequate medical facilities commensurate with the current and anticipated future needs would result in a significant adverse, long-term, direct impact to U.S. Veterans in the region.

3.12 Community Services

The Gateway Site is located in the Fredericksburg Public School District and the Hood Drive Site is located in the Spotsylvania County School District. There are no schools located within 2,500 feet of the Action Alternative sites (Google 2020).

The Fredericksburg Police Department (Gateway Site) and Spotsylvania County Sheriff's Office (Hood Drive Site) provide police protection and emergency medical services to the Action Alternative sites and their vicinities. The Fredericksburg Fire Department (Gateway Site) and Spotsylvania County Department of Fire, Rescue, and Emergency Management (Hood Drive Site) provide fire protection and emergency medical services to the Action Alternative sites and their vicinities.

The City of Fredericksburg Transportation Division (Gateway Site) and Virginia Department of Transportation (VDOT) provide maintenance to primary roads and bridges in the vicinity of the Action Alternative sites.

There are no developed recreational facilities in the immediate vicinity of the Action Alternative sites.

The Mary Washington Healthcare Campus is located approximately 3,500 feet northeast of the Gateway Site. Mary Washington Healthcare at Lee's Hill is located approximately 1,500 feet east-southeast of the Hood Drive Site. There are no additional hospitals or other major medical facilities located within one mile of the Action Alternative sites.

Public transportation is provided to the vicinity of the Action Alternative sites by FRED Transit, via bus stops along Plank Road and Cowan Boulevard (Gateway Site – Bus Route F1) and U.S. Route 1 (Hood Drive Site – Bus Routes F2, F3, S1, S4, and S5). Additional information regarding public transportation in the site vicinities is provided in Section 3.14.

3.12.1 Effects of the Action Alternatives

No significant additional load is expected to be placed on the fire or police departments as the result of implementing the Proposed Action at either of the Action Alternative sites. Coordination with FRED Transit may expand bus services to include new bus stops at the proposed HCC. Increased use of other public or community services as a result of the Proposed Action is not expected. As such, the Proposed Action is expected to have a negligible impact on local public services.

VA's closure of leased clinics, which would be replaced with the much larger, centralized proposed HCC, would have negligible community service impacts.

3.12.2 Effects of the No Action Alternative

Under the No Action Alternative, no construction by VA's selected developer would occur and no impacts to community services would be anticipated. Should the Action Alternative sites be developed in the future by others, community service impacts may occur, depending on the use.

3.13 Solid Waste and Hazardous Materials

Hazardous and toxic materials or substances are generally defined as materials or substances that pose a risk (through either physical or chemical reactions) to human health or the environment.

Gateway Site

Bowman Consulting completed a Phase I ESA of the 88-acre 1500 Gateway Boulevard development area, including the Gateway Site, in October 2018 (Bowman Consulting 2018e). The Bowman Phase I ESA indicated that the Gateway Site is mostly undeveloped woodlands with a small clearing in the southeastern corner associated with a small vacant off-site school. The site was primarily farmland in the 1960s and 1970s with limited undeveloped woodlands along the eastern and northern boundaries, and has been gradually reforested since the 1980s. The Phase I ESA identified recognized environmental conditions (RECs) associated with the southeasterly adjoining former school. These RECs were associated with a previously damaged septic system, an abandoned 275-gallon heating oil aboveground storage tank with no leaking or staining, and staining on the basement floor near a sump. None of these RECs are located on the Gateway Site. No environmental concerns or RECs were identified for the Gateway Site.

Hood Drive Site

ATC completed a Phase I ESA for the Hood Drive Site in March 2020 (ATC Group Services, LLC 2020a). The Phase I ESA reported that the Hood Drive Site includes approximately 49 acres of mostly undeveloped, grassy land with small areas of trees and a pond. The site includes a small parcel with a house (4708 Hood Drive) that was built in the early 1950s and a small parcel with a vacant gasoline station/convenience store (5313 U.S. Route 1) that was built in the early 1970s. The Hood Drive Site was mostly unimproved farmland with a farmstead in the northeastern portion from at least 1942 to the 1970s. With the exception of the north-central portion, the site gradually became reforested starting in the 1970s and was heavily wooded by 2003. The site was cleared of most of its vegetation between 2005 and 2006 in anticipation of commercial development. Earthwork for the commercial development began in late 2008 and ceased prior to completion in 2009. During that time, the southern portion of the site was heavily disturbed and graded in preparation for development. Since 2009, the majority of the site has gradually become revegetated with grass and shrubs.

The Phase I ESA stated the gasoline and diesel underground storage tanks (USTs) associated with the vacant on-site gasoline station were removed in 2015. Petroleum-contaminated soils were encountered during the removal of the USTs and a release was reported to VDEQ. Site characterization investigations were completed in 2015 and 2016 to assess the nature and extent of the UST release. These investigations found generally low concentrations of contaminants in soil and benzene, ethylbenzene, methyl tert-butyl ether, and naphthalene in groundwater in excess of the VDEQ Voluntary Remediation Program (VRP) Tier II Residential Groundwater Screening Levels, with the highest concentrations detected in the eastern portion of the vacant gasoline station. Other than a water supply well at the gasoline station, no water supply wells were identified in the vicinity of the gasoline station. On July 17, 2016, VDEQ issued a Cased Closed [no further action (NFA)] letter for the petroleum release associated with the gasoline station. VDEQ file notes state the NFA decision was based on the removal of the source of the contamination (the USTs), the absence of groundwater water supply wells in the area (other than the gasoline station well, which was to be abandoned), the commercial use of the area, and absence of occupants on the western adjacent property (the primary proposed HCC parcel) and the gasoline station property (no vapor intrusion and worker exposure concerns).

The ATC Phase I ESA identified two RECs for the Hood Drive Site:

- The documented petroleum contamination at the vacant gasoline station parcel that exceeds the VDEQ VRP Tier II Residential Groundwater Screening Levels.
- Potential contaminated vapor intrusion concerns for buildings on the vacant gasoline station parcel.

In addition, the ATC Phase I ESA noted the house and vacant gasoline station/convenience store at the Hood Drive Site may contain asbestos-containing materials (ACMs).

The ATC Phase I ESA recommended a Soil Management Plan be developed to reduce risks associated with any future excavation/construction activities in the area of the former UST systems and coordination with the VDEQ to determine if additional assessment would be required to maintain the NFA status given that land use conditions would change as part of the proposed redevelopment of the property as a HCC.

In June 2020, ATC completed a Limited Phase II ESA to further assess the potential impacts of the residual contamination at the vacant gasoline station on the proposed HCC development (ATC Group Services, LLC 2020b). The investigation included two soil borings on the western side of the vacant gasoline station parcel, two soil borings on the eastern portion of the main site parcel, and two soil boring in the eastern portion of the proposed HCC building location (approximately 600 feet west of the vacant gasoline station) and the collection of two soil gas samples in proposed HCC building location. Low concentrations of petroleum compounds were detected in soil and/or groundwater samples in the vicinity of the vacant gasoline station (below VDEQ VRP Screening Levels and the VDEQ UST Section Action Levels). No petroleum compounds were detected in the soil samples collected in the proposed HCC building location. The soil gas samples contained very low concentrations of petroleum compounds, well below the VDEQ VRP Residential and Industrial Shallow Soil Gas Screening Levels.

On June 24, 2020, VDEQ provided a letter stating they reviewed the proposed site plan for the HCC development and noted the plan includes covering the vacant gasoline station property by either grass or pavement. VDEQ noted that while some residual soil contamination may be encountered during any construction excavation on the gasoline station property, the levels of contamination should be minimal and since this area of the site would not include a structure, there would be no petroleum vapor intrusion concern. VDEQ indicated that they do not anticipate that the gasoline station and identified petroleum contamination would create issues for the proposed HCC development, other than the need for proper waste management for any excavated material.

3.13.1 Effects of the Action Alternatives

VA's closure of the existing leased Fredericksburg outpatient clinics would have no solid waste or hazardous materials impacts.

Implementing the Proposed Action at either Action Alternative site would result in short-term, less-than-significant adverse impacts due to the increased presence and use of petroleum and hazardous substances during construction. An increase in construction vehicle traffic would increase the likelihood for release of vehicle operating fluids (such as oil, diesel, gasoline, and antifreeze) and maintenance materials. As such, a less-than-significant, direct, short-term adverse impact is possible. Implementation of standard construction BMPs would serve to ensure this impact is further minimized.

No significant adverse long-term impacts during operation of the HCC at either Action Alternative site are anticipated. Long-term operational solid wastes, hazardous materials, and medical wastes would be managed in accordance with applicable federal and state laws. Wastes would be collected and properly disposed of by licensed, contracted transportation and disposal companies.

Gateway Site

Based on the results of the Phase I ESA for the 88-acre 1500 Gateway Boulevard Development property, which identified no RECs for the Gateway Site, no contamination is suspected to be present at the site. Consequently, no contaminated soil management issues or potential unacceptable exposures for construction workers or future site occupants are anticipated.

Hood Drive Site

Based on the results of the Phase I ESA for the Hood Drive site, soil and groundwater contamination is present near the former UST area at the vacant gasoline station/convenience store in the eastern portion of the Hood Drive site.

The proposed HCC structure would be located approximately 600 feet from the former gasoline station and the proposed HCC would be serviced by the municipal water system. Consequently, the impacted soil and groundwater associated with the former gasoline on the eastern portion of the Hood Drive Site would not pose a risk to future site occupants. Development in the area of the soil and groundwater contamination would be limited to roadways, landscaping, and possibly the installation of utilities.

A Soil and Water Management Plan would be prepared and implemented to inform construction contractors of the soil and groundwater conditions in area of the former gasoline station and to ensure proper handling and disposal of excavated soils and groundwater associated with dewatering (if any is necessary). With the completion of these BMPs, which are included in the Hood Drive Site Action Alternative, potential impacts associated with contamination identified at the Hood Drive Site would be less than significant.

The house and vacant gasoline station/convenience store at the Hood Drive Site may contain ACMs. Pre-demolition asbestos surveys of the Hood Drive Site buildings would be conducted by licensed inspectors prior to demolition activities. Identified ACMs would be removed by licensed contractors in accordance with the federal and state requirements prior to demolition.

3.13.2 Effects of the No Action Alternative

Under the No Action Alternative, no construction by VA's developer would occur, with no potential for less-than-significant, direct, short-term adverse impacts from petroleum and hazardous substances used during construction. Should the Action Alternative sites be developed in the future by others, similar short-term and long-term solid waste and hazardous materials impacts as realized under the Proposed Action could occur, depending upon the use.

3.14 Traffic, Transportation, and Parking

Traffic in the vicinities of the Action Alternative sites is regulated by the Fredericksburg Transportation Division (Gateway Site) and VDOT (both Action Alternative sites).

Public transportation is provided to the vicinity of the Action Alternative sites by FRED Transit, via Bus Route F1 and a bus stop at the intersection of Plank Road, Cowan Boulevard, and Mahone Street (Gateway Site), and via Bus Routes F2, F3, S1, S4, and S5 with stops at the commercial retail plaza across U.S. Route 1 (Hood Drive Site). As part of VA's contract requirements, the developer would ensure that one or more bus stops is located within 1,320 safely accessible walkable feet from the primary entrance of the HCC building.

Gateway Site

Access to the Gateway Site would be provided from a planned Gateway Boulevard extension between Plank Road (US Route 3) and Cowan Boulevard. The Gateway Boulevard extension would be a north-south oriented, four-lane paved road within a 100-foot-wide ROW. Plank Road is an east-west oriented, six-lane road that intersects with Interstate 95 near the Gateway Site. Cowan Boulevard is an east-west oriented, four-lane road that crosses over Interstate 95. According to VDOT, the 2019 annual average daily traffic (AADT) for Plank Road in the vicinity of the Gateway Site was 57,000 vehicles, the 2017 AADT for Cowan Boulevard in the vicinity of the Gateway Site was 24,000 vehicles and the 2009 AADT for the existing section of Gateway Boulevard south of Plank Road was 5,800 vehicles. Roads and intersections near the Gateway Site are illustrated on Figure 3-7. Refer to Table 3-6 for roadway information for the Gateway Site.

Table 3-6 Gateway Site Area Roadways

Type	Route	Direction	Road Width (feet)	Lanes	Average Daily Traffic (year)
Interstate	Interstate 95	north-south	275	6	76,000 (2019)
Minor Urban Collector	Gateway Boulevard (south of Plank Road	north-south	75	4	5,800 (2009)
Urban Principal Arterial	Plank Road (US Route 3)	east-west	120	6	57,000 (2019)
Urban Major Collector	Cowan Boulevard	east-west	75	4	24,000 (2017)
AADT Source: (Virginia Department of Transportation 2020) Additional Data Sources: TTL Site Reconnaissance, (May 20,2020); and Traffic Impact Analysis, Wells and Associates (Wells + Associates, Inc. 2020a)					

In 2020, VA retained Wells and Associates to conduct a traffic impact analysis (TIA) for the Gateway Site to evaluate the existing traffic conditions in the vicinity of the Gateway Site and the future potential traffic conditions without and with the proposed HCC. During the initial scoping of the TIA with VDOT and the City of Fredericksburg, Wells and Associates learned Michael Baker International had recently (October 2019) completed a TIA for the entire 88-acre 1500 Gateway Boulevard Development that included the proposed VA HCC. At the request of VDOT and the City of Fredericksburg, Wells and Associates used the Baker TIA as the basis for the Gateway Site TIA, as the Baker TIA captured the VA Proposed Action and is expected to be approved in the near future. The Gateway Site TIA evaluated the following intersections:

- Eastbound Route 3 and southbound I-95 loop off-ramp (1)
- Westbound Route 3 and southbound I-95 loop on-ramp (2)
- Westbound Route 3 and northbound I-95 loop off-ramp (3)
- Route 3 and northbound I-95 ramp (4)
- Route 3 and Gateway Boulevard (5)
- Route 3 and Altoona Drive/Mahone Street (6)
- Cowan Boulevard and the Future Gateway Boulevard Extension (7)
- Future Gateway Boulevard Extension northern access point (8)
- Future Gateway Boulevard Extension southern access point (9)
- Future Gateway Boulevard Extension central access point (10)

Note: Number in parentheses denotes the intersection number on Figures 3-8 through 3-13.

Figure 3-7 Gateway Site Study Intersections

2020 Baseline Conditions

The 2020 Baseline Conditions were developed using existing traffic count data and current road and intersection conditions. The baseline conditions analysis indicated that each study intersection along Plank Road currently operates at overall acceptable level of service[3] (LOS) B or better during both the AM and PM peak periods. Some minor movements at high volume intersections approach or exceed capacity at LOS E, or F, including the intersection of Plank Road and Mahone Street, and Plank Road and Gateway Boulevard. However, mainline queues were estimated to mostly clear within one signal cycle length. The existing lane use, traffic control, and levels of service are shown on Figure 3-8.

