Environmental Assessment for Force Protection Measures at the LaSalle Gate Langley Air Force Base, Virginia

FINAL

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Environmental Assessment for
Force Protection Measures at the LaSalle Gate
Langley Air Force Base, Virginia

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14. ABSTRACT
This EA describes the potential environmental consequences resulting from a proposal to redesign and construct the LaSalle Gate complex at Langley AFB in order to comply with new Anti-Terrorism/Force Protection standards. Eleven resource categories received a thorough evaluation to identify potential impacts. Due to the action, adverse, but not significant impacts will be felt in land use, water, and wetlands resources. Minor and temporary impacts would be seen in air quality, biological resources, waste, and noise. The improvements at the LaSalle gate would greatly increase safety in the years to come. The action is expected to have no impacts on cultural resources, geology, and socioeconomics. No long term environmental consequences are anticipated.

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The attached Environmental Assessment (EA) document was developed in accordance with the regulations for implementing the procedural provisions of the National Environmental Policy Act of 1969 (NEPA) and 32 Code of Federal Regulations (CFR) Part 989. This document originates from Langley AFB 1 CES/CEVQA and is coordinated through Headquarters Air Combat Command (ACC).

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FINDING OF NO SIGNIFICANT IMPACT/
FINDING OF NO PRACTICABLE ALTERNATIVE

1.0 NAME OF ACTION

Force Protection Measures at the LaSalle Gate, Langley Air Force Base, Virginia

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

The primary purpose of this project is the improvement of antiterrorism/force protection (AT/FP) conditions at Langley AFB. To achieve that objective, the Proposed Action involves construction activities that are subject to the National Environmental Policy Act (NEPA) review. The Environmental Assessment (EA), required by NEPA, examines the potential impacts of demolishing and reconstructing the guard house, Visitor Reception Center (VRC), and expansion of the existing parking lot.

The redesign and construction of the gate, guard house and VRC would provide full ballistic protection coverage to Security Forces personnel and the gate complex would be equipped with new features to secure the base perimeter. The redirection of commercial vehicles to the West Gate would allow for the inspection of commercial vehicles at the Commercial Vehicle Inspection (CMI) facility and would expedite vehicle flow and eliminate pressure to rush commercial vehicle inspections at the LaSalle Gate.

Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in One Phase: The proposed redesign introduces a natural serpentine effect through the inclusion of a traffic circle, and varying the grading of the pavement surface. Active hydraulic pop-up barriers would be placed across all lanes of traffic, both ingress and egress lanes, with the controls located at the guard house. In addition, berming and fencing would be used to prevent vehicles from leaving the roadway and running the gates and/or avoiding the pop-up barriers. This berming and fencing would be used around the VRC along with the natural low areas to prevent vehicles from leaving the visitor parking lot except through the designated drive through. Demolition and reconstruction of the current guard house is proposed to provide full ballistic protection coverage to Security Forces personnel.

The proposed redesign of the VRC would expand the capacity from parking for 18 vehicles (and one space for handicapped parking), a waiting area for six, and work stations for two airmen to 49 parking spaces (including two handicapped spaces) a waiting area that seats 25, and six workstations. In addition, restrooms, public telephones and the base pass and identification card office would be relocated to the proposed 2,900 square foot facility. Although the commercial traffic and truck inspection function would be moved to the West Gate, limited capabilities for handling commercial vehicles would be retained at the LaSalle Gate to allow for contingency situations.

Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases: Under this alternative the LaSalle Gate improvements would be the same as those in the Proposed Action but would be conducted in four phases, during which the gate would continue to operate as an entry point.

Alternative 2: Improvement and Expansion of Guard House, Visitor Reception Center, and Parking Lot with Force Protection Measures—Reverse Layout: Under this alternative, the gate improvements would occur in a reverse layout relative to the Proposed Action and Alternative 1. Visitors would enter the VRC parking lot, park and walk northward to the VRC. This layout could accommodate a greater number of parking spaces in the area and would be more appealing from an architectural design standpoint. The scope of the improvements and expansion would be similar to those described under the Proposed Action. However, this alternative creates two problems: this places the largest aspect of the construction project against a protected wetland area and places the VRC relatively deep inside the gate, beyond the guard house. For these two reasons, Alternative 2 is not carried forward for analysis.

No Action Alternative: Under the No Action Alternative, the Air Force would leave the LaSalle Gate as it is and perform no construction at the site. No force protection measures would be enabled and the LaSalle Gate would continue to fail to meet DOD and Air Force AT/FP standards.

3.0 SUMMARY OF THE ENVIRONMENTAL CONSEQUENCES

The Proposed Action at the LaSalle Gate would generate short-term impacts on the surrounding environment. The nature and duration of the impacts are such that there would be no significant impact associated with the proposed activities since they would be either short-term impacts or could be mitigated by utilization of best management practices. The Proposed Action would encroach upon approximately 0.84 acre of base open space; would substantially increase the amount of paved area in the vicinity of tidal wetlands; and would strain wetland buffer areas but avoid direct impact on nearby wetlands. There are no EO 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations* concerns since the Proposed Action would affect neither minority nor low-income groups disproportionately.

Land Use: Land use would be impacted by the reconstruction of the VRC and the accompanying expansion of the parking lot since approximately 0.84 acre of open space would be paved over to accommodate the Proposed Action. Although there would be a loss of some open space, wetlands would not be impacted directly; instead the buffer around them would be encroached upon. Mitigation measures that would be taken to appropriately manage storm water are described in the Water Quality section below.

Water Quality: Under the Proposed Action, the increase in paved surfaces could contribute to an increase in the volume and speed of storm water run-off. To combat potential negative impacts on nearby wetlands, drainage for the complex would be collected at various locations and slowly discharged to the low area to the east of the site. Machinery and construction vehicles would always be operated outside of the nearby wetlands. Soil disturbance as a result of earth-moving could contribute to turbid run-off, and accidental spills at the site could add hazardous and other waste to the run-off. Secondary containment for oils and chemicals used on-site would be used to prevent these materials from entering the nearby waters. Extensive erosion/sediment control measures that are designed in accordance with the current edition of the Virginia Erosion and Sediment Control Handbook would be installed at designated locations to prevent erosion and sediment from leaving the site.

Coastal Zone, Wetlands and Floodplains: Site constraints severely limit the area on which AT/FP improvements may be made. The Proposed Action would not directly encroach upon any wetlands; it would expand into the buffer area around the wetland and the site lies within the 100-year floodplain. All work associated with the Proposed Action would be conducted in accordance with Virginia's Water Protection Permit Program. Wetlands are located to the east and south of the site affected by the Proposed Action. Care has been taken in designing facilities that will meet the requirements of Department of Defense and Air Force AT/FP requirements while at the same time avoiding encroachment on protected wetlands.

4.0 CONCLUSION

On the basis of the findings of the EA, conducted in accordance with the requirements of the National Environmental Policy Act, the Council on Environmental Quality regulations and Air Force Instruction 32-7061, as promulgated in 32 Code of Federal Regulations Part 989, and after careful review of the potential impacts of the proposed action, I find that there would be no significant impact on the quality of the human or natural environment from implementation of the proposed action. Therefore I find no requirement to prepare an Environmental Impact Statement.