[3] **Level of Service** – LOS represents a set of qualitative descriptions of a transportation system's performance. The Federal Highway Administration Highway Capacity Manual defines levels of service for intersections and highway segments, with ratings that range from A (best) to F (worst). Generally, a LOS of D or higher is considered acceptable by transportation planning agencies.

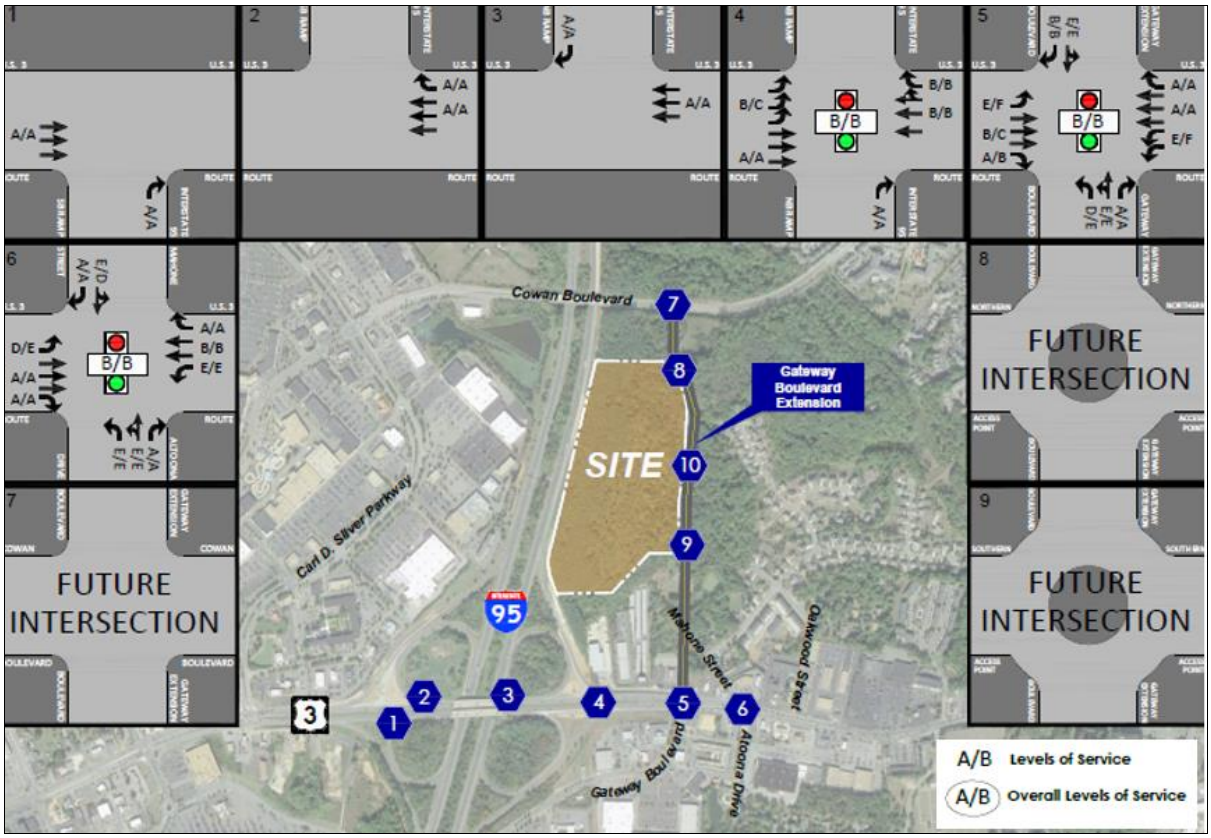

Figure 3-8 Gateway Site Current LOS

2040 Background Conditions without the Proposed HCC or 1500 Gateway Boulevard Development

The 2040 Background Conditions were developed using existing traffic count data with a background growth rate of 1 to 2 percent per year. The Baker TIA included the development of the Gateway Boulevard extension between Plank Road and Cowan Boulevard, without any development within the 88-acre 1500 Gateway Boulevard Development area, as part of the 2040 background conditions. Background conditions included the following roadway network improvements:

- Extension of Gateway Boulevard from Plank Road to Cowan Boulevard.
- Construction of two roundabouts on the Gateway Boulevard extension between Plank Road and Cowan Boulevard to provide access for the future 1500 Gateway Boulevard Development.
- A new signalized intersection at Gateway Boulevard extension and Cowan Boulevard with new dedicated right and left turn lanes.
- A reconfigured signalized intersection at Gateway Boulevard extension and Plank Road with additional dedicated right and left turn lanes and restriping.
- Restriping the intersection of Plank Road and Altoona Drive/Mahone Street to change traffic movements through the intersection.
- Construction of an interparcel connector south of Plank Road to connect Altoona Drive with the existing Gateway Boulevard.
- Widening the northbound off-ramps from Interstate 95 to Plank Road to three right-turn lanes and realigning the northbound Interstate 95 off-ramps to the signalized intersection with the northbound on-ramps.

These roadway improvements were planned to be implemented by the City of Fredericksburg, the Gateway Site owner, and/or VDOT and have been funded or committed to be funded for implementation, and thus were included in the background conditions. In August 2020, the City of Fredericksburg stated the interparcel connector south of Plank Road is no longer planned. Wells and Associates evaluated the elimination of this roadway improvement and found it did not substantially affect background conditions or traffic impacts associated with the proposed HCC at the Gateway Site.

The 2040 background conditions analysis found that with the construction of the Gateway Boulevard extension and the planned Plank Road improvements described above, with no additional development associated with the proposed HCC or the remainder of the 1500 Gateway Boulevard Development, each study intersection would operate at overall LOS C or better during the AM and PM peak periods. The TIA found that the operations of the intersections would degrade slightly from existing conditions, but the roadway improvements would generally accommodate the increase in traffic and some of the existing congestion. The intersections created as part of the Gateway Boulevard Extension would also operate at LOS C or better during the AM and PM peak periods. The background future (2040) lane use, traffic control, and levels of service are shown on Figure 3-9.

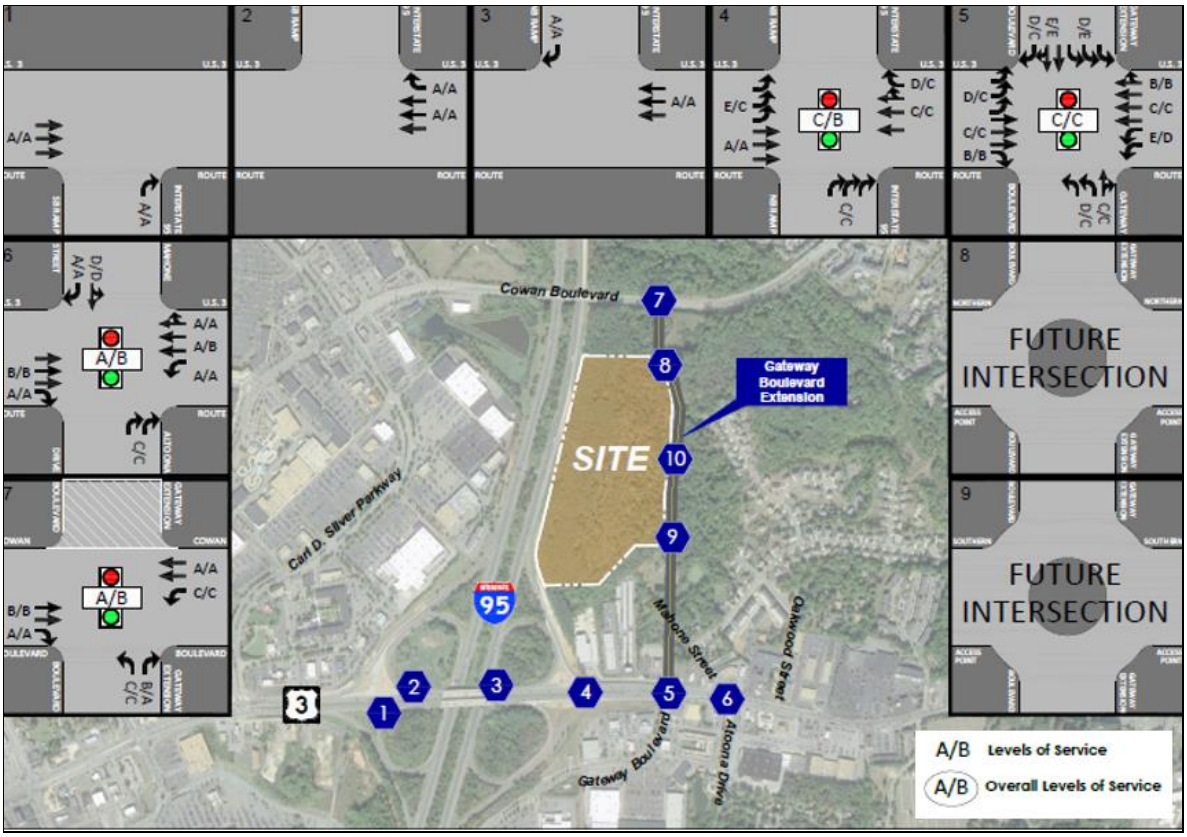

Figure 3-9 Gateway Site Background 2040

2040 Conditions with the Proposed HCC and 1500 Gateway Boulevard Development

The Baker TIA evaluated the conditions on the local roads in 2040 based on the 2040 background conditions plus the traffic generated by the full development of the 1500 Gateway Boulevard Development, including the approximately 500,000-gross square-foot VA HCC and the following:

- 100,000-square-foot nursing home
- 90,000-square-foot hotel
- 103,000-square-foot of apartment space
- 100,000-square-foot medical office building
- 84,000-square-foot of specialty retail
- 43,000-square-foot of sit-down restaurant space
- 260,000-square-foot of general office

Based on the Institute of Transportation Engineers Trip Generation Manual and trip generation information associated with other VA medical facilities similar to the proposed HCC, the complete 1500 Gateway Boulevard Development, including the proposed HCC, was estimated to generate approximately 20,468 vehicle trips per day, of which approximately 8,075 vehicle trips per day are associated with the proposed HCC and 12,393 vehicle trips per day are associated with the remaining portions of the 1500 Gateway Boulevard Development.

It is noted that the peak hour vehicle trip generation estimates utilized in the traffic study are conservative and are based on standard operating hours for similar VA facilities. The proposed HCC would provide extended hours of operation on weekdays and weekends to provide more flexibility to patients. In

addition, telehealth visits are expected to increase to provide more convenience to patients as advancements in technology are made. These factors may result in a reduction of peak hour trips during standard morning and evening commuter peak hours weekdays since patients can be served outside of commuter peak periods or conduct doctor visits virtually.

The 2040 buildout analysis found that with the addition of 1500 Gateway Boulevard Development traffic, including the proposed HCC, each study intersection would operate at overall LOS D or better during the AM and PM peak periods. Some individual movements would approach or exceed capacity with the addition of the 1500 Gateway Boulevard Development traffic; however, each movement delay would be below one full signal cycle length and queues are estimated to only increase slightly from background conditions. The total future (2040) lane use, traffic control, and levels of service are shown on Figure 3-10.

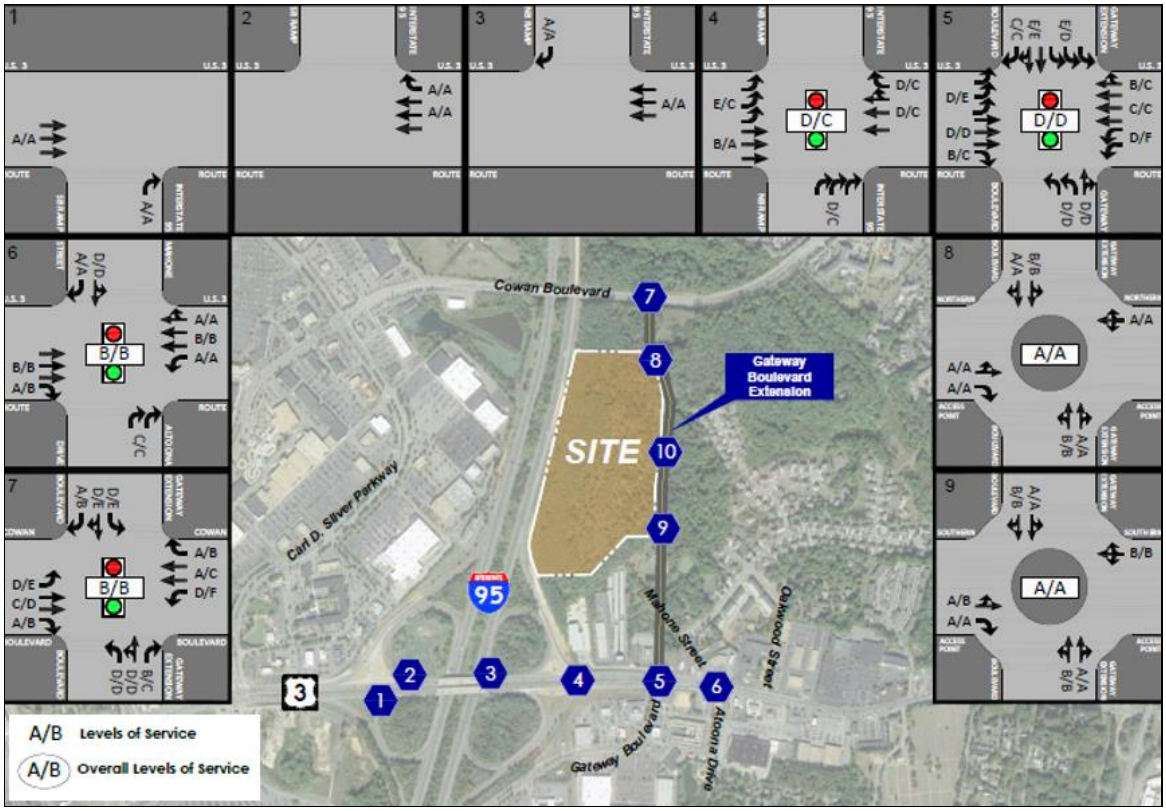

Figure 3-10 Gateway Site 2040 with Proposed HCC and 1500 Gateway Boulevard Development

The TIA concluded that with the installation of the roadway improvements included in the 2040 background analysis, which are planned and funded or committed to be funded by the City of Fredericksburg, the Gateway Site owner, and/or VDOT, all of the studied intersections would operate at an acceptable level of service and would effectively mitigate the traffic generated by the entire 1500 Gateway Boulevard Development, including the proposed VA HCC.

Proposed HCC Access Analysis

The Baker TIA evaluated traffic conditions based on the installation of two roundabouts on the Gateway Boulevard extension that would provide access for the 1500 Gateway Boulevard Development. Preliminary site plans for the HCC development include three access drives to the Gateway Site from Gateway Boulevard, with the primary entrance between the two roundabouts. Wells and Associates conducted additional analysis of access to the proposed HCC. Two configurations were evaluated,

including a signalized standard intersection between two roundabouts that would serve as the main entrance to the HCC (Alternative 1) and standard intersections at all three locations (Alternative 2).

The Gateway Site TIA found that in Alternative 1, all of the approaches at both roundabouts would operate at acceptable levels of service (LOS A or B) during both the AM and PM peak hours. The primary access drive would require a new traffic signal and would operate at acceptable levels of service (at LOS B or C) during the AM and PM peak hours.

The Gateway Site TIA indicated that in Alternative 2, all of the turning movements at the northern intersection would operate at acceptable levels of service under stop control, with the exception of the eastbound and westbound side-street movements. These would operate at LOS F during the PM peak hour. Given the relatively low volume of these movements and that separate lanes are provided, no additional improvements were considered to be necessary. The central intersection would operate at acceptable levels of service during both the AM and PM peak hours assuming separate turn lanes are provided and a new traffic signal is installed. The southern intersection would require separate turn lanes and a new traffic signal in order to maintain acceptable levels of service during both peak hours.

The Gateway TIA stated that if the Gateway Site is selected, a detailed signal warrant analysis in accordance with the Manual on Uniform Traffic Control Devices would be conducted and submitted for review and approval by VDOT and the City of Fredericksburg.

Hood Drive Site

Primary and secondary access to the Hood Drive Site would be provided via U.S. Route 1. Secondary access would also be provided via Hood Drive. U.S. Route 1 is a north-south oriented, four-lane road that intersects with Interstate 95 approximately one-half mile south of the Hood Drive Site. Hood Drive is currently an east-west oriented, two-lane road that intersects with Courthouse Road and U.S. Route 1. Courthouse Road is currently a northeast-southwest oriented, four-lane paved road. According to VDOT, the 2019 AADT for U.S. Route 1 in the vicinity of the Hood Drive Site was 28,000 vehicles, the 2017 AADT for Hood Drive in the vicinity of the Hood Drive Site was 12,000 vehicles, and the 2019 AADT data for Courthouse Road in the vicinity of the Hood Drive Site was 41,000 vehicles. Roads near the Hood Drive Site are illustrated on Figure 3-11. Refer to Table 3-7 for roadway information for the Hood Drive Site.

Table 3-7 Hood Drive Site Area Roadways

Type	Route	Direction	Road Width (feet)	Lanes	Average Daily Traffic (year)
Interstate	Interstate 95 N	north-south	200	6	60,000 (2019)
Urban Principal Arterial	U.S. Route 1	north-south	65	4	28,000 (2019)
Urban Minor Arterial	Courthouse Road/Lafayette Boulevard	northeast-southwest	80	4	41,000 (2019)
Urban Collector	Hood Drive/Mine Road	east-west	20	2	12,000 (2017)
AADT source: (Virginia Department of Transportation 2020) Additional data sources: TTL site reconnaissance (May 19, 2020) and Wells and Associates TIA (Wells + Associates 2020b).					

Spotsylvania County stated that the Hood Drive Site is located in close proximity to the confluence of a number of major transportation routes and a number of transportation projects are being studied or

proposed near the Hood Drive Site, including collector/distributor lanes on Exit 126 (U.S. Route 1 exit/entrance) from Interstate 95, the expansion of Hood Drive to four lanes, improvements to the intersections of Hood Drive/Courthouse Road and U.S. Route 1/Market Street, and the revitalization (streetscape improvements) of U.S. Route 1 north of Market Street.

In 2020, VA retained Wells and Associates to conduct a TIA for the Hood Drive Site (Hood Drive Site TIA) to evaluate the existing traffic conditions in the vicinity of the Hood Drive Site and the future potential traffic conditions with and without the proposed HCC development. The Hood Drive Site TIA evaluated the following intersections:

- Courthouse Road/Lafayette Boulevard/U.S. Route 1 (1)
- Courthouse Road/Hood Drive/Houser Drive (2)
- Hood Drive/Mine Drive/U.S. Route 1 (3)
- Market Street/U.S. Route 1 (4)
- Interstate 95 Northbound Ramps/U.S. Route 1 (5)
- Interstate 95 Southbound Ramps/U.S. Route 1 (6)
- Future Hood Drive HCC Site Driveways (7, 8, and 9).

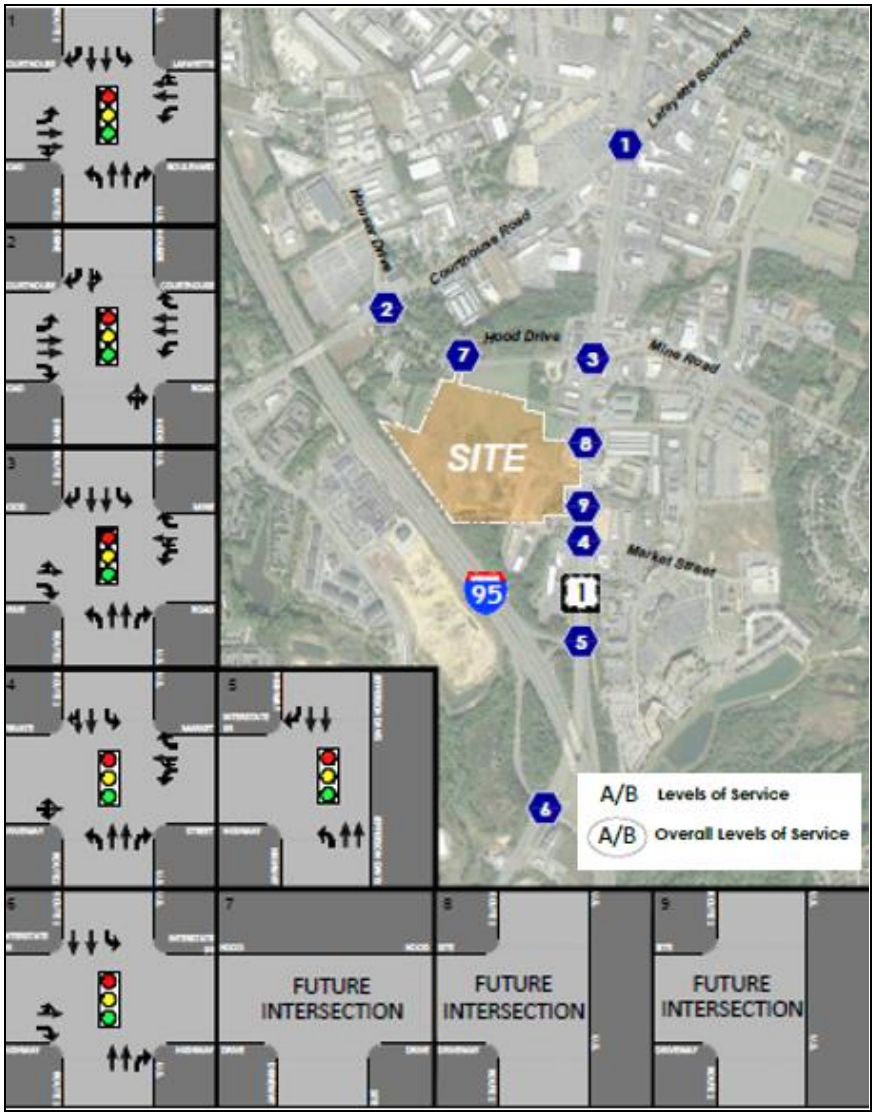

Figure 3-11 Hood Drive Site Study Intersections

2020 Baseline Conditions

The 2020 Baseline Conditions were developed using existing traffic count data and current road and intersection conditions. The baseline condition analysis indicated that all of the study intersections currently operate at overall acceptable levels of service LOS D or better during the AM peak hour with the exception of the Hood Drive/Mine Road/U.S. Route 1 intersection that operates at an overall LOS F. Some individual movements at the study intersections also operate near or beyond capacity (at LOS E or F) during this period, including the Hood Drive/Mine Road/U.S. Route 1 intersection and the Market Street/U.S. Route 1 intersection.

All of the study intersections currently operate at overall acceptable levels of service during the PM peak hour with the exception of the Courthouse Road/Hood Drive/Houser Drive intersection that operates at an overall LOS E. In addition, some individual movements at the study intersections also operate near or beyond capacity (at LOS E or F) during this period, including the Hood Drive/Mine Road/U.S. Route 1 intersection, the Hood Drive/Mine Drive/U.S. Route 1 intersection, and the Market Street/U.S. Route 1 intersection.

The Interstate 95 ramp intersections currently operate at overall acceptable levels of service during both the AM and PM peak hours with select movements operating at LOS F. Intersection operations are illustrated on Figure 3-12.

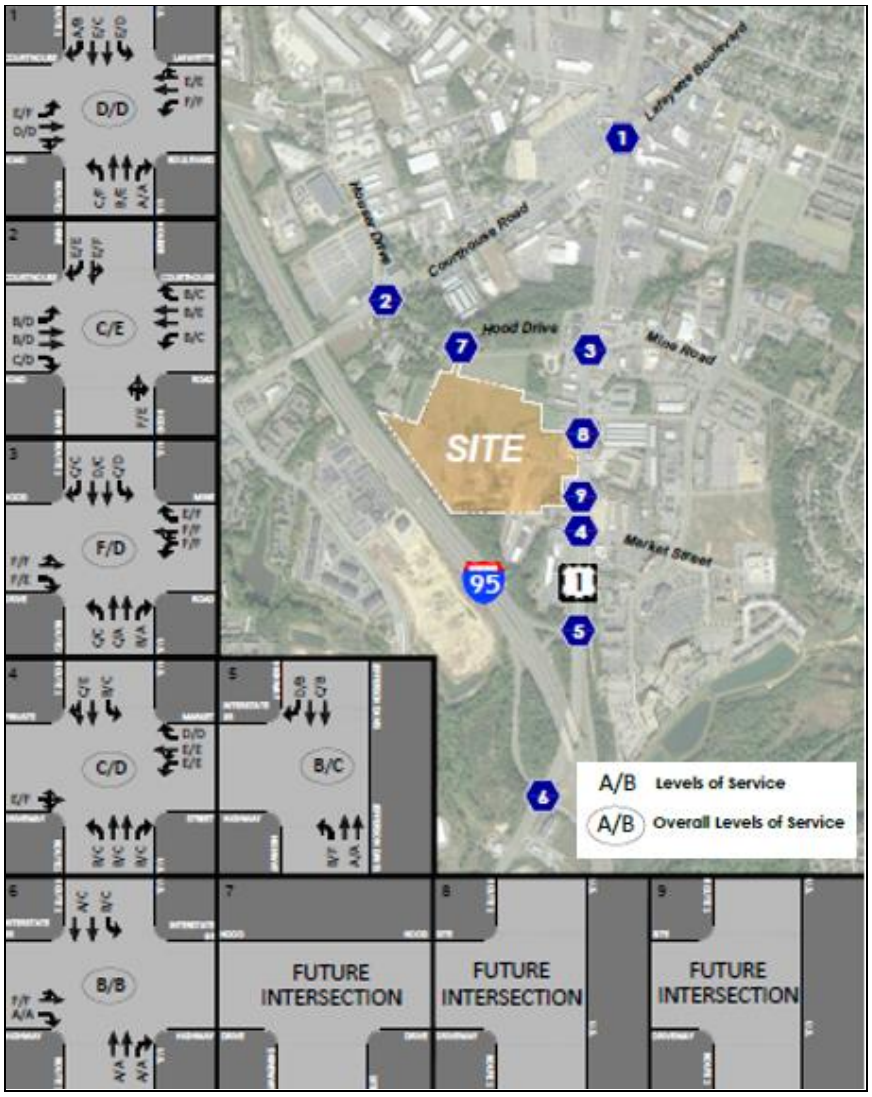

Figure 3-12 Hood Drive Site Current LOS

2025 Background Conditions without the Proposed HCC

The 2025 Background Conditions were developed using existing traffic count data, increases in traffic associated with regional growth (0.5 percent per year per VDOT), and traffic increases associated with other approved, but not yet constructed, major developments in the region based on a scoping meeting with VDOT and Spotsylvania County. The 2025 background conditions also considered a number of roadway improvements that are already planned to be implemented by 2025 for the vicinity of the Hood Drive Site, including:

- The westbound approach of the intersection of Hood Drive/Houser Drive/Courthouse Road will be improved to include a left turn lane with storage, a left-through lane, and a right turn lane with storage.
- The intersection of U.S. Route 1/Market Street will be redesigned with the following improvements: The eastbound approach will be modified to include a separate left and right turn lane and restrict through movements. U.S. Route 1 will be widened southbound to accommodate an addition through lane. Market Street will be widened westbound to accommodate a total of three left turn lanes and a shared through right lane.

- The eastbound approach at the intersection of U.S. Route 1/I-95 South Ramp will be improved with dual channelized right turn lanes as well as a left-through and a left turn lane.

The 2025 background conditions analysis found that the following study intersections would, overall, operate near (LOS E) or beyond (LOS F) capacity:

- Courthouse Road/Lafayette Boulevard/U.S. Route 1 – Forecasted to continue to operate near capacity (LOS E) during both the AM and PM peak hours, with some movements operating at LOS E or F.
- Hood Drive/Mine Road/U.S. Route 1 – Forecasted to operate near capacity at LOS E during both the AM and PM peak hours, with some movements operating at LOS E or F.
- I-95 Northbound Ramps/U.S. Route 1 – Forecasted to operate beyond capacity (at LOS F) during both the AM and PM peak hours due to regional increases in traffic.
- I-95 Southbound Ramps/U.S. Route 1 – Forecasted to operate beyond capacity (at LOS F) during both the AM and PM peak hours due to regional increases in traffic.

In addition, the intersections of Courthouse Road/Hood Drive/Houser Drive and Market Street/U.S. Route 1 would have some individual traffic movements operating near or beyond capacity (LOS E or F).

The 2025 background conditions are illustrated on Figure 3-13.