In accordance with Executive Order, 11988, Protection of Floodplains, and the authority delegated in Secretary of the Air Force 791.1, including the written re-delegations accomplished pursuant to that Order, and taking the above information into account, I find that there is no practicable alternative to this action and that the Proposed action includes all practicable measures to minimize harm to the Langley AFB floodplain environment.

Timothy A Byers

TIMOTHY A. BYERS
Colonel, USAF
Director of Installations (A7)

16 OCT 05

DATE

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ACRONYMS AND ABBREVIATIONS

1 FW	1st Fighter Wing
ACC	Air Combat Command
AFB	Air Force Base
AFI	Air Force Instruction
APZ	Accident Potential Zone
AT	Antiterrorism
AT/FP	Antiterrorism/Force Protection
BASH	Bird/Aircraft Strike Hazard
BMPs	Best Management Practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CRMP	Cultural Resources Management Plan
CVI	Commercial Vehicle Inspection Facility
CZMA	Coastal Zone Management Act
DCBLA	Division of Chesapeake Bay Local Assistance
DNL	Day-night Average Noise Level
DoD	Department of Defense
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
ECP	Entry Control Point
EPA	Environmental Protection Agency
ERP	Environmental Restoration Program
FACEUP	Federal Agencies' Chesapeake Ecosystem Unified Plan
FP	Force Protection
NAAQS	National Ambient Air Quality Standards
NASA	National Aeronautics and Space Administration
NASA LaRC	NASA Langley Research Center
NEPA	National Environmental Policy Act
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
O_3	Ozone
Pb	Lead
PM_{10}	Particulate Matter Less Than 10 Microns
ROI	Region of Influence
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SO_x	Sulfur Dioxides
UFC	Unified Facilities Criteria
USAF	United States Air Force
USC	United States Code
VA DCR	Virginia Department of Conservation and Recreation
VCP	Virginia Coastal Program
VOCs	Volatile Organic Compounds
VRC	Visitor Reception Center

EXECUTIVE SUMMARY

This Environmental Assessment (EA) examines the potential impacts of the redesign of the LaSalle Gate complex at Langley Air Force Base in order to comply with Department of Defense (DoD) Force Protection requirements as identified in Langley Air Force Base's Anti-Terrorism Plan 10-245. The Proposed Action is subject to review under the National Environmental Policy Act (NEPA) of 1969 (42 U.S. Code [USC] 4321-4347). Federal Agency NEPA compliance is governed by implementing regulations promulgated by the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] Parts 1500-1508). CEQ NEPA regulations are supplemented by agency-specific regulations, which for the Air Force is The *Environmental Impact Analysis Process*, codified at 32 CFR Part 989.

Purpose and Need for the Action

On a continual basis, antiterrorism/force protection (AT/FP) defends against asymmetric threats in accordance with Department of Defense Instruction 2000.16, DoD Antiterrorism Standards, to defeat or mitigate the effects of a terrorist attack. The definition of an asymmetric threat is a broad and unpredictable spectrum of military operations conducted by nations, organizations or individuals specifically targeting weaknesses and vulnerabilities within an enemy government or armed force. Deterrence is the first line of defense against such a terrorist attack. This is best accomplished by proper intelligence and adequate perimeter security. Presently, two of the three Langley AFB gate complexes fail to meet DoD Force Protection requirements as identified in Air Force Instruction (AFI) 10-245, Air Force Antiterrorism Standards.

The purpose of the Proposed Action is to enhance force protection. The redesign and construction of the gate, guard house and Visitor Reception Center (VRC) would provide full ballistic protection coverage to Security Forces personnel and the gate complex would be equipped with new features to secure the base perimeter. The redirection of commercial vehicles to the West Gate would allow for the inspection of commercial vehicles at the Commercial Vehicle Inspection (CVI) facility and would expedite vehicle flow and eliminate pressure to rush commercial vehicle inspections at the LaSalle Gate.

Proposed Action and Alternatives

Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in One Phase

Under the Proposed Action, the size and function of the VRC would expand to include the Base Pass Office to reduce the delays experienced by visitors trying to get a base pass. Additional

parking capacity would be needed to support the expanded VRC function. The guard house would be moved, enlarged, and equipped with features to improve protection of personnel. Serpentine roadways, bollards and other structures to support force protection objectives would be constructed.

Under the Proposed Action, the gate complex improvements would require the rerouting of traffic to the King Street and West Gates while the existing complex is demolished and the new complex is constructed.

Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

Under this alternative the LaSalle Gate improvements would be the same as those in the Proposed Action but would be conducted in four phases, during which the gate would continue to operate as an entry point. In the first phase, the new VRC parking lot would be constructed and would temporarily receive traffic via a temporary guard house constructed near Nealy Avenue. In the second phase, the guard house would be demolished and reconstructed and road and paving treatments would be built. During the third phase the use of the parking lot and temporary guard house would end and the new guard house would begin operation and the new VRC would be constructed. The final phase would include demolition of the old VRC, operation of the new VRC, and the final grading and placement of landscaping and fencing.

Alternative 2: Improvement and Expansion of Guard House, Visitor Reception Center, and Parking Lot with Force Protection Measures—Reverse Layout

Under this alternative, the gate improvements would occur in a reverse layout relative to the Proposed Action and Alternative 1. Visitors would enter the VRC parking lot, park and walk northward to the VRC. This layout could accommodate a greater number of parking spaces in the area and would be more appealing from an architectural design standpoint. The scope of the improvements and expansion would be similar to those described under the Proposed Action**.** However, this alternative creates two problems: this places the largest aspect of the construction project against a protected wetland area and places the VRC relatively deep inside the gate, beyond the guard house. For these two reasons, Alternative 2 is not carried forward for analysis.

No Action Alternative

Under the no action alternative, the LaSalle Gate would remain unchanged and no reduced or increased impacts to the environment would occur. However, the threat of a high-speed vehicle

breaking the installation's perimeter security by "running the gate" would not be mitigated. The current guard house would continue to be below current ballistic design standards and the excessive wait times experienced by visitors seeking entry to the base would continue.

Summary of Impacts

The Proposed Action at the LaSalle Gate would generate short-term impacts on the surrounding environment. The nature and duration of the impacts are such that, with the use of common construction practices, there would be no significant impacts because of the implementation of the Proposed Action. In the table below Land Use, Water Quality and Coastal Zone, Wetlands and Floodplains are all given a "-"rating. The Proposed Action would encroach upon approximately 0.84 acre of base open space; would substantially increase the amount of paved area in the vicinity of tidal wetlands; and would strain the wetland buffer area, but avoid direct impact on nearby wetlands.

Land use, air quality, biological resources, safety, solid and hazardous waste, water quality, the coastal zone, wetlands and floodplains, noise, cultural resources, geology and soils, and socioeconomic factors were examined. Impacts are summarized below.

Table ES-1. Summary of the Potential Impacts of the Proposed Action and Alternatives

Issue Area	Proposed Action	Alternative 1	No Action
Land Use	-	-	0
Air Quality	0	0	0
Biological Resources	0	0	0
Safety	+	+	-
Solid and Hazardous Waste	0	0	0
Water Quality	-	-	0
Coastal Zone, Wetlands, and Floodplains	-	-	0
Noise	0	-	0
Cultural Resources	0	0	0
Geology and Soils	0	0	0
Socioeconomics	0	0	0

- represents an adverse, but not significant impact
0 represents a neutral effect
+ represents a positive effect

1.0 PURPOSE AND NEED FOR THE ACTION

This Environmental Assessment (EA) examines the potential impacts of improved entry control and force protection measures at the LaSalle Gate at Langley Air Force Base, hereafter referred to as Langley AFB or the base. The Proposed Action is subject to review under the National Environmental Policy Act (NEPA) of 1969 (42 U.S. Code [USC] 4321-4347). Federal Agency NEPA compliance is governed by implementing regulations promulgated by the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] Parts 1500-1508). CEQ NEPA regulations are supplemented by agency-specific regulations, which for the Air Force is *The Environmental Impact Analysis Process,* codified at 32 CFR Part 989.

1.1 Introduction

Langley AFB is located in Hampton, Virginia. The main base is occupied jointly with the National Aeronautics and Space Administration Langley Research Center (NASA LaRC) on 2,883 acres. Currently, the host unit at the base is the 1st Fighter Wing (1 FW). The Back River, a tidal estuary that flows east and discharges into the lower reaches of the Chesapeake Bay, surrounds the base on three sides. A peninsula separates the main channel of the river into the Northwest and Southwest Branches. Langley AFB and the NASA LaRC occupy this peninsula, as shown in Figure 1-1 on page 1-2.

Much of the peninsula occupied by Langley AFB and NASA LaRC is located within the 100-year floodplain. Most of the area within the base is highly developed. Along the shoreline, development generally extends near or to the riverbank, although a narrow buffer of grassland is present in some locations.

Tide Mill Creek is located immediately south of the LaSalle Gate. Residential areas are present along LaSalle, the roadway then crosses over Tide Mill Creek after which there is an area of open space and trees followed by the entry point to the base. There is another area of open space just after the entrance to the base.

Langley AFB is one of many federal facilities that fall within the Chesapeake Bay Watershed. Because of the large number of federal facilities in the area, the United States Environmental Protection Agency's (EPA's) Chesapeake Bay Program established a Federal Agencies Committee in 1984.

Figure 1-1. Location Map, Langley Air Force Base, Virginia

Langley AFB has been an active participant in the Program since 1994, when the first Federal Agencies' Agreement committed federal lands to long-term and specific water quality goals and required cooperative efforts to improve the ecosystem management of the Chesapeake Bay. In 1998, the federal agencies, including the DoD and the United States Air Force (USAF), renewed their commitments to the Chesapeake Bay Program by signing the Federal Agencies' Chesapeake Ecosystem Unified Plan (FACEUP) (Appendix A).

1.2 Background

The LaSalle Gate is the main entrance to the base and includes the Visitor Reception Center (VRC). Figure 1-2 on page 1-4 provides an aerial view of the LaSalle Gate. Visitor passes for individuals and commercial traffic are issued from this location which includes a truck inspection capability. Approximately 27 percent of all base traffic is processed at this location. Access to Langley AFB is marked on Interstate 64 via LaSalle Avenue, a divided road that terminates at the base. The approach to the gate is heavily vegetated with mature trees and shrubs. The gate is located north of the bridge that spans Tide Mill Creek. Signage is adequate and motorists are informed that the road terminates at the base. They are given an opportunity to turn around prior to arriving at the entry control point (ECP).

This site is primarily constrained due to wetlands bordering its south, east, and west boundaries. There is some flexibility to the north. Conflicting or adjacent land uses do not exist because all of the private property in the area is separated by Tide Mill Creek or the Back River.

A total of three inbound traffic lanes (one designated as a right-turn only lane) and two outbound lanes, with a raised median serve the gate. The inbound right-turn only lane presently functions as the truck inspection area; traffic is managed by vertical stacking, with security personnel checking vehicles two-deep. The existing parking lot has 18 spaces plus one handicapped space, and is configured for one ingress/egress route. Jersey barriers have been used to block off the base side entrance to the parking area.

The VRC is undersized for the customer load. There are only two workstations and the building is crowded with six visitors. Frequently, there are long lines of potential visitors to the base outside the VRC waiting to be processed. There is no room within the current structure to add work stations to better manage the customer load. It is not unusual for visitors to experience long waits, without adequate shelter or access to restroom facilities. The existing structure also shows evidence of differential settlement on the slab.

1.3 Purpose and Need

On a continual basis, antiterrorism/force protection (AT/FP) defends against asymmetric threats in accordance with Department of Defense (DoD) Instruction 2000.16, DoD Antiterrorism Standards, to defeat or mitigate the effects of a terrorist attack. The DoD definition of an asymmetric threat is a broad and unpredictable spectrum of military operations conducted by nations, organizations or individuals specifically targeting weaknesses and vulnerabilities within an enemy government or armed force. Deterrence is the first line of defense against such a terrorist attack. This is best accomplished by proper intelligence and adequate perimeter security. Presently, two of the three base gate complexes fail to meet DoD Force Protection requirements as identified in Air Force Instruction (AFI) 10-245, Air Force Antiterrorism Standards.

The purpose of the Proposed Action is to enhance force protection. The redesign and construction of the gate, guard house and VRC would provide full ballistic protection coverage to Security Forces personnel and the gate complex would be equipped with new features to secure the base perimeter. The redirection of commercial vehicles to the West Gate would allow for the inspection of commercial vehicles at the Commercial Vehicle Inspection (CVI) facility and would expedite vehicle flow and eliminate pressure to rush commercial vehicle inspections

at the LaSalle Gate. Although this redirection of traffic brings additional traffic activity into the Land Use Control Area of the runway's Clear Zone, the CVI is an Air Combat Command (ACC) Approved Land Use Control Area Incompatible Land Use siting.