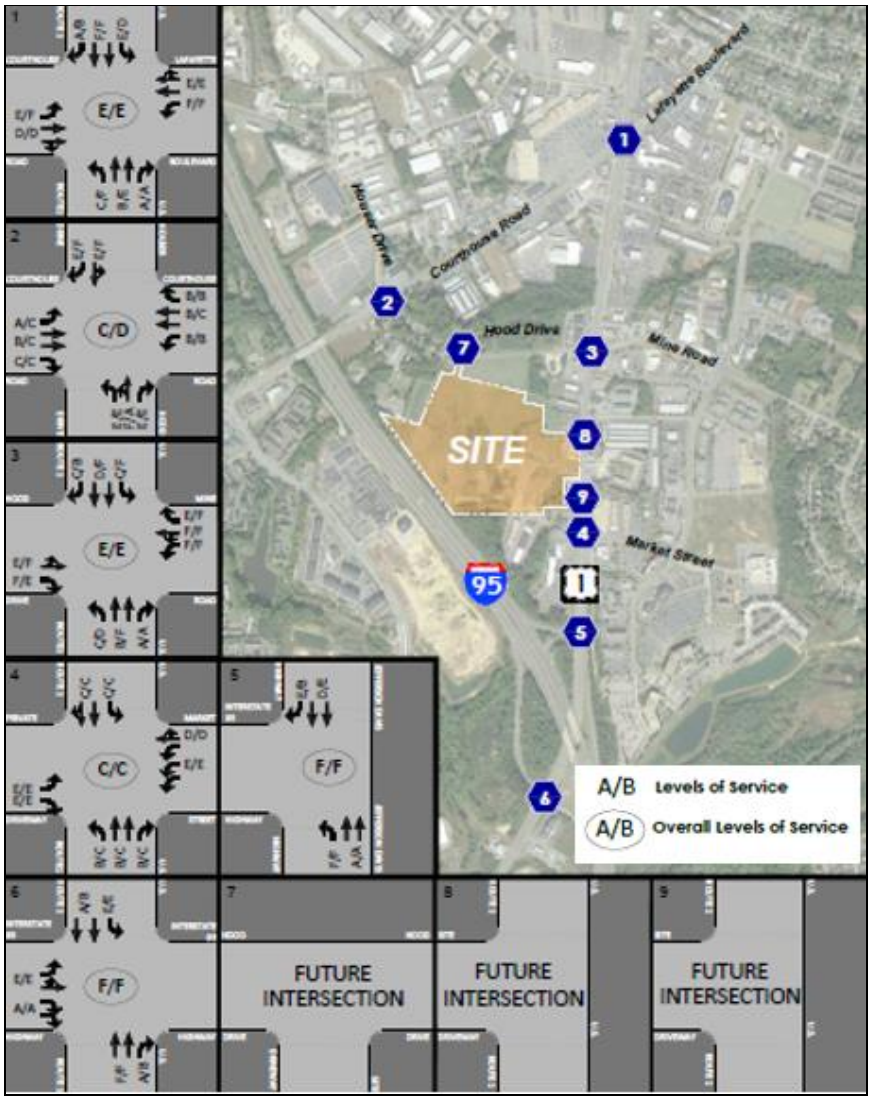

Figure 3-13 Hood Drive Site 2025 Background without Proposed HCC LOS

2025 Conditions with the Proposed HCC

The Hood Drive Site TIA evaluated the conditions on local roads in 2025 based on the 2025 background conditions plus the traffic generated by the proposed HCC development at the Hood Drive Site. The analysis estimated the HCC would generate approximately 8,075 vehicle trips per day based on trip generation associated with other VA medical facilities similar to the proposed HCC and assuming a 500,000-gross-square-foot HCC (same assumptions as the Gateway Site TIA). The proposed HCC would include one primary access along U.S. Route 1, one secondary access, mostly for employees, along U.S. Route 1, and an additional, generalized secondary access along Hood Drive. The Hood Drive Site TIA found that the overall level of service would be generally consistent with those reported under 2025 background conditions (without proposed HCC) for all of the study intersections, with the following exceptions:

- Courthouse Road/Lafayette Boulevard/U.S. Route 1 – this intersection would operate at LOS F during the AM peak hour rather than LOS E as reported under 2025 background conditions.

- Hood Drive/Mine Road/U.S. Route 1 - this intersection would operate at LOS F during both the AM and PM peak hours rather than LOS E as reported under 2025 background conditions.

The Hood Drive Site TIA also found that several unsignalized turning movements at the primary access drive/U.S. Route 1 intersection would operate beyond capacity (at LOS F) during both the AM and PM peak hours without further improvements or signalization. In addition, the eastbound right turn movement exiting the Hood Drive Site onto southbound U.S. Route 1 at the secondary access /U.S. Route 1 intersection would operate at an acceptable level of service during the AM peak hour, but at LOS F during the PM peak hour under stop control. The 2025 conditions with the proposed HCC are illustrated on Figure 3-14.

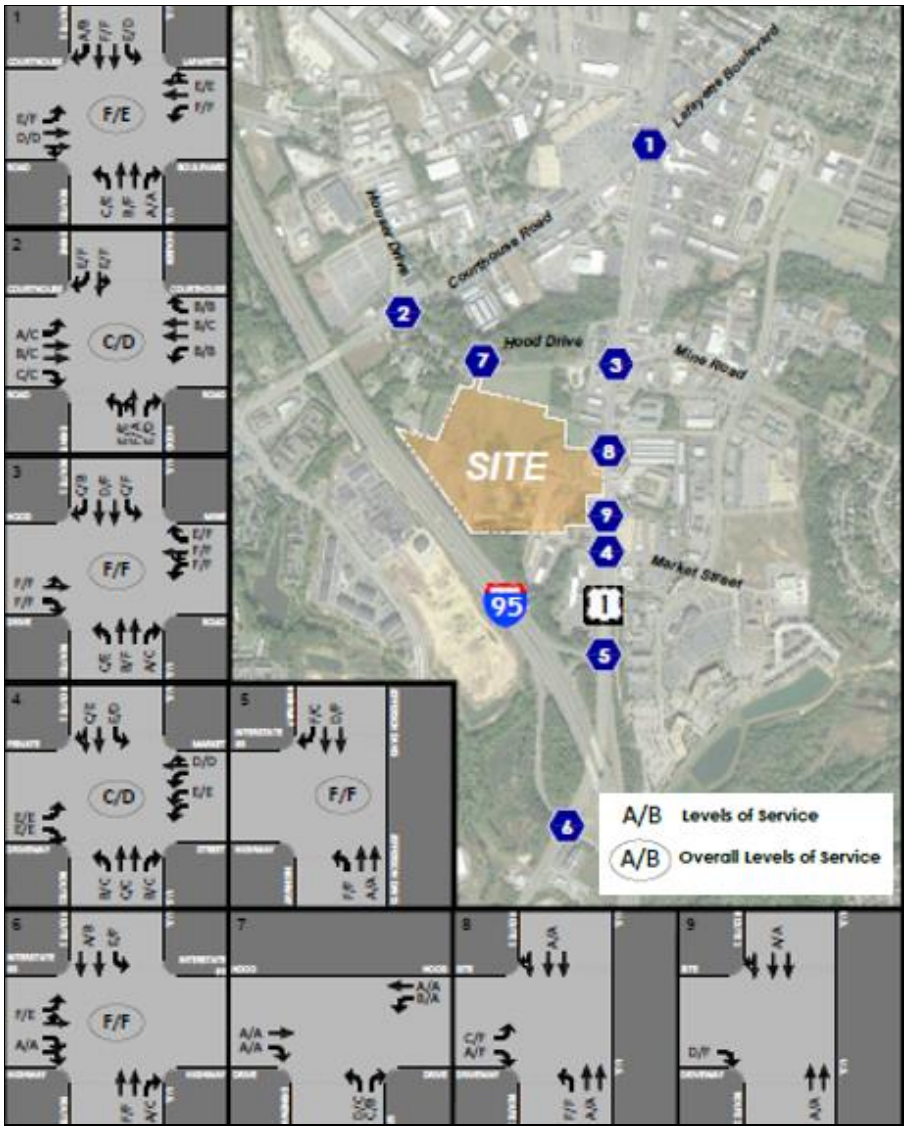

Figure 3-14 Hood Drive Site 2025 with Proposed HCC LOS

Based on the 2025 background conditions and the 2025 conditions with the proposed HCC, additional transportation improvements beyond those currently planned to be completed by 2025 would be required to mitigate the traffic impacts associated with the regional growth, planned additional development

projects in the region, and the proposed VA HCC. As such, the Hood Drive Site TIA recommended the following mitigation measures:

- Courthouse Road/Lafayette Boulevard/U.S. Route 1: Add eastbound and westbound dual left turn lanes. Note that this improvement was identified for 2031, but is not fully funded.
- Hood Drive/Mine Road/U.S. Route 1: Widen the eastbound approach to provide separate left, through, and right lanes approaching U.S. Route 1. Restripe the westbound approach to provide dual left turn lanes and a shared through-right lane. Note that this improvement may require adjustments to the eastbound receiving lanes to accommodate the alignment. Adjust side-street signal phasing to provide concurrent protected left turn phasing.
- I-95 Northbound Ramps/U.S. Route 1: The currently planned improvements to include a second northbound left turn lane and associated ramp improvements would reduce the overall delay at this intersection; although, it would continue to operate beyond capacity during the peak hours. This improvement was identified for 2031, but is not fully funded.
- I-95 Southbound Ramps/U.S. Route 1: Regional growth and planned additional development projects without the proposed HCC would result in this intersection operating beyond capacity under future conditions. The proposed HCC would contribute to the delays at this intersection. Improvements are needed with or without the proposed HCC.
- Site Driveway/Hood Drive: No improvements are required beyond the separate left and right turn lanes on Hood Drive. Separate left and right turn lanes for exiting traffic are recommended. This intersection would operate effectively under stop sign control.
- North Site Driveway/U.S. Route 1: Install new traffic signal, pending review and approval of a signal justification report and access management request by VDOT. It is noted that this traffic signal would require review and approval by the State Traffic Engineer. Install northbound dual left turn lanes. Install a southbound right turn lane. Provide separate left and right turn lanes exiting the site. Provide right turn overlap signal phasing for exiting traffic.
- South Site Driveway/U.S. Route 1: Provide a southbound right turn lane on U.S. Route 1 into the property. Note that although the right turn exiting movement is anticipated to operate beyond capacity during the PM peak hour, vehicles would use gaps in traffic created by adjacent traffic signals and any vehicle queuing would occur on-site and not impact the public road network.

The Hood Drive Site TIA also noted that an exception to access management would be required at the primary access driveway and would be submitted to VDOT for approval if this site is selected by the VA for development.

The Hood Drive Site TIA re-evaluated 2025 traffic conditions with the recommended mitigation measures. With the exception of the Interstate 95 intersections with U.S. Route 1, which operate beyond capacity (LOS F) without the proposed HCC, all studied intersections would operate overall at LOS D or better during both AM and PM peak hours. The 2025 conditions with the Proposed HCC and recommended mitigations are illustrated on Figure 3-15.

VDOT reviewed the Hood Drive Site TIA and recommended additional improvements, primarily associated with the Interstate 95 intersections with U.S. Route 1. As requested by VDOT, Wells and Associates completed a Supplemental Traffic Analysis, which found that with the additional improvements, all studied intersections would operate at an overall acceptable level of service (LOS D or better). Spotsylvania County has committed to funding improvements at the following intersections should the Hood Drive Site be selected for the proposed HCC:

- Courthouse Road/Lafayette Boulevard/U.S. Route 1

- Hood Drive/Mine Road/U.S. Route 1
- I-95 Northbound Ramps/U.S. Route 1
- I-95 Southbound Ramps/U.S. Route 1

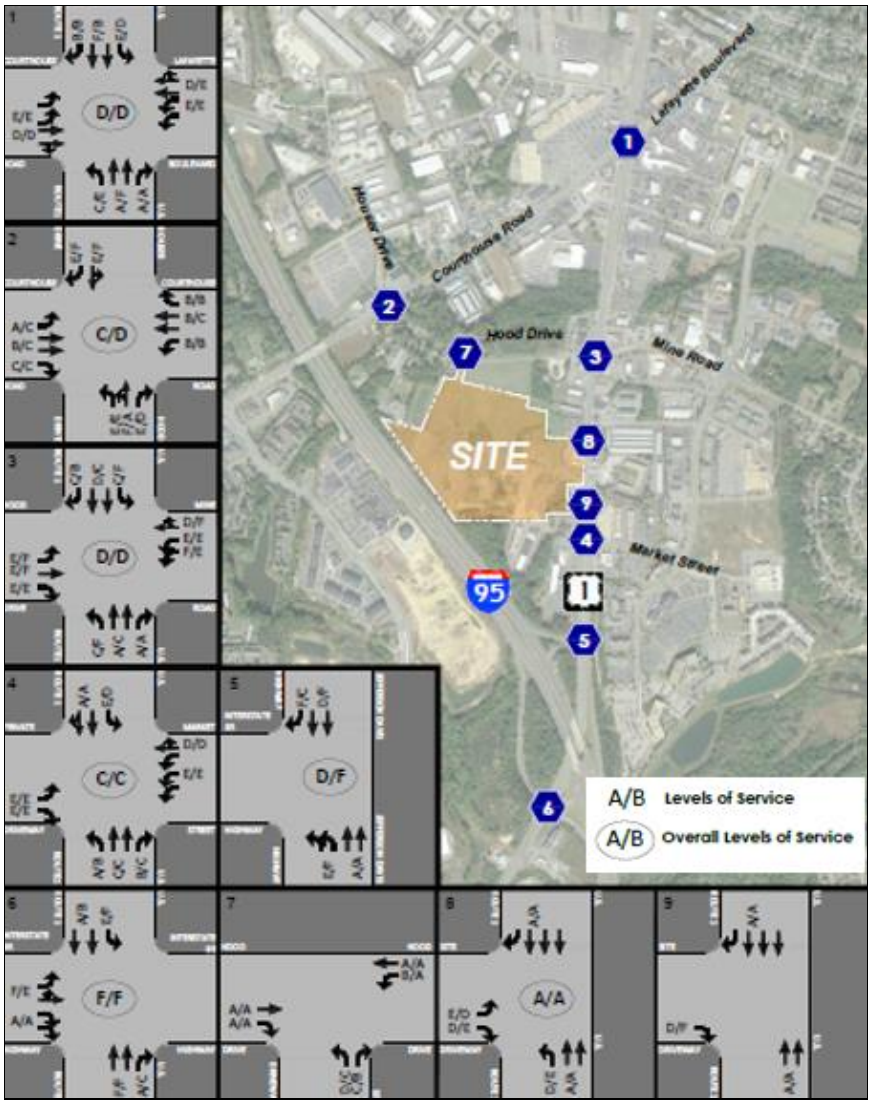

Figure 3-15 Hood Drive Site 2025 with Proposed HCC and Mitigation LOS

Connector Road Evaluation

During scoping for the Hood Drive Site TIA, Spotsylvania County and VDOT requested an alternative analysis for a new connector road between U.S. Route 1 and Hood Drive (see Figure 3-16 for a preliminary conceptual location). This connector road has been contemplated without the proposed HCC development to ease the traffic congestion at the Hood Drive/Mine Road/U.S. Route 1 intersection. The alternative analysis assumed that the primary access to the proposed HCC would be from the connector road to minimize the number of new signalized intersections. The alternative analysis including the connector road configuration found that the connector road intersections with Hood Drive and U.S. Route

1 would operate at overall acceptable levels of service during both the AM and PM peak hours under during the 2025 buildout conditions and the Hood Drive/Mine Road/U.S. Route 1 intersections would operate with considerable less delay when compared to conditions without the connector road.