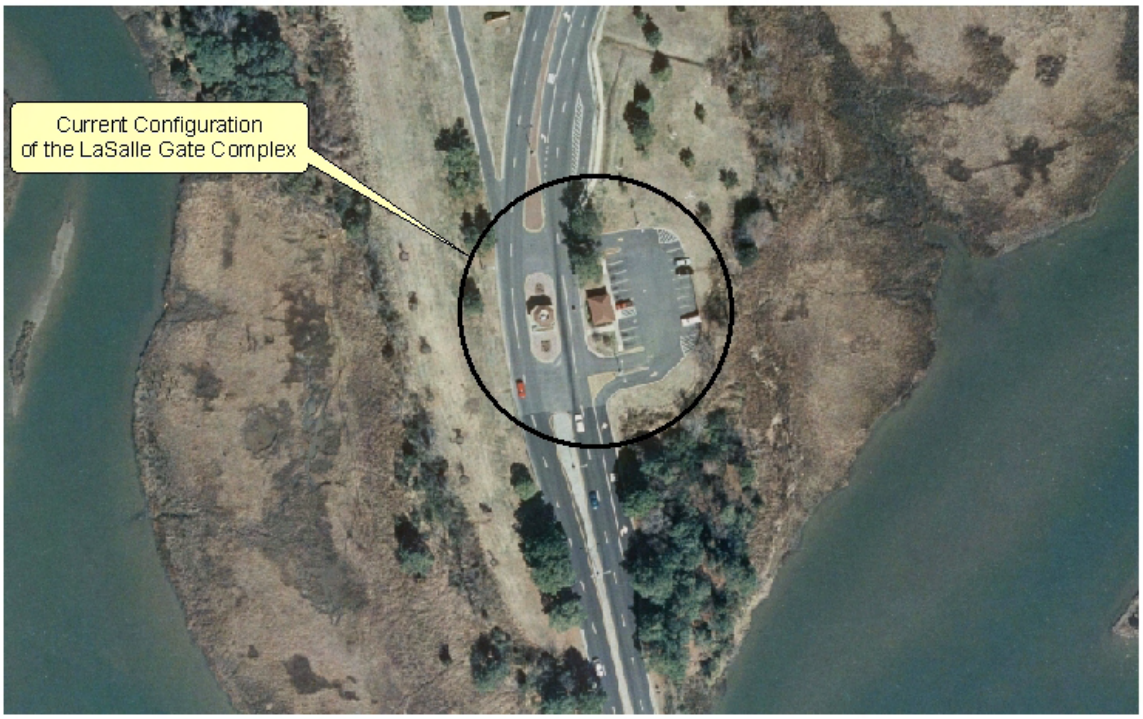

Figure 1-2. Aerial View of Existing LaSalle Gate Complex

1.4 Public and Agency Involvement

As a part of the planning and analysis process for the project at the LaSalle Gate, the Air Force would contact transportation and planning offices within the Hampton and Newport News government agencies. Civic associations for areas that would be directly impacted by the gate improvements would also be contacted and door-to-door hand outs would be provided to ensure that potentially impacted members of the community were made aware of Langley AFB's plans.

Commuters, entering the base or using Armistead Avenue (which could experience more congestion due to traffic diverted from the LaSalle Gate), would also potentially be impacted by the project. Radio announcements to inform commuters of the plans would be provided on a variety of local stations to reduce confusion and frustration due to the temporary changes in traffic pattern and likely delays. Recently completed improvements in traffic flow at the West Gate would diminish the magnitude of the impact from temporarily closing the LaSalle Gate.

To facilitate public involvement in the project, the Air Force published a Notice of Availability for the Draft EA to solicit public input. The Notice initiated a 30-day public comment period and briefly described the Proposed Action to improve force protection at the main entrance to Langley AFB and to expand the Visitor Reception Center functions. The Notice was published in the Local section of a Sunday issue of the *Daily Press*, a widely-read Hampton, Virginia newspaper (April 10, 2005) and the base weekly newspaper, the *Flyer* (April 8, 2005) The Langley AFB Public Affairs Office (1FW/PA) issued a press release about the availability of the Draft EA and soliciting public input on April 11, 2005. The press release was disseminated to local media outlets in the area (listed in Appendix B).

Copies of the Draft EA were made available for review at the following locations:

Bateman Library	42 Ash Avenue, Langley AFB
Hampton Library	4207 Victoria Boulevard, Hampton
Poquoson Library	500 City Hall Avenue, Poquoson
York County Library	100 Long Green Boulevard, Yorktown

Within the 30-day comment period the base may chose to conduct a public meeting if there is sufficient interest shown by the surrounding community. No comments were received during the 30-day comment period.

After the 30-day comment period, consolidated comments from various offices within the Virginia Department of Environmental Quality (VDEQ) were received. A summary of these comments and the Air Force response to these comments are provided in Appendix B to this EA. After the close of the comment period, comments were received from the Division of Chesapeake Bay Local Assistance (DCBLA), including their suggestions for an alternative design. The Air Force has reviewed the alternative suggested by DCBLA and concluded that the alternative design is not comparable to the Proposed Action and therefore not carried forward for further analysis. The DCBLA comment and the Air Force's response justifying no further analysis of the DCBLA alternative are provided in Section 3.2 of Appendix B.

2.0 PROPOSED ACTION AND ALTERNATIVES

The Proposed Action, to expand the VRC and associated parking lot concurrently; to move and enlarge the guard house; and, to add structures to support force protection principles, was selected from the four alternatives discussed in this Section and is based upon the selection criteria described in Section 2.1, below.

2.1 Selection Criteria

Seven criteria were identified on which to base the selection of the Proposed Action for Force Protection measures at the LaSalle Gate. The Proposed Action meets six of the criteria. The selection criteria are defined below.

2.1.1 Improve Force Protection Conditions

The selected action should result in provision of adequate perimeter security. The LaSalle Gate fails to meet DoD Force Protection requirements. Programs of deterrence are made up of various approaches including the implementation of defensive measures as identified in the Air Force AT/FP standards contained in Air Force Instruction 10-245. This includes improvements in entry control point lighting, pavements, and providing a rejection capability at the gate. New facilities should provide protection for security personnel while allowing for surveillance of the site.

2.1.2 Improve Traffic Management

The selected action should result in improved flow of vehicles in and out of the gate complex. The selected action should increase the control maintained by security personnel over vehicles that approach the gate. New facilities should include features to accommodate sufficient security personnel and to provide sufficient physical structures to direct and confine the maximum volume of traffic for control purposes.

2.1.3 Increase Capacity at the Visitor Reception Center

The selected action should result in a greater number of visitors being adequately controlled by security personnel. Improvements to the existing VRC should result in increased capacity in the volume of people that can be comfortably and securely processed into, or denied access to, the base. The new facilities should eliminate or reduce in the frequency and length of lines of waiting customers outside of the VRC and eliminate any pressure on security personnel to rush the processing of a visitor.

2.1.4 Present Minimal Environmental Impact

The selected action should create the least negative environmental impact possible during and after construction activities. The proximity of tidal wetlands, Tide Mill Creek and the southwest branch of the Back River to the LaSalle Gate requires consideration of potential environmental impacts to these and other resources.

2.1.5 Preserve Existing Vegetation and Habitat

The selected action should preserve and be developed within the existing vegetation and habitat to the extent possible.

2.1.6 Provide a Welcoming and Attractive Entrance to the Base

The selected action should result in an aesthetic improvement to the entrance to the base. The LaSalle Gate complex, the base's main gate, should extend a sense of pride, professionalism and readiness to all that seek to enter the base. The selected action should provide an attractive and welcoming design that also ensures protection and allows for security.

2.1.7 Accomplish in a Timely Manner

The selected action should be one that can be implemented as soon as possible so that AT/FP requirements can be met.

2.2 Application of the Selected Criteria to Alternatives

The criteria and their applicability to the four alternatives for entry point improvements at the LaSalle Gate are shown in Table 2-1 below.

Table 2-1. Selection Criteria for The Proposed Action

	Improve Force Protection Conditions	Improve Traffic Management	Increase Capacity at the Visitor Reception Center	Present Minimal Environmental Impact During Construction	Preserve Existing Vegetation and Habitat	Provide a Welcoming and Attractive Entrance to the Base	Accomplish in a Timely Manner
Proposed Action	✓	✓	✓	✓		✓	✓
Alternative 1	✓	✓	✓			✓	
Alternative 2		✓	✓			✓	✓
No Action Alternative				✓	✓		✓

2.3 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in One Phase

Under the Proposed Action, the gate complex improvements would require the rerouting of traffic to the King Street and West Gates while the existing VRC and guard house are demolished and new facilities are constructed. The Proposed Action at the LaSalle Gate complex would limit a high speed approach to the gate with the inclusion of a traffic circle and varying the grading of the pavement surface. Active hydraulic pop-up barriers would be placed across all lanes of traffic, both ingress and egress lanes, with the controls located at the guard house. Berming and fencing would be used to prevent vehicles from leaving the roadway and running the gates and/or avoiding the pop-up barriers. Berming and fencing would also be used around the VRC and in the naturally low areas to prevent vehicles from leaving the visitor parking lot except through the designated drive through.

The Proposed Action would expand the VRC parking lot capacity from parking for 19 vehicles (18 plus one handicapped) to 49 parking spaces (47 plus two handicapped spaces). The waiting area inside the VRC would expand from one that crowds six visitors, to a waiting area that seats 25. The work stations for two airmen would be increased to six workstations. In addition, restrooms, public telephones and the base pass and identification card office would be relocated to the proposed 2,900 square foot facility.

Expansion of the VRC would provide a more comfortable area for visitors and would reduce the pressure to process visitors in the midst of a crowded waiting area that often results in visitors waiting outside of the building. Commercial traffic and truck inspection would be redirected to the West Gate, but limited capabilities for handling commercial vehicles would be retained at the LaSalle Gate to allow for contingency situations.

Figure 2-1 provides an aerial view of the construction as described in the Proposed Action in relation to the current layout of the LaSalle Gate. New construction is indicated by yellow markings; the translucent blue areas indicate delineated wetlands adjacent to the Proposed Action. The wetland delineation shown was completed by IT Corporation in 2001 which has been approved by John Evans of the USACE. Specifically, in 2004 he stated that the, “base delineation does serve as a very good indication of the location and extent of wetlands and other waters.” Figure 2-2 is a copy of the layout plan for the Proposed Action.

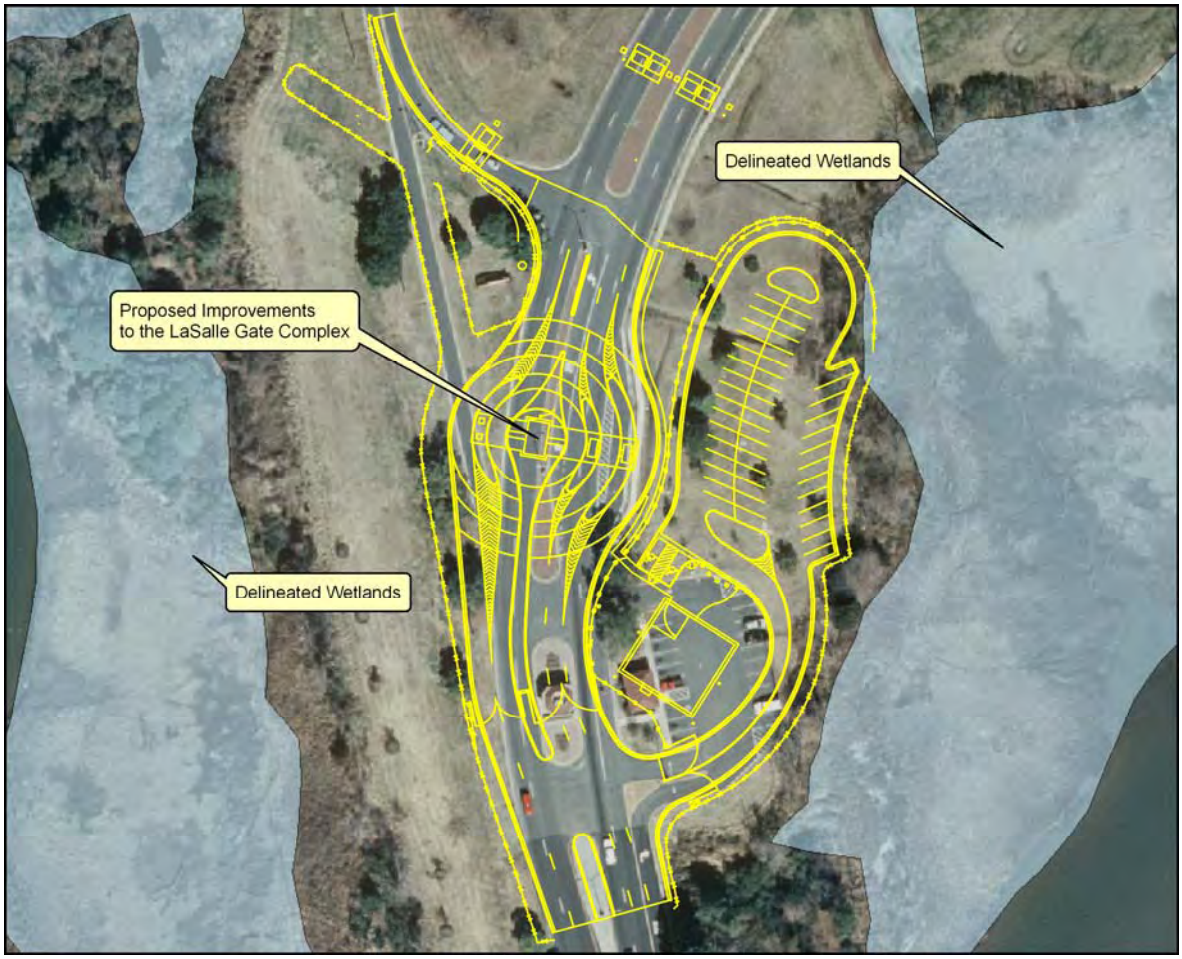

Figure 2-1. Construction Plans and Wetland Coverage at LaSalle Gate

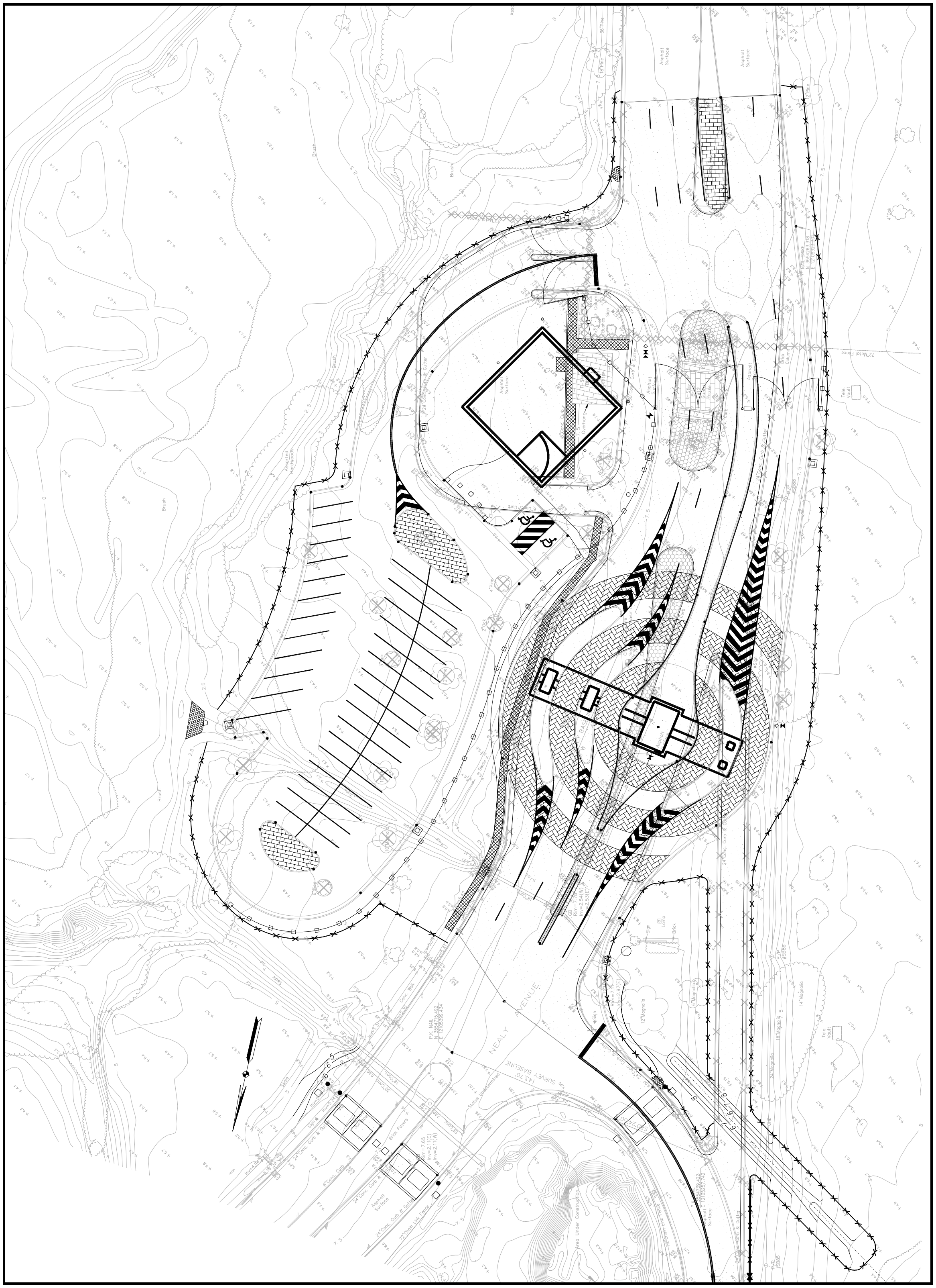

Figure 2-2. LaSalle Gate Layout Plan

2.4 Alternatives to the Proposed Action

In accordance with both the CEQ and AF implementing regulations for NEPA, alternatives to the Proposed Action must be identified. Under the AF regulations, alternatives may be eliminated from further analysis based on reasonable standards so long as those standards are not so narrow as to unnecessarily limit the alternatives (32 CFR 989.8(b)). Reasonable alternatives have been identified based upon their ability to provide needed force protection measures; improve traffic/ visitor flow; and have minimal environmental impact. Discussion of each alternative, and the no action alternative, is presented below.

2.4.1 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

Under this alternative the LaSalle Gate improvements would be the same as those in the Proposed Action but would be conducted in four phases, during which the gate would continue to operate as an entry point to the base. During the first phase the VRC parking lot would be constructed, as would a temporary bypass road through the parking lot that would connect to Nealy Avenue. A temporary guard house would be placed adjacent to the bypass road to serve as the temporary entry point. The second phase would involve demolition of the existing gate and guard house and the construction of a new gate and guard house complex like that described in the Proposed Action, including the barrier and pavement improvements. Phase three would include the opening of the new gate and guard house; removal of the temporary road and temporary guard house and regrading for berms and landscaping; and construction of the new VRC. During the last phase of the LaSalle Gate improvements the VRC would open; fences would be put back up; and site clean up and landscaping would be completed.