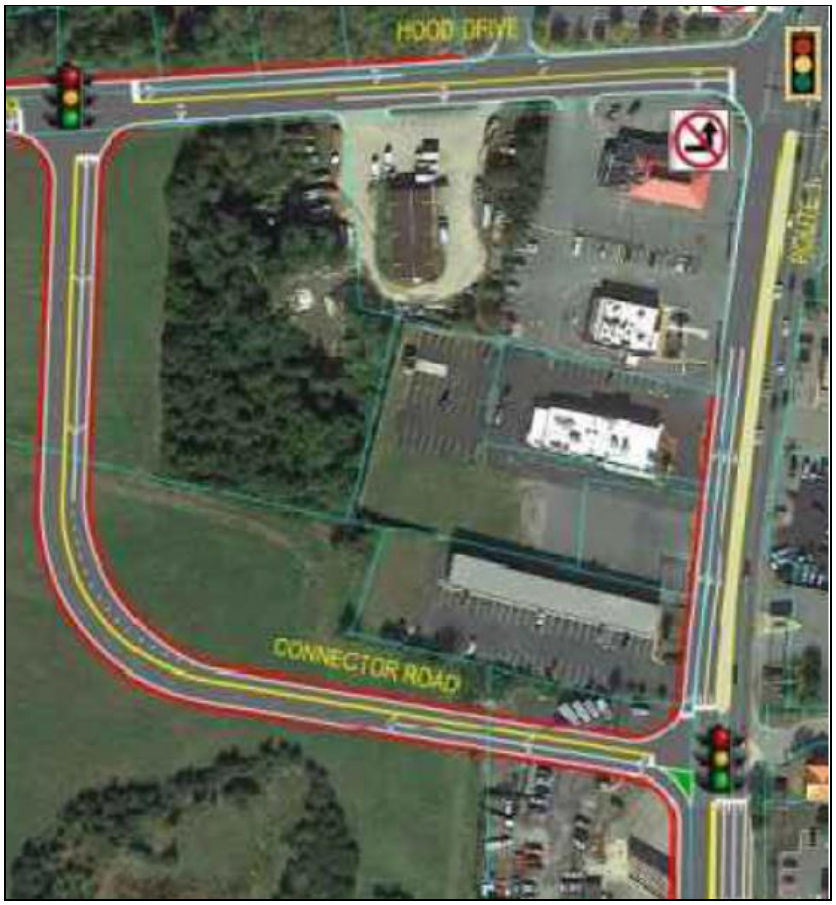

Figure 3-16 Hood Drive Site Connector Road Alternative

3.14.1 Effects of the Action Alternatives

The Proposed Action could have short-term and long-term, direct and indirect, transportation impacts.

Construction traffic, consisting of trucks, workers' personal vehicles, and construction equipment, would increase traffic volumes in the local area, and could cause delays if this occurred during morning and evening peak periods. Installation and connection of utilities, located within or adjacent to the selected site could also impact local roadways. These activities could result in additional traffic congestion, as well as a potential need to detour traffic around the area during utility work.

During operation, public roadways in the vicinity of the proposed HCC would experience traffic as a result of usage of these new facilities. As described in Section 2.2, the HCC would be open Monday through Friday from 6:00 am to 8:00 pm and Saturday and Sunday from 7:00 am to 5:00 pm, except on federal holidays. VA estimates the HCC would experience approximately 4,037 Veteran, staff, volunteer and other visitor vehicle stops on an average daily basis, generating a total of approximately 4,037 round-trip vehicle trips per day (8,075 one-way vehicle trips per day). Given the proposed operational use, traffic generated by the Proposed Action would occur throughout the day, Monday through Sunday. Patients of the HCC would travel at various times during the day during daylight hours. Staff at the HCC would primarily arrive to and depart from the HCC at peak travel hours (7:00 am and 5:00 pm).

Traffic associated with the proposed HCC at the selected site would be generally new to the local area, because the Veterans who would be served by the HCC (and the associated staff) currently use the existing Richmond VAMC and the two existing leased Fredericksburg clinics. The Fredericksburg CBOC is located approximately one mile northeast of the Gateway Site and the Fredericksburg 2 CBOC is located approximately 1,500 feet southeast across U.S. Route 1 from the Hood Drive Site; as such, some of the traffic associated with the existing leased clinics is already present in the vicinity of the Action Alternative sites. The Proposed Action would result in a reduction in VA traffic near the existing facilities and an increase in traffic near the selected HCC site. Overall, miles driven by Veterans and staff would be similar to existing conditions.

The Proposed Action would have no adverse impacts on parking. The HCC developments would include on-site parking (approximately 2,600 spaces) adequate to accommodate the projected needs of Veterans and VA staff using the proposed HCC.

Gateway Site

Primary and secondary access to the Gateway Site would be provided from a planned Gateway Boulevard extension between Plank Road and Cowan Boulevard. Previous traffic studies identified several improvements to area roadways and intersections that are needed to mitigate the traffic impacts from the 1500 Gateway Boulevard Development. These improvements are planned to be implemented by the City of Fredericksburg, the Gateway Site owner, and/or VDOT, and have been funded or committed to be funded for implementation. The TIA found that with the installation of the planned improvements, the intersections within the study area would operate at acceptable LOSs with the complete development of the 1500 Gateway Boulevard Development, including the proposed VA HCC. Based on this analysis, the Proposed Action at the Gateway Site would not have significant transportation impacts. If the Gateway Site is selected for the proposed HCC, the developer would work with the City of Fredericksburg and VDOT to identify and implement roadway improvements, as necessary, to ensure that there would be no significant traffic impacts.

The Gateway Site access analysis found that an additional primary, signalized access drive intersection to the HCC from the Gateway Boulevard extension would not result in an unacceptable LOS on Gateway Boulevard. If the Gateway Site is selected, a detailed signal warrant analysis would be conducted and submitted for review and approval by VDOT and the City of Fredericksburg.

Hood Drive Site

Primary and secondary access to the Hood Drive Site would be provided via U.S. Route 1. Secondary access would also be provided via Hood Drive.

The Hood Drive Site TIA found that intersections in the vicinity of the Hood Drive Site currently operate at overall acceptable levels of service LOS D or better during the AM and PM peak hours with the exception of the Hood Drive/Mine Road/U.S. Route 1 intersection that operates at an overall LOS F (AM peak) and LOS E (PM peak). The TIA identified several roadway improvements that have been proposed to be implemented by 2025; however, even with these improvements, several intersections in the Hood Drive Site area are projected to operate at an unacceptable level of service (LOS F) in 2025 without the proposed HCC due to general regional growth and other approved development projects in the region that have not yet been constructed. The proposed HCC at the Hood Drive Site would contribute additional traffic to these already failing intersection and would cause the Courthouse Road/Lafayette Boulevard/U.S. Route 1 and Hood Drive/Mine Road/U.S. Route 1 intersections to operate at LOS F (vs LOS E without the HCC).

Additional transportation improvements beyond those currently planned to be completed by 2025 would be required to mitigate the traffic impacts associated with the regional growth, planned additional development projects in the region, and the proposed VA HCC. The TIA and Supplemental Traffic Analysis identified several potential mitigation measures to address the transportation impacts. All

studied intersections would operate overall at LOS D or better during both AM and PM peak hours with the identified mitigation measures. If the Hood Drive Site is selected for the proposed HCC, the developer would work with the Spotsylvania County and VDOT to identify and implement roadway improvements, as necessary, to ensure that there would be no significant traffic impacts. Spotsylvania County has committed to funding the local roadway network improvements should the Hood Drive Site be selected for the proposed HCC. The developer would be responsible to fund the improvements at the HCC entrance/exit drive intersections.

If the Hood Drive Site is selected, a signal justification report and access management request for proposed main entrance to the HCC from U.S. Route 1 would be submitted to VDOT for review and approval by the State Traffic Engineer.

3.14.2 Effects of the No Action Alternative

Under the No Action Alternative, no transportation or parking impacts associated with the Proposed Action would occur. However, should the Action Alternative sites ultimately be developed by others, traffic and parking impacts would occur. The type and magnitude of transportation and parking effects would be dependent upon the future use of the sites. The Gateway Boulevard extension and other roadway improvements in the area have been planned and partially funded. Roads in the vicinity of the Gateway Site would likely operate at an acceptable LOS. The TIA found that several intersections in the vicinity of the Hood Drive Site would operate at an unacceptable level of service under the 2025 background conditions and that mitigation measures, not yet planned or funded, would be necessary. Based on this analysis, roads in the vicinity of the Hood Drive Site may operate at an unacceptable level of service under the No Action Alternative.

3.15 Utilities

Basic utilities in the vicinities of the Action Alternative sites (water, sewer, natural gas, and electric) are provided by various utility providers. As part of the preparation of this EA, local utility providers were researched and developer provided information was reviewed to determine the availability of required utilities in the vicinity of the Action Alternative sites. Utility providers to the sites were identified as follows:

- **Dominion Energy** supplies electricity to the Action Alternative sites.
- **Columbia Gas** supplies natural gas to Action Alternative sites.
- **City of Fredericksburg** supplies potable water, sanitary sewer, and stormwater sewer services to the Gateway Site vicinity.
- **Spotsylvania County** supplies potable water, sanitary sewer, and stormwater sewer services to the Hood Drive Site vicinity.
- **Verizon** provides telecommunication services to the vicinity of the Action Alternative sites.

Spotsylvania County stated that public water and sewer are available to the Hood Drive Site.

3.15.1 Effects of the Action Alternatives

The proposed HCC would result in an increase in the consumption of utilities, including electricity, natural gas, potable water, and sanitary sewer discharges. All major utility services are available immediately next to or in close proximity to the Action Alternative sites. Stormwater management, as discussed in Section 3.6, would also be required for the Proposed Action.

The proposed HCC is not anticipated to require extraordinary utility services beyond those of a similarly sized light industrial/commercial operation. Based on preliminary design information provided by the

prospective developers, including available capacity information provide by some utility providers, adequate utilities likely exist to supply the facility as currently proposed. However, each utility provider would require a review of the detailed final design plans to validate these preliminary findings and to determine connection/extension requirements to service the proposed HCC. No significant utility impacts are anticipated.

VA's closure of the existing leased clinics would have negligible utility impacts.

3.15.2 Effects of the No Action Alternative

Under the No Action Alternative, no construction by VA's selected developer would occur and there would be no utility impacts by VA. However, should the Action Alternative sites ultimately be developed by others, impacts similar to those identified under the Proposed Action could occur. The type and magnitude of utility effects would be dependent upon the future use of the Action Alternative sites.

3.16 Environmental Justice

In 1994, EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was issued to focus attention of federal agencies on human health and environmental conditions in minority and low-income communities and to ensure that disproportionately high and adverse human health or environmental effects on these communities are identified and addressed.

According to the USEPA-developed EJSCREEN (an environmental justice mapping and screening internet application), the Gateway Site is located in an area with a slightly higher minority population (45 percent) and higher low-income population (34 percent) than the State of Virginia as a whole (37 percent and 26 percent, respectively). The Hood Drive Site is located in an area with a slightly higher minority population (42 percent) and similar low-income population (25 percent) than the State of Virginia as a whole.

3.16.1 Effects of the Action Alternatives

The Proposed Action would have negligible environmental justice effects. Although the Action Alternative sites are located in areas with slightly larger than average minority populations and Gateway Site is located in an area with a slightly larger than average low-income population, the Proposed Action would have very little impact on the residents in the areas. During construction, effects on nearby residential land uses, such as through noise and dust, would be limited and controlled through BMPs, thereby minimizing adverse effects to populations within the region of influence.

Proposed Action construction activities are anticipated to have a short-term beneficial socioeconomic (and environmental justice) effect on the local employment and personal income in the region of influence, as described in Section 3.11.

3.16.2 Effects of the No Action Alternative

Under the No Action Alternative, no development by VA's selected developer would occur at the Action Alternative sites and there would be no direct environmental justice effect by VA. However, Veterans in the Fredericksburg area, including low-income and minority populations, would continue to be served by undersized, inadequate VA outpatient health care facilities.

3.17 Cumulative Impacts

As defined by the CEQ regulations in 40 CFR Part 1508.7, cumulative impacts are those which "result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions, without regard to the agency (federal or non-federal) or individual who

undertakes such other actions." Cumulative impact analysis captures the effects that result from the Proposed Action in combination with the effects of other actions taken before, during, or after the Proposed Action in the same geographic area.

3.17.1 Effects of the Action Alternatives

Gateway Site

The Gateway Site is located in a mixed use (commercial and residential), largely developed suburban area approximately 2.2 miles west of the center of the City of Fredericksburg. The region of influence for the Gateway Site is mostly developed residential (east) and commercial (south and west) properties with limited areas for development to the north, northeast, and east. Most of the remaining undeveloped area in the immediate site vicinity is included as part of the 88-acre 1500 Gateway Boulevard Development project. In addition to the proposed HCC, the 1500 Gateway Boulevard Development project would include a mixture of residential and commercial properties, tentatively including a hotel, nursing home, a medical office building, apartments, retail space and office space.

There has been no large-scale development in the vicinity of the Gateway Site since the early 2000s. Further potential development on the undeveloped land to the northeast and not part of the 1500 Gateway Boulevard Development project is possible; however, these undeveloped lands are part of a VDCR conservation easement (11.2 acres) and would not developed, or are largely surrounded by residential neighborhoods and would likely be developed for residential use, if developed at all.

Hood Drive Site

The Hood Drive Site is located in a mixed-use primarily commercial with limited residential, mostly developed, suburban area approximately 4.5 miles southwest of the center of the City of Fredericksburg. The region of influence for the Hood Drive Site is mostly developed commercial and residential properties with limited undeveloped land to the north and south of the Hood Drive Site. The areas along the east and west sides of U.S. Route 1 have been developed with commercial properties since the 1970s with the addition of Lee's Hill retail plaza and many other businesses in the early 1990s, and the addition of other commercial properties across Interstate 95 to the west since the mid-2000s. Additional large-scale development is ongoing in the area, but much of it is located greater than one mile south of the Hood Drive Site near the intersections of Interstate 95, Spotsylvania Parkway, and Mills Drive. Spotsylvania County stated that the Hood Drive Site is centrally located within the County's designated Primary Development area that is intended growth and development in a variety of suburban, semi-urban, and urban scale densities with redevelopment of aged sites, including the Royal Farms gasoline station adjoining to the east of the Hood Site, an upcoming Chick-fil-A restaurant across U.S. Route 1 from the Hood Drive Site, and a locally relocated Pizza Hut. The Hood Drive Site is also located in the County's Opportunity Zone, Technology Zone. Additional development in the Hood Drive Site vicinity would likely be smaller scale developments and/or the redevelopment of existing properties.