2.4.2 Alternative 2: Improvement and Expansion of Guard House, Visitor Reception Center, and Parking Lot with Force Protection Measures—Reverse Layout

Under this alternative, visitors would enter the VRC parking lot, park and walk northward to the VRC building. The scope of the improvements and expansion would be similar to those described under the Proposed Action. From a design and land use perspective, this alternative is more appropriate to the size and shape of the land.

This alternative creates two problems: it places the new VRC building, the largest aspect of the construction project, on top of a protected wetland buffer area; and, places the VRC relatively

deep inside the gate, beyond the guard house. Visitors would be able to get well inside the base perimeter before security personnel had assessed their intended destination, point of contact on the base and reviewed their identification. For these two reasons, Alternative 2 is not carried forward for analysis.

2.4.3 No Action Alternative

Under the no action alternative, the conditions at the LaSalle Gate complex would remain unchanged. The LaSalle Gate would continue to fail to meet mandated DoD AT/FP standards.

2.5 Comparison of Alternatives

Table 2-2 summarizes the potential environmental impacts of the Proposed Action and the alternatives based upon the detailed impact analyses presented in Section 4.0 for the alternatives that were carried forward for analysis.

Table 2-2. Summary of the Potential Impacts of the Proposed Action and Alternatives

Issue Area	Proposed Action	Alternative 1	No Action
Land Use	-	-	0
Air Quality	0	0	0
Biological Resources	0	0	0
Safety	+	+	-
Solid and Hazardous Waste	0	0	0
Water Quality	-	-	0
Coastal Zone, Wetlands, and Floodplains	-	-	0
Noise	0	-	0
Cultural Resources	0	0	0
Geology and Soils	0	0	0

- represents an adverse, but not significant impact

0 represents a neutral effect

+ represents a positive effect

3.0 EXISTING ENVIRONMENT

This section describes existing environmental conditions at the base and the resources potentially affected by the Proposed Action and the alternatives described in Sections 2.3 and 2.4. Existing conditions at the LaSalle Gate are presented for eleven issue areas which are presented below.

3.1 Land Use

The site of the Proposed Action includes the land around the existing LaSalle Gate, the VRC, and a guard house. The current land use designation is Open Space for this area in the Base General Plan (see Figure 3-1 below). Approximately 27 percent of all base traffic is processed at this location. Access to Langley AFB is marked on Interstate 64 via LaSalle Avenue, a divided road that terminates at the base. The approach to the gate via LaSalle Avenue is heavily vegetated with mature trees and shrubs. The ECP is located north of the bridge that spans Tide Mill Creek.

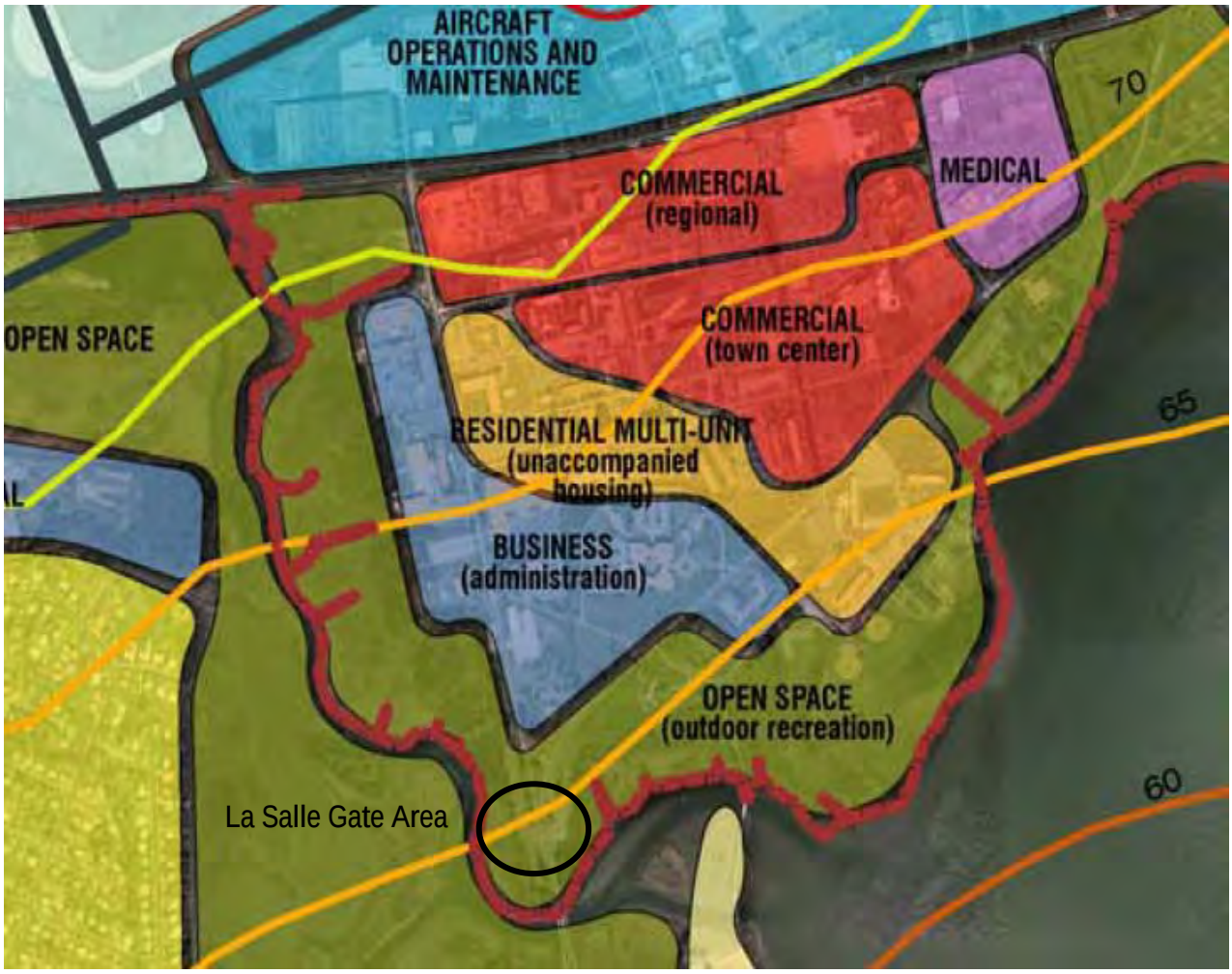

Figure 3-1. Langley AFB Zoning Plan

The site is partially constrained due to the wetland edge bordering its south, east, and west boundaries. There is, however, some flexibility to the north. Conflicting or adjacent land uses do not exist because all of the private property in the area is separated by Tide Mill Creek or the Back River.

A total of three inbound traffic lanes (one designated as a right-turn only lane) and two outbound lanes, with a raised median serve the gate. The inbound right-turn only lane presently functions as the truck inspection area; traffic is managed by vertical stacking, with security personnel checking vehicles two-deep. The existing parking lot has 18 spaces plus one handicapped space, and is configured for only one ingress/egress route. Jersey barriers have been used to block off the base side entrance to the parking area.

Selected gate improvements would also be conducted within the 100-year floodplain at Langley, as most of the base lies within this designation. Figure 2-1 on page 2-4 shows the Proposed Action in yellow and delineated wetlands in blue stripes.

3.2 Air Quality

The EPA developed National Ambient Air Quality Standards (NAAQS) for criteria pollutants to establish primary standards at levels sufficient to protect the public health with an adequate margin of safety. The criteria pollutants that have standards are sulfur dioxide (SO_2), particulate matter less than ten microns (PM_{10}), carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), and lead (Pb). O_3 is controlled by regulating its precursors, volatile organic compounds (VOCs) and nitrogen oxides (NO_x). NAAQS are implemented by states through a state implementation plan (SIP). Those areas that persistently violate NAAQS are designated as in nonattainment. Table 3-1 on page 3-3 shows the baseline emissions of the first five criteria pollutants emitted by Langley AFB and the Hampton Roads Air Quality Control Region.

Langley is located in an area originally designated by EPA as an attainment area for all NAAQS, except for ozone. The area then reached attainment for ozone in July 1997. However, the area was redesignated as a marginal nonattainment area for ozone on April 15, 2004 with an effective date of June 15, 2004 (Volume 69 of the Federal Register, Page 23857) because its ozone levels were between 0.085 and 0.092 ppm.

The Clean Air Act prohibits a federal agency from engaging in an activity that would: (1) cause or contribute to any new violation of any air quality standard in any area; (2) increase the frequency or severity of any existing violation; or (3) delay timely attainment. Under the Clean

Air Act, the conformity rule applies to federal actions occurring in nonattainment or maintenance areas and would therefore apply to the Proposed Action, since Langley is in a maintenance area for ozone.

The conformity rule defines applicability criteria and includes several exemptions and emissions thresholds, which determine whether the federal action requires a conformity determination. Non-exempt federal actions with total direct and indirect emissions that remain below the *de minimis* thresholds and are not regionally significant do not require conformity determinations. The *de minimis* thresholds for the base are 100 tons per year (tpy) of NO_x and 100 tpy of VOC since it is in a maintenance area outside the ozone transport region that extends from northern Virginia to Maine.

Table 3-1. Baseline Emissions for Langley Air Force Base

Emissions Source	Pollutant (tons/year)				
	CO	**VOCs**	**NO_x**	**SO_2**	**PM_{10}**
Langley AFB[1]					
Stationary Sources	15.7	88.9	46.2	1.2	5.2
Mobile Sources	778.99	36.78	247.61	5.61	8.63
Total	794.69	125.68	293.81	6.81	13.83
Hampton Roads Air Quality Control Region[2]	257,325	79,750	83,560	110,220	49,860

[1] Source: Robert D. Jones, CES/CEVC 2003.
[2] Source: Environmental Assessment Demolition of the Langley Tow Tank Facility, April 2001.

3.3 Biological Resources

No threatened or endangered species are known to exist on Langley AFB, although bald eagles feed and forage on the surrounding waters and tidal flats. All rare, threatened, and endangered plant and animal species that potentially occur on base are listed in Appendix D. Also included in Appendix D is correspondence from the Fish and Wildlife Service's Ecological Services Office, the Virginia Department of Game and Inland Fisheries' Environmental Services Section, and the Virginia Department of Conservation and Recreation's (VA DCR) Division of Natural Heritage stating the known threatened or endangered species that they are aware of in the Hampton/Langley AFB area: the Canebrake Rattlesnake, a state endangered species; the Northern Diamond-backed Terrapin, federal species of concern; the Great Egret, the Yellow-crowned Night Heron, the Northern Harrier, the Forester's Tern, the Least Tern, and the Caspian

Tern, all classified as of state special concern; and the Saltmarsh Sharp Tailed Sparrow is of state special concern during breeding season.