The Proposed Action would result in impacts to the area as identified throughout Section 3. These include short-term and/or long-term potential adverse impacts to aesthetics, air quality, cultural resources (Gateway Site), soil and geology, hydrology and water quality, wildlife and habitat, noise, land use (Hood Drive Site), wetlands, coastal zones, solid waste and hazardous materials, transportation, and utilities. All of these potential impacts are less than significant and would be further reduced through careful coordination and implementation of general BMPs and management measures, and compliance with regulatory requirements, as identified in Section 4.

The 1500 Gateway Boulevard Development could have cumulative impacts with the development of the HCC at the Gateway Site. The remainder of the 1500 Gateway Boulevard Development is anticipated to include up to 780,000 square feet of residential, commercial and office space on land adjacent to Gateway Site. The entire 1500 Gateway Boulevard Development area is zoned Planned Development Medical

Center and is a major project that has had considerable input and planning from the City of Fredericksburg. The primary potential cumulative impact, traffic, has been assessed through a TIA, and roadway improvements are planned and funded by the City of Fredericksburg and VDOT to mitigate potential cumulative effects. Cumulative impacts associated with the development of the HCC at the Gateway Site would be less than significant.

Given the nature of the Proposed Action and the limited potential for other large development in the immediate vicinity of the Hood Drive Site, cumulative impacts, other than potential regional transportation impacts, are anticipated to be less than significant. The TIA for the Hood Drive Site found that regional growth and other large approved, but not yet constructed, development projects (located two miles or more south of the Hood Drive Site) would result in several intersections in the vicinity of the Hood Drive Site operating at an unacceptable LOS. The proposed HCC would add more traffic to these failing intersections. However, potential mitigation measures identified in the TIA considered the cumulative impact of the proposed HCC as well as other background traffic on local roads. Therefore, with the implementation of these or similar roadway improvements coordinated with local authorities, cumulative traffic impacts would be less than significant.

Both Sites

Other potential development in the area of the selected site would be subject to zoning requirements and site plan approval by Spotsylvania County or the City of Fredericksburg, as applicable, which would serve to maintain and control regional, potentially cumulative impacts.

No significant adverse cumulative impacts to the environment induced by the Proposed Action are anticipated within the region. Close coordination between the federal and state agencies, the City of Fredericksburg (Gateway Site), Spotsylvania County (Hood Drive Site), and community representatives would serve to manage and control cumulative effects within the region, including managing regional transportation increases with adequate infrastructure. Implementation of local land use and resource management plans would serve to control the extent of environmental impacts, and continued planning would ensure future socioeconomic conditions maintain the quality of life the area's residents currently enjoy. Implementation of effective resource management plans and programs should minimize or eliminate any potential cumulative degradation of the natural ecosystem, cultural, or human environment within the region of influence of the Proposed Action.

3.17.2 Effects of the No Action Alternative

Under the No Action Alternative, cumulative impacts would be similar to those identified for the Proposed Action, as the Action Alternative sites would likely be developed for other commercial use. The extent of cumulative effects under the No Action Alternative would depend upon that future use. However, cumulative impacts would not likely be significant, as any new development would be subject to zoning requirements and site plan approval.

3.18 Potential for Generating Substantial Public Controversy

As discussed in Sections 5 and 6, VA has solicited input from the public and various federal, state, and local government agencies regarding the Proposed Action. Members of the public and several government agencies have provided input; none of the input has identified substantial controversy related to the Proposed Action or the Action Alternatives. VA published and distributed the Draft EA for a 30-day public comment period. Public comments on the Draft EA were considered in preparing the Final EA, as appropriate, and are included in Section 5.

4.0 MANAGEMENT, MINIMIZATION, AND MITIGATION MEASURES

This section summarizes the management, minimization, and mitigation measures that are proposed to minimize and maintain potential adverse effects of the Proposed Action at acceptable, less-than-significant levels.

Per established protocols, procedures, and requirements, the developer and their construction contractors would implement BMPs and would satisfy all applicable regulatory requirements in association with the design, construction, and operation of the proposed HCC at the selected Action Alternative site. These "management measures" are described in this EA, and are included as components of each of the Action Alternatives. "Management measures" are defined as routine BMPs and/or regulatory compliance measures that are regularly implemented as part of proposed activities, as appropriate, across Virginia. In general, implementation of such management measures would maintain impacts at acceptable levels for all resource areas analyzed. These are different from "mitigation measures," which are defined as project-specific requirements, not routinely implemented as part of development projects, necessary to reduce identified potentially significant adverse environmental impacts to less-than-significant levels.

The routine BMPs and management, minimization, and mitigation measures summarized in Table 4-1 would be included by VA's developer in the selected Action Alternative to minimize and maintain adverse effects at less-than-significant levels.

Table 4-1 Management, Minimization, and Mitigation Measures Incorporated into the Proposed Action

Technical Resource Area	Measure
Aesthetics	Comply with the development standards of the Fredericksburg Unified Development Ordinance and the Fredericksburg Code of Ordinances (FCO) for the Gateway Site and the Spotsylvania County Code of Ordinances (SCCO) for the Hood Drive Site.
	Use vegetative buffers to enhance viewscapes, particularly near adjacent residential properties.
	Use shielded, downward-facing outdoor lighting.
Air Quality	Use appropriate dust suppression methods (such as the use of water, dust, palliative, covers, and suspension of earth moving in high wind conditions) during onsite construction activities.
	Stabilize disturbed area through re-vegetation or mulching if the area would be inactive for several weeks or longer.
	Implement measures to reduce diesel particulate matter emissions from construction equipment, such as reducing idling time and using newer equipment with emissions controls.
	Comply with the applicable VDEQ air quality regulations. Secure any required minor air emissions permits from VDEQ prior to construction.
Cultural and Historic Resources	Implement the procedural Programmatic Agreement (PA) to mitigate the adverse historic property effects to the NRHP-eligible Confederate Civil War encampment and artillery position, if the Gateway Site is selected for the proposed HCC.
	Should potentially historic or culturally significant items be discovered during project construction, the construction contractor would immediately cease work in the area until VA, a qualified archaeologist, Virginia SHPO, and other consulting parties are contacted to properly identify and appropriately treat discovered items in accordance with applicable state and federal laws.

Technical Resource Area	Measure
Geology and Soils	Control soil erosion and sedimentation impacts during construction by implementing erosion prevention measures and complying with the VDEQ-issued Virginia Pollutant Discharge Elimination System (VPDES) permit, including the development and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP). The VPDES permit would require stormwater runoff and erosion management using BMPs, such as earth berms, vegetative buffers and filter strips, and spill prevention and management techniques. The construction contractor would implement the sedimentation and erosion control measures specified in the VPDES permit and the SWPPP to protect surface water quality.
Hydrology and Water Quality	Control soil erosion and sedimentation impacts during construction by complying with the VDEQ VPDES permit.
	Design improvements in accordance with the requirements of Energy Independence and Security Act Section 438 with respect to stormwater runoff quantity and characteristics.
	Ensure the design of the HCC includes sufficient stormwater management so as not to adversely affect the water quantity/quality in receiving waters and/or offsite areas.
Wildlife and Habitat	Native species should be used to the extent practicable when re-vegetating land disturbed by construction to avoid the potential introduction of non-native or invasive species.
	For the selected site, the developer would comply with city, county, and/or state regulations and ordinances implementing the CBPA.
Noise	Limit, to the extent possible, construction and associated heavy truck traffic to occur between 7:00 a.m. and 7:00 p.m. on Monday through Friday, or during normal, weekday, work hours.
	Locate stationary operating equipment as far away from sensitive receptors as possible.
	Comply with the noise control provisions of the FCO (Gateway Site) and SCCO (Hood Drive Site).
	Coordinate proposed construction activities in advance with nearby sensitive receptors within 500 feet of the selected site. Let the local residents know what operations would be occurring at what times, including when they would start and when they would finish each day. Post signage at the entry points of the selected site providing current construction information, including schedule and activity.
	Shut down noise-generating heavy equipment when it is not needed.
	Maintain equipment per manufacturer's recommendations to minimize noise generation.
	Encourage construction personnel to operate equipment in the quietest manner practicable (such as speed restrictions, retarder brake restrictions, engine speed restrictions).
Land Use	Comply with the applicable zoning regulations and development standards for the selected site.
Wetlands, Floodplains, and Coastal Zone Management	Obtain a permit from USACE and VDEQ for any filling or taking of wetlands on the Gateway Site. Obtain a jurisdictional determination from the USACE and obtain a permit from USACE and/or VDEQ for any filling or taking of wetlands on the Hood Drive Site. Completed the permit-required mitigation measures.
	Design improvements in accordance with the requirements of Energy Independence and Security Act Section 438 with respect to stormwater runoff quantity and characteristics.
	Developer to coordinate with the VDEQ, as required, to ensure that the Proposed Action is consistent with the VDEQ's Coastal Zone Management Program.
Socioeconomics	Construction areas would be secured to prevent unauthorized access by children from nearby residential areas.
Community Services	None required.

Technical Resource Area	Measure
Solid Waste and Hazardous Materials	Comply with applicable federal and state laws governing the use, generation, storage, transportation, and disposal of solid and hazardous materials and medical wastes.
	Prepare a Soil and Groundwater Management Plan to notify construction contractors of the soil and groundwater conditions in the eastern portion of the Hood Drive Site (vacant gasoline station) and ensure proper handling and disposal of impacted groundwater and soil that may be encountered during construction (Hood Drive Site).
	Complete surveys of the Hood Drive Site buildings for ACMs prior to demolition activities. Remove ACMs in accordance with the federal and state requirements prior to demolition activities.
Traffic, Transportation, and Parking	Work with the City of Fredericksburg and VDOT, as applicable, during the HCC design to identify and implement roadway improvements to address traffic impacts (Gateway Site).
	Work with Spotsylvania County and VDOT, as applicable, during the HCC design to identify and implement roadway improvements to address traffic impacts (Hood Drive Site).
	Complete a traffic signal warrant analysis and submit it for review and approval by VDOT and the City of Fredericksburg for the proposed main entrance drive (Gateway Site).
	Prepare a signal justification report and access management request for the proposed main entrance drive from U.S. Route 1 and submit to VDOT for review and approval by the State Traffic Engineer (Hood Drive Site).
	Ensure debris and/or soil is not deposited on local roadways during the demolition and construction activities.
Utilities	None required.
Environmental Justice	None required.

5.0 PUBLIC PARTICIPATION

VA invites public participation in decision-making on new proposals through the NEPA process. Public participation with respect to decision-making on the Proposed Action is guided by 38 CFR Part 26, VA's regulations for implementing NEPA. Additional guidance is provided in *VA's NEPA Interim Guidance for Projects* (U.S. Department of Veterans Affairs 2010). Consideration of the views and information of all interested persons promotes open communication and enables better decision-making. Members of the public with a potential interest in the Proposed Action are encouraged to participate. A record of the public involvement associated with this EA is provided in Appendix F.

5.1 SCOPING

VA initiated the public scoping process for the Proposed Action in November 2019, which included a public meeting held in Fredericksburg on December 9, 2020 that was announced in a public notice published in the Fredericksburg Free Lance Star on November 26, 2019, and December 2, 2019. Members of the public who attended the meeting had general questions regarding the Proposed Action, VA's lease solicitation/procurement process, and the NEPA process for the Proposed Action.

5.2 PUBLIC REVIEW

VA published and distributed the Draft EA for a 30-day public comment period, as announced by a Notice of Availability published in the Free Lance Star, a local newspaper of general circulation, on July 12 and 15, 2020. A copy of the Draft EA was also made available on the Richmond VAMC website (www.richmond.va.gov/pressreleases/FredericksburgHCC_EA.asp).

VA emailed notification of the availability of the Draft EA for review and comment, with a link to the Draft EA on the Richmond VAMC website, to each of the agencies and Tribes that were contacted during the NEPA scoping and Section 106 consultation. Six agencies (a member of the Stafford County Board of Supervisors, Spotsylvania County Department of Economic Development (SCDED), Virginia Department of Agriculture and Consumer Services (VDACS), Spotsylvania County Zoning Administrator, Spotsylvania County Administrator, and VDEQ Office of Local Government Programs) provided comments on the Draft EA (Appendix F). Agency comments are summarized in Table 5-1. The responses to the comments are integrated into the Final EA, as applicable.

VA held a virtual public meeting on July 29, 2020, at 6 pm to present a summary of the Draft EA and to receive public input and comment on the Draft EA. Two members of the public attended the public meeting. Public comments on the Draft EA resulting from the public meeting were considered in preparing the Final EA, as appropriate, and are summarized below in Table 5-1.

Table 5-1 Summary of Agency and Public Comments on the Draft EA

Agency and Public Comments on Draft EA		
Comment	**Response**	**Section**
General		
A member of the public requested an update on the expected completion of the project.	VA anticipates completing the Final EA by the end of August 2020 and awarding the lease for the proposed HCC by the end of September 2020.	Not applicable

Agency and Public Comments on Draft EA		
Comment	**Response**	**Section**
Action Alternatives		
A member of the Stafford County Board of Supervisors (also a Veteran) noted the City of Fredericksburg (Gateway Site) is landlocked and congested and preferred a Spotsylvania County location (Hood Drive Site) as being less stressful for Veterans.	Comment acknowledged.	Not applicable
SCDED noted the Richmond VAMC is overcrowded and stated that the Hood Drive Site would be more attractive for the proposed HCC because it is geographically closer to the Richmond VAMC than the Gateway Site.	Comment acknowledged. Note - the Hood Drive Site is located approximately 52 miles north of the Richmond VAMC, while the Gateway Site is located approximately 55.5 miles north of the Richmond VAMC; a difference of approximately 3.5 miles.	Not applicable
SCDED stated that the southern portion of the Hood Drive Site was graded and a stormwater pond started in preparation for site development and requested that the Final EA wording reflect that Hood Drive Site grading was done to facilitate development.	Wording within the Final EA has been modified, where applicable, to reflect the site grading conducted in 2008 was conducted in preparation for site development.	Throughout
Cultural Resources		
SCDED stated the Gateway Site has a known large Civil War encampment that could take a long time to mitigate. The potential for several historic artifacts of significant historical value could be present. During the Civil War, several Confederate soldiers passed away due to sickness and starvation while in winter encampments; given this information, there could be unmarked graves just outside of the encampment site.	Hundreds of archaeological test pits and a full metal detector survey were conducted at the Gateway Site to assess the archaeological resources at the site. No evidence of grave sites was identified. If the Gateway Site is selected for the proposed HCC, VA would complete the required archaeological inventory and data recovery in consultation with the Virginia SHPO and other consulting parties.	3.4
SCDED stated the Gateway Site has two archaeological sites related to Civil War activity that are recommended as eligible for the NRHP and the Hood Drive Site has nothing of historical significance.	Comment acknowledged. Note - one of the archaeological sites is partially (mostly) located on the Gateway Site; the other archaeological site is located within the 88-acre 1500 Gateway Boulevard Development area, but not on the 35-acre Gateway Site proposed for the VA HCC.	3.4

Agency and Public Comments on Draft EA		
Comment	**Response**	**Section**
Soils and Geology		
SCDED stated the Hood Drive Site requires no substantial cutting or filling, other than for general site leveling and stormwater retention and the Gateway Site would require cut and fill.	Comment acknowledged.	3.5
SCDED noted geotechnical soil borings were conducted for the 88-acre 1500 Gateway Boulevard Development and questioned why no geotechnical soil borings were conducted on the 35-acre Gateway Site proposed for the VA HCC.	The soil borings were not specifically conducted for the proposed HCC development. A geotechnical investigation of either selected site would be conducted for the HCC development.	3.5
VDACS noted the Action Alternative sites are classified as farmland of statewide importance, but have not been farmed for several decades and are in an "urbanized area" and are exempt from the federal Farmland Protection Policy Act (FFPA). VDACS encouraged VA to be mindful of actions that could alter water flow within surrounding property agricultural lands and, to the greatest extent possible, minimize adverse drainage or erosion issues that may result. VDACS also suggested that VA determine whether Spotsylvania County or the City of Fredericksburg established any agricultural and forestial districts that may be impacted by the project and noted additional project review would be required should such districts exist.	The Draft EA stated the Action Alternative sites contain soils classified as farmland of statewide importance that are exempt from the FPPA. Properties in the areas surrounding the sites are not zoned or used for agriculture. Soil erosion and sedimentation impacts would be minimized through BMPs and adherence to the requirements of the VPDES permit and local erosion and sediment control ordinance. The sites are not located within an agricultural or forestial district.	3.5
Wildlife and Habitat		
VDACS stated VDCR reviews projects and submits comments regarding potential impacts on state protected plant and insect species on behalf of VDACS. VDACS provided contact information for VDCR.	VDCR determined state protected plant and insect species would not be impacted by the proposed HCC at either Action Alternative site.	3.7
SCDED questioned how the Hood Drive Site could be within the range of the northern long-eared bat, but not the Gateway Site, and requested that this information be reviewed.	USFWS did not identify the Gateway Site as being located within the range of the northern long-eared bat; USFWS identified the Hood Drive Site as being within the range of the northern long-eared bat. Please refer to the USFWS IPaC Official Species Lists in Appendix D. Neither Action Alternative site is located within 75 miles of known winter habitat and roosts.	3.7

Agency and Public Comments on Draft EA		
Comment	**Response**	**Section**
Land Use		
Spotsylvania County Zoning Administrator confirmed that a small parcel that is part of the Hood Drive Site (4708 Hood Drive) is zoned residential (R-1). The Zoning Administrator stated the R-1 zoning designation does not preclude the placement of an access road on this parcel to serve the proposed HCC and neither rezoning nor a zoning variance would be required to construct the proposed HCC access road.	The land use section of the EA has been updated with this zoning information.	3.9
Coastal Zones		
VDEQ Office of Local Government Programs, as part of its review of the Federal Consistency Determination (FCD) under the Coastal Zone Management Program, requested information regarding whether the sites are located within a Resource Protection Area (RPA) or a Resource Management Area (RMA) per the Chesapeake Bay Preservation Act.	Neither Action Alternative site is located within an RPA. Both sites are located within RMAs. This information and additional discussion have been added to Sections 3.7 and 3.10.	3.7 and 3.10
Transportation and Parking		
SCDED stated that there is no access to the Gateway Site and funding for the proposed Gateway Boulevard extension has not been allocated. SCDED stated the Smart Scale funding being sought by the City of Fredericksburg would not meet the timeline of the proposed HCC development.	The City of Fredericksburg stated Smart Scale funds and committed City and site owner funds are planned to be used to construct the Gateway Boulevard extension. The City has committed to funding the Gateway Boulevard extension if Smart Scale funds are not received. The City estimates the road would be completed by July 2023, in time for the proposed HCC development.	3.14
SCDED and the Spotsylvania County Administrator stated that the Draft EA incorrectly states that several improvements to area roadways and intersections needed to address traffic impacts from the 1500 Gateway Boulevard Development, including the proposed HCC at the Gateway Site, are planned to be implemented by the City of Fredericksburg and/or VDOT, and have been funded for implementation. SCDED stated the road project is not fully funded and Smart Scale funding being sought by the City of Fredericksburg would not meet the timeline of the proposed HCC development.	The City of Fredericksburg stated Smart Scale funds and committed VDOT, City, and site owner funds are planned to be used to construct the Gateway Boulevard extension and other needed roadway improvements. The City has committed to funding the Gateway Boulevard extension if Smart Scale funds are not received. The City estimates the roadway improvements would be completed by July 2023, in time for the proposed HCC development.	3.14

Agency and Public Comments on Draft EA		
Comment	**Response**	**Section**
SCDED stated that the Virginia Railway Express is located approximately 6.1 miles from the Hood Drive Site and was not mentioned in the EA.	Rail has been added to the transportation modes listed in the referenced text. For the purposes of this NEPA analysis, the number of Veterans that may access the HCC via rail and transfer to another mode of transportation to complete the last 6.1 miles is not expected to change the conclusion that either Action Alternative would have no significant impact to traffic and transportation with the identified improvements and mitigation measures.	3.14
The Spotsylvania County Administrator noted that VDOT maintains all public roads in Spotsylvania County. Spotsylvania County Public Works Department does not regulate traffic in the vicinity of the Hood Drive Site.	Section 3.14 of the EA has been updated with this information.	3.14
Spotsylvania County Administrator noted that projects to improve the intersection of Courthouse Road/Lafayette Boulevard/ U.S. Route 1 and the intersection of the I-95 northbound ramps with U.S. Route 1 are partially funded, are Smart Scale candidates for full funding, and are planned to be completed by 2028. The Administrator stated these improvements have been developed in cooperation with VDOT to mitigate the traffic impacts associated with regional and planned growth.	Section 3.14 of the EA has been updated with this information.	3.14
The Spotsylvania County Administrator stated VDOT just completed the U.S. Route 1 Corridor Study to identify improvements for U.S. Route 1 between Hood Drive/Mine Road and Market Street and the County is working with VDOT to advance the Hood Drive Connector, which would also provide the north site driveway entrance to the HCC on U.S. Route 1 if the Hood Site is selected. He also noted that the Draft EA Figure 3-16 reflects an early concept of the Hood Drive Connector Road and does not show the current proposed U.S. Route 1 connection point location.	Section 3.14 of the EA has been updated with this information.	3.14

Agency and Public Comments on Draft EA		
Comment	**Response**	**Section**
A member of the public requested clarification whether Spotsylvania County and/or VDOT would fund required improvements to the road network around the Hood Drive Site.	At the time of the Draft EA public meeting, the Traffic Impact Analysis (TIA) for the Hood Drive Site had been submitted to Spotsylvania County and VDOT for review and comment, but comments had not yet been received. Subsequently, Spotsylvania County and VDOT provided comments regarding the TIA and Spotsylvania County has committed to funding the necessary local roadway network improvements, should the Hood Drive Site be selected for the HCC. VA's developer would be responsible for funding improvements at the HCC entrance/exit drive intersections.	3.14
Utilities		
SCDED stated that Spotsylvania County supplies its own water and sewer, while the City of Fredericksburg receives 100 percent of its potable water supply directly from Spotsylvania County. The City of Fredericksburg also sends, on average, 11 percent of its sanitary sewage to Spotsylvania County and the percentage increases during peak flow periods. SCDED stated without the current agreements between Spotsylvania County and the City of Fredericksburg, the City of Fredericksburg could not provide adequate water and sewer for its residents and businesses.	Comment acknowledged.	3.15
Cumulative Impacts		
SCDED stated that the road name Spotsylvania County Road in Section 3.17 is incorrect. The correct road name is Spotsylvania Parkway	The road name has been corrected in the Final EA.	3.17
SCDED stated that redevelopment has started in the area of the Hood Drive Site. Recent redevelopment projects include the demolition of a hotel at the corner of U.S. Route 1 and Market Street with plans for a new Chick-fil-A at the same location. Also, a Pizza Hut restaurant was demolished and relocated, while a Royal Farms gas station was constructed in the former Pizza Hut location at the corner of Hood Drive and U.S. Route 1. A new Pizza Hut was built South of Hood Drive on U.S. Route 1, replacing a former service station.	The EA has been updated to reflect the recent development in the vicinity of the Hood Drive Site.	3.9 and 3.17

6.0 AGENCIES AND PERSONS CONSULTED

6.1 AGENCY COORDINATION

Agencies consulted for this EA include:

- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- USDA Natural Resource Conservation Service
- Federal Highway Administration
- Virginia Department of Game and Inland Fisheries
- Virginia Division of Historical Resources (Virginia SHPO)
- Virginia Department of Environmental Quality, various divisions
- Virginia Department of Transportation
- Virginia Department of Forestry
- Virginia Department of Conservation and Recreation
- Virginia Department of Agriculture and Consumer Services
- VDCR Natural Heritage Resources
- Friends of the Rappahannock
- George Washington Regional Commission
- Fredericksburg Area Metropolitan Planning Organization
- Spotsylvania County (various divisions)
- City of Fredericksburg (various departments)

VA initiated the agency scoping process for the Proposed Action in November 2019, which included an email request for information and comments based on the VA delineated area (area of consideration) for the proposed HCC, as well as two stakeholder meetings held in Fredericksburg on December 5, 2019. Additional site-specific agency scoping (email request for information and comments) was conducted on May 21, 2020, once the Gateway Site and Hood Drive Site were identified as the prospective HCC locations.

Responses were received from USEPA, USFWS, USACE, VDEQ Office of Environmental Impact Review (OEIR), VDEQ ODW, VDCR, VDF, Spotsylvania County Economic Development Department, Spotsylvania County, and the City of Fredericksburg. Input provided by these agencies is addressed in the appropriate resource sub-sections of Section 3. Written correspondence from the agencies is provided in Appendix B. The following summarizes that input, which VA used to focus this EA's analysis:

General Input/Both Action Alternative Sites

- **USEPA's NEPA Program** provided general guidance and recommendations for VA's completion of the EA. USEPA also recommended that VA consider brownfields or redevelopment of previously developed sites for the HCC; strongly encouraged integrating low-impact development and green infrastructure into the site and/building design; and recommended the availability of public transportation to be considered in site selection.
- **USFWS Virginia Field Office** stated that they have an on-line system that provides the steps and information necessary to allow any individual or entity requiring review/approval of their project to complete a review and come to the appropriate conclusion. USFWS also provided a link to the on-line system.

- **USACE** stated that the Proposed Action should avoid impacts to WOTUS and that any impacts to WOTUS may require a Section 10 and/or Section 404 of the Clean Water Act permit, including mitigation (replacement) at specified ratios. USACE also stated that VA is required to complete consultation with SHPO as detailed in Section 106 of the NHPA and designated VA as the "lead agency" to fulfill the collective federal responsibilities under Section 106 for the Proposed Action. USACE also stated that VA is required to meet Section 7 of the Endangered Species Act responsibilities through consultation with USACE and/or USFWS.
- **VDEQ OEIR** stated they are responsible for coordinating Virginia's review of federal NEPA documents and federal consistency determinations prepared pursuant to the Coastal Zone Management Act, which applies to federal activities that are reasonably likely to affect any land use or water use or natural resources of Virginia's designated coastal resources management area. OEIR provide guidance on submitting documents for review and provided links to databases that may assist in the preparation of the EA.
- **VDEQ ODW** stated that the Action Alternative sites are not within one mile of any public water wells and are not within the watersheds of any public surface water intakes. VDEQ ODW stated that BMPs for erosion and sediment control and spill prevention control and countermeasures should be implemented. VDEQ ODW also stated that materials should be managed while on-site and during transport to prevent impacts to nearby surface water.
- **VDCR** stated that natural heritage resources have not been documented within the boundaries of the Action Alternative sites, including a 100-foot buffer. In addition, VDCR stated that the proposed HCC would not impact any state-listed plants and insects at either of the Action Alternative sites. VDCR stated that there are no State Natural Area Preserves under VDCR's jurisdiction in the vicinity of the Action Alternative sites. VDCR provided requirement for federal and state projects in a Special Flood Hazard Area; however, neither of the Action Alternative sites is located in such an area.
- **Spotsylvania County Department of Economic Development** provided data and other research in support of the development of the propose HCC within Spotsylvania County.

Gateway Site

- **VDCR** stated that they maintain a conservation easement with Central Virginia Battlefields Trust for an 11.2-acre property to the east of the Gateway Site and that the Proposed Action is not anticipated to negatively affect this easement. The conservation easement is associated with a parcel approximately 150 feet northeast of the Gateway Site that is now owned by the City of Fredericksburg and was established to protect archaeological resources associated with the Civil War. VDCR stated that the Proposed Action would fragment an Ecological Core C5 area (least ecologically relevant) as identified in the Virginia Natural Landscape Assessment and recommended efforts to minimize edges in remaining fragments, retain natural corridors that allow movement between fragments, and designing the intervening landscape to minimize its hostility to native wildlife.
- **VDF** stated that the Gateway Site was likely historically clear cut for agricultural use and has gradually reforested. VDF stated the western portion of the Gateway Site, along Interstate 95, primarily consists of an artificial (planted), overstocked loblolly pine community and recommended that this area be clear cut. VDF stated that the remaining portions of the Gateway Site consist primarily of a mixed pine and hardwood community, a common community in Virginia. VDF stated that the mixed pine and hardwood community is healthy, is experiencing normal community progression, supports a great deal of diversity in variety of tree species, and likely supports a wide variety of game and non-game species.

- **The City of Fredericksburg** provided a series of documents pertaining to cultural resources, geotechnical investigation, wetlands, wildlife and habitat, perennial flow and resource protection areas, and solid and hazardous materials and wastes for the proposed 1500 Gateway Boulevard Development. The documents are listed in Section 8 and discussed within the respective technical resource areas of Section 3.

Hood Site

- **VDF** stated that the Hood Drive Site is located in a heavily developed area, was clear cut in 2005, and has been heavily worked (graded) since 2005. According to the VDF, the Hood Drive Site is subject to a high noise level from Interstate 95 and identified habitats are neither unique nor rare.
- **Spotsylvania County** stated that the Hood Drive Site is centrally located within the County's designated Primary Development area that is intended growth and development in a variety of suburban, semi-urban, and urban scale densities and the County's Opportunity Zone with redevelopment of aged sites, including the Royal Farms gasoline station adjoining to the east of the Hood Site and an upcoming Chick-fil-A across U.S. Route 1 from the Hood Drive Site. Spotsylvania County also stated that public water and sewer are available to the Hood Drive Site.

  Spotsylvania County stated that the Hood Drive Site is not known to contain any rivers, RPAs, or Special Flood Hazard Areas, and is not within a Dam Break Inundation Zone. Spotsylvania County stated that the Hood Drive Site lies within the Rappahannock River / Massaponax Creek watershed and the Rappahannock River-Massaponax Creek-Muddy Creek-Hazel Run-Motts Run-Claiborne Run sub-watershed.

  Spotsylvania County stated that a former convenience store and gasoline station is located on the eastern portion of the Hood Drive Site where the County issued a permit for UST removals and the VDEQ issued a "case closed" letter for the former convenience store and gasoline station.

  Spotsylvania County stated that the small-whorled pogonia is not known to be located on the Hood Drive Site, there are no public parks within 1 mile of the Hood Drive Site, and there are no known conservation areas or natural resource concerns on the Hood Drive Site. Spotsylvania County provide site-specific soil information for the Hood Drive Site and stated that the Hood Drive Site is not conducive to farming.

  Spotsylvania County stated that the Hood Drive Site is located in close proximity to the confluence of a number of major transportation routes and a number of transportation projects are being studied or proposed near the Hood Drive Site, including collector/distributor lanes on Exit 126 from Interstate 95, the expansion of Hood Drive to four lanes, improvements to the intersections of Hood Drive/Courthouse Road and U.S. Route 1/Market Street, and the revitalization (streetscape improvements) of U.S. Route 1 north of Market Street.

  Spotsylvania County stated that an architectural survey was completed for the residence on the northern portion of the Hood Drive Site and was determined not to be eligible for listing on the NRHP. No other historical resources were identified for the Hood Drive Site by Spotsylvania County.

6.2 NATIONAL HISTORIC PRESERVATION ACT SECTION 106 CONSULTATION

On July 16, 2020, VA initiated NHPA Section 106 consultation with the Virginia SHPO, the Advisory Council on Historic Preservation, City of Fredericksburg Community Planning and Building Department, Spotsylvania County Department of Planning and Zoning, and other potentially interested parties (National Park Service Fredericksburg & Spotsylvania National Military Park; American Battlefield Trust, Fredericksburg Area Museum; Historic Fredericksburg Foundation, Inc.; Rappahannock Valley

Civil War Round Table; Spotsylvania Historical Society; the Central Virginia Battlefields Trust; Preservation Virginia; and federally recognized Native American Tribes regarding the proposed development of the HCC.

As part of the initial Section 106 consultation, VA submitted information detailing the cultural resources identification efforts and findings for the Gateway and Hood Drive Sites. VA identified no historic properties eligible for listing on the NRHP at the Hood Drive Site and determined the implementation of the Proposed Action at the Hood Drive Site would have no effect on historic properties listed or eligible for listing on the NRHP. VA identified the Civil War encampment archaeological site located on the Gateway Site and a Civil War archaeological site located approximately 400 feet northeast of the Gateway Site as eligible for listing on the NRHP and three Civil War battlefields in the site area as listed or eligible for listing on the NRHP. VA plans a phased approach for the further identification of historic properties and assessment of effects if the Gateway Site is selected.

VA invited the consulting parties to participate in the development of a procedural PA that would be implemented for the Proposed Action. VA provided a copy of the draft procedural PA for review and comment. Only the Virginia SHPO provided comments on the draft procedural PA. The PAwas executed by Virginia SHPO and VA on August 24, 2020.

The PA states that if the Hood Drive Site is selected for the proposed HCC, no further consultation is required, as there would be no adverse historic property effects. The PA also identifies the steps and procedures VA would implement to mitigate potential adverse effects if the Gateway Site is selected for the proposed HCC.

6.3 NATIVE AMERICAN CONSULTATION

VA initiated consultation with four federally recognized Native American Tribes as part of this NEPA process, in accordance with 36 CFR 800.2 and Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, 6 November 2000. These Tribes (Catawba Indian Nation, Delaware Nation of Oklahoma, Pamunkey Indian Tribe, and Monacan Indian Nation) identified as having possible ancestral ties to the area of the Action Alternative sites, were invited by VA to participate in the Section 106 process. The Pamunkey Indian Tribe and the Monacan Indian Tribe have elected to participate and are Section 106 consulting parties.

7.0 LIST OF PREPARERS

U.S. Department of Veterans Affairs Staff

Ms. Christine Modovsky
Environmental Engineer
Construction & Facilities Management
U.S. Department of Veterans Affairs

Mr. Héctor M. Abreu Cintrón, AIC
Senior Historic Preservation Specialist
CFM, Historic Preservation Office
U.S. Department of Veterans Affairs

TTL Associates, Inc. (Consultants)

Paul Jackson
Role: Research and Data Gathering, Document Preparation, Affected Environment, Environmental Impact Analysis, and Scoping Coordination
Degree: B.A., Biology/English 1992
Years of Experience: 20

Rob Clark
Role: Project Manager, Technical QA/QC Review, Program Management/Project Coordination
Degree: B.S., Aquatic Environments/Environmental Science, 1985
Years of Experience: 34

Paul Hotz
Role: Site Reconnaissance, Research and Data Gathering, Affected Environment
Degree: B.S., Construction Engineering Technology, 1992
Years of Experience: 30

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Fredericksburg Area Metropolitan Planning Organization: https://www.fampo.gwregion.org/

Friends of the Rappahannock: https://riverfriends.org/

George Washington Regional Commission: https://gwregion.org/

National Wetlands Inventory: https://www.fws.gov/wetlands/Data/mapper.html

Spotsylvania County, Virginia: https://www.spotsylvania.va.us/

Virginia Department of Environmental Quality: https://www.deq.virginia.gov/

Virginia Department of Game and Inland Fisheries: https://www.dgif.virginia.gov/

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Virginia Natural Heritage Resources: https://www.dcr.virginia.gov/natural-heritage/

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U.S. Army Corps of Engineers: https://www.usace.army.mil

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U.S. Fish and Wildlife Service: https://www.fws.gov

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9.0 GLOSSARY

100-Year Flood – A flood event of such magnitude that it occurs, on average, every 100 years; this equates to a one percent chance of it occurring in a given year.

Aesthetics – Pertaining to the quality of human perception of natural beauty.

Ambient - The environment as it exists around people, plants, and structures.

Ambient Air Quality Standards - Those standards established under the Clean Air Act to protect health and welfare .

Aquifer - An underground geological formation containing usable amounts of groundwater which can supply wells and springs.

Asbestos - Incombustible, chemical-resistant, fibrous mineral forms of impure magnesium silicate used for fireproofing, electrical insulation, building materials, brake linings, and chemical filters. Asbestos is a carcinogenic substance.

Attainment Area - Region that meets the National Ambient Air Quality Standard (NAAQS) for a criteria pollutant under the Clean Air Act.

Bedrock - The solid rock that underlies all soil, sand, clay, gravel and loose material on the earth's surface.

Best Management Practices (BMPs) - Methods, measures, or practices to prevent or reduce the contributions of pollutants to U.S. waters. Best management practices may be imposed in addition to, or in the absence of, effluent limitations, standards, or prohibitions (AR 200-1).

Commercial land use – Land use that includes private and public businesses (retail, wholesale, etc.), institutions (schools, churches, etc.), health services (hospitals, clinics, etc.), and military buildings and installations.

Contaminants - Any physical, chemical, biological, or radiological substances that have an adverse effect on air, water, or soil.

Council on Environmental Quality (CEQ) - An Executive Office of the President composed of three members appointed by the President, subject to approval by the Senate. Each member shall be exceptionally qualified to analyze and interpret environmental trends, and to appraise programs and activities of the federal government. Members are to be conscious of and responsive to the scientific, economic, social, aesthetic, and cultural needs of the Nation; and to formulate and recommend national policies to promote the improvement of the quality of the environment.

Criteria Pollutants - The Clean Air Act of 1970 required the USEPA to set air quality standards for common and widespread pollutants in order to protect human health and welfare. There are six "criteria pollutants": ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), lead (Pb), nitrogen dioxide (NO_2), and particulate matter.

Cultural Resources - The physical evidence of our Nation's heritage. Included are: archaeological sites; historic buildings, structures, and districts; and localities with social significance to the human community.

Cumulative Impact - The impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

Decibel (dB) - A unit of measurement of sound pressure level.

Direct Impact - A direct impact is caused by a Proposed Action and occurs at the same time and place.

Emission - A release of a pollutant.

Endangered Species - Any species which is in danger of extinction throughout all or a significant portion of its range.

Environmental Assessment (EA) - An EA is a publication that provides sufficient evidence and analyses to show whether a proposed system will adversely affect the environment or be environmentally controversial.

Erosion - The wearing away of the land surface by detachment and movement of soil and rock fragments through the action of moving water and other geological agents.

Agricultural land - Cropland, pastures, meadows, and planted woodland.

Fauna - Animal life, especially the animal characteristics of a region, period, or special environment.

Flora - Vegetation; plant life characteristic of a region, period, or special environment.

Floodplain - The relatively flat area or lowlands adjoining a river, stream, ocean, lake, or other body of water that is susceptible to being inundated by floodwaters.

Fugitive Dust - Particles light enough to be suspended in air, but not captured by a filtering system. For this document, this refers to particles put in the air by moving vehicles and air movement over disturbed soils at construction sites.

Geology - Science which deals with the physical history of the earth, the rocks of which it is composed, and physical changes in the earth.

Groundwater - Water found below the ground surface. Groundwater may be geologic in origin and as pristine as it was when it was entrapped by the surrounding rock or it may be subject to daily or seasonal effects depending on the local hydrologic cycle. Groundwater may be pumped from wells and used for drinking water, irrigation, and other purposes. It is recharged by precipitation or irrigation water soaking into the ground. Thus, any contaminant in precipitation or irrigation water may be carried into groundwater.

Hazardous Substance - Hazardous materials are defined within several laws and regulations to have certain meanings. For this document, a hazardous material is any one of the following:

Any substance designated pursuant to section 311 (b)(2)(A) of the Clean Water Act.

Any element, compound, mixture, solution, or substance designated pursuant to Section 102 of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Any hazardous substance as defined under the Resource Conservation and Recovery Act (RCRA).

Any toxic pollutant listed under TSCA.

Any hazardous air pollutant listed under Section 112 of the Clean Air Act.

Any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action pursuant to Subsection 7 of TSCA.

The term does not include: 1) Petroleum, including crude oil or any thereof, which is not otherwise specifically listed or designated as a hazardous substance in a above. 2) Natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). A list of hazardous substances is found in 40 CFR 302.4.

Hazardous Waste - A solid waste which, when improperly treated, stored, transported, or disposed of,

poses a substantial hazard to human health or the environment. Hazardous wastes are identified in 40 CFR 261.3 or applicable foreign law, rule, or regulation.

Hazardous Waste Storage - As defined in 40 CFR 260.10, ". . . the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere".

Hydric Soil - A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic (oxygen-lacking) conditions that favor the growth and regeneration of hydrophytic vegetation. A wetland indicator.

Indirect Impact - An indirect impact is caused by a Proposed Action that occurs later in time or farther removed in distance, but is still reasonably foreseeable. Indirect impacts may include induced changes in the pattern of land use, population density or growth rate, and related effects on air, water, and other natural and social systems. For example, referring to the possible direct impacts described above, the clearing of trees for new development may have an indirect impact on area wildlife by decreasing available habitat.

Industrial Land Use – Land uses of a relatively higher intensity that are generally not compatible with residential development. Examples include light and heavy manufacturing, mining, and chemical refining.

Isolated Wetland – Areas that meet the wetland hydrology, vegetation, and hydric soil characteristics, but do not have a direct connection to the Waters of the U.S.

Jurisdictional Wetland – Areas that meet the wetland hydrology, vegetation, and hydric soil characteristics, and have a direct connection to the Waters of the U.S. These wetlands are regulated by the USACE.

Listed Species - Any plant or animal designated by a state or the federal government as threatened, endangered, special concern, or candidate species.

Mitigation - Measures taken to reduce adverse impacts on the environment.

Mobile Sources - Vehicles, aircraft, watercraft, construction equipment, and other equipment that use internal combustion engines for energy sources.

Monitoring - A process of inspecting and recording the progress of mitigation measures implemented.

National Ambient Air Quality Standards (NAAQS) - Nationwide standards set up by the USEPA for widespread air pollutants, as required by Section 109 of the Clean Air Act. Currently, six pollutants are regulated by primary and secondary NAAQS: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide.

National Environmental Policy Act (NEPA) - U.S. statute that requires all federal agencies to consider the potential effects of major federal actions on the human and natural environment.

Non-attainment Area - An area that has been designated by the EPA or the appropriate State air quality agency as exceeding one or more national or state ambient air quality standards.

Parcel - A plot of land, usually a division of a larger area.

Particulates or Particulate Matter - Fine liquid or solid particles such as dust, smoke, mist, fumes, or smog found in air.

Physiographic Region - A portion of the Earth's surface with a basically common topography and common morphology.

Pollutant - A substance introduced into the environment that adversely affects the usefulness of a resource.

Potable Water - Water which is suitable for drinking.

Prime Agricultural land - A special category of highly productive cropland that is recognized and described by the U.S. Department of Agriculture's Natural Resource Conservation Service and receives special protection under the Surface Mining Law.

Remediation - A long-term action that reduces or eliminates a threat to the environment.

Riparian Areas - Areas adjacent to rivers and streams that have a high density, diversity, and productivity of plant and animal species relative to nearby uplands.

Sensitive Receptors - Include, but are not limited to, asthmatics, children, and the elderly, as well as specific facilities, such as long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, and childcare centers.

Significant Impact - According to 40 CFR 1508.27, "significance" as used in NEPA requires consideration of both context and intensity.

Context. The significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the Proposed Action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action.

Soil - The mixture of altered mineral and organic material at the earth's surface that supports plant life.

Solid Waste - Any discarded material that is not excluded by section 261.4(a) or that is not excluded by variance granted under sections 260.30 and 260.31.

Threatened species - Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Topography - The relief features or surface configuration of an area.

Toxic Substance - A harmful substance which includes elements, compounds, mixtures, and materials of complex composition.

Waters of the United States - Include the following: Territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters.

Watershed - The region draining into a particular stream, river, or entire river system.

Wetlands - Areas that are regularly saturated by surface or groundwater and, thus, are characterized by a prevalence of vegetation that is adapted for life in saturated soil conditions. Examples include swamps, bogs, fens, marshes, and estuaries.

Wildlife Habitat - Set of living communities in which a wildlife population lives.