3.3.1 Vegetation

Various types of estuarine vegetation are present, including false willow (*Baccharis sp.*), saltmeadow cordgrass (*Spartina patens*), smooth cordgrass (*Spartina alterniflora*), and common weed (*Phragmites australis*). In addition, wax myrtle, loblolly pine, honeysuckle, poison ivy, and blackberry plants are present at the gate complex and along the approach to the gate. The gate complex itself and the land to the north of the gate consist primarily of paved parking lots and roadways.

3.3.2 Wildlife

Habitat quality for wildlife in the area is low due to the proximity to high levels of human activity. The motion, noise, and pollution of automobile traffic on the roads limit the quality of wildlife habitat. Insects and small mammals typically associated with wetland and grassy areas may inhabit the area. As stated above, no threatened or endangered species are known to exist on Langley AFB, although bald eagles feed and forage on the surrounding waters and tidal flats.

3.4 Safety

The existing LaSalle Gate complex does not comply with DoD's AT/FP standards, putting security personnel at risk. The guard house does not meet ballistic standards, and there is no physical barrier to mitigate the risk of a high-speed approach to the gate.

Currently, trucks entering the base are pulled to the side of the road and inspected as they approach the gate. This scenario causes back-ups creating unsafe working conditions for security personnel and their canine support inspecting the vehicles.

The flight line is located north of the LaSalle Gate. Bird/Aircraft Strike Hazard (BASH) issues are of concern elsewhere on base and steps have been taken to minimize BASH hazards. The base is located along migratory bird routes and contains numerous natural areas that attract transitory birds.

3.5 Solid Waste and Hazardous Materials/Waste

The base is subject to and routinely maintains compliance with solid waste and hazardous materials/waste regulations, including rules pertaining to chemical storage in tanks and

containers. Hazardous waste management requirements, including waste minimization policies, are applied to all actions taken at the base. Solid waste leaving the base is taken to the Bethel Sanitary Landfill, and efforts are made to recycle construction debris.

3.6 Water Quality

The base is bordered by the Northwest and Southwest Branches of the Back River. The Back River is a tributary of the Chesapeake Bay. The water is estuarine and primarily saline in nature.

Storm water runoff from base parking lots and roads may carry some spilled oil, grease, hydraulic fluid, and jet fuel into tributaries of the Back River; however, due to pollution prevention and waste management measures, the releases are sporadic and minimal in quantity. Occasionally, runoff may contain fertilizer residue from landscaping efforts to keep turf healthy and green.

3.7 Coastal Zone, Wetlands, and Floodplains

The federal Coastal Zone Management Act (CZMA) requires that "federal agency activity within or outside the coastal zone that affects land, water use, or natural resources of the coastal zone shall be carried out in a manner consistent with approved state management programs" (16 U.S.C. 1456(c)(1)(A)). Executive Order 11988, Floodplain Management, requires that each federal agency "shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains."

Virginia's requirements applicable to actions in the coastal zone, wetlands and floodplains are managed under the Virginia Coastal Program (VCP). The VCP goals include prevention of damage to the Commonwealth's natural resource base, the protection of public and private investment in the coastal zone, and the promotion of resources development and public recreation opportunities. Nine enforceable regulatory programs are gathered under the VCP to protect and enhance the coastal zone. Details of the VCP are attached as Appendix E.

The Chesapeake Bay Preservation Act, adopted by the General Assembly in 1988, provides for the protection and improvement of water quality of the Chesapeake Bay, its tributaries, and other state waters by minimizing the effects of human activity upon these waters. All counties, cities, and towns in Tidewater Virginia fall under the jurisdiction of the Act.

Langley lies entirely within the Chesapeake Bay watershed and is identified as an Environmental Resource Area for the Bay. The Chesapeake Bay Preservation Act requires riparian buffers of 100 feet from water features that drain into the Bay. Only under certain restrictive circumstances may these buffers be reduced if additional storm water quality improvement measures are incorporated into facility/site designs. The southern and eastern edges of the LaSalle Gate complex are bordered by wetlands. Wetlands are also present to the west of the ECP on the far side of LaSalle Avenue.

Executive Order 11990, Protection of Wetlands, requires that each federal agency "shall provide leadership and shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands". Federal, state, and local wetland construction permits are required for any construction within the wetland and coastal zone management areas.

3.8 Noise

According to the Base General Plan, the LaSalle Gate complex lies between the 65 and 70 decibel noise contour levels on an "average busy day." On military installations, the Day-night average Noise Level (DNL) is used to determine impacts. The DNL metric provides a single measure of overall noise exposure and is used to predict human annoyance. Different functions such as residential, commercial, and recreational activities have varying sensitivities to noise levels. For example, residential uses without noise attenuation should not occur in areas with noise levels above 65 decibels. Sound levels are expressed in decibels and are "A-weighted" for human hearing as recommended by EPA because it is convenient to use, accurate for most purposes and is used extensively throughout the world.

3.9 Cultural Resources

Section 106 of the National Historic Preservation Act of 1966 requires that federal agencies take into account the effects of their undertakings on historic properties. According to the base General Plan, most areas with historical or archaeological significance are located along the shore on the eastern side of the base.

Although the area including the LaSalle Gate is assessed as having a low potential for containing historical remains in the Base General Plan, some resources were discovered northeast of the area that would be impacted by the project. It is likely that previous development, such as clearing, grading, roadwork, and building construction, have destroyed any potential for intact deposits.

3.10 Geology and Soils

Soils at Langley are mostly unconsolidated fluvial, marine, and estuarine deposits that may date as far back as the Cretaceous era, circa 135 million years ago. During the construction of the base, fill was added for leveling. The fill was compacted in areas where buildings such as the existing entrance, VRC, and parking lot were constructed.

3.11 Socioeconomics

Environmental justice concerns the disproportionate effect of a federal action on low-income or minority populations. The existence of disproportionately high and adverse impacts depends on the nature and magnitude of the effects identified for each of the individual resources. If implementation of the Proposed Action were to have the potential to significantly affect people, those effects would have to be evaluated for how they adversely or disproportionately affect low–income or minority communities.

4.0 ENVIRONMENTAL CONSEQUENCES

This section describes the potential environmental consequences of the Proposed Action and alternatives. The assessment shows that relatively minor short-term impacts on the surrounding environment may occur. The nature and duration of the impacts are such that, with the use of common construction practices, there would be no significant impacts during implementation since they would be either short-term impacts or could be mitigated by utilization of best management practices (BMPs).

4.1 Land Use

4.1.1 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in One Phase

The Proposed Action would occur at the same location as the existing gate and VRC, but would expand the footprint of the complex to accommodate improvements. It would encroach upon approximately 0.84 acre of base open space, straining buffer requirements, but avoiding direct impact on nearby wetlands. The future land use designation of the property as dictated in the Base General Plan is Open Space. This is compatible with the Base General Plan since the existing land use, a gate complex, would not change and the current designation is also Open Space. The new approach to the gate would provide three lanes for vehicles entering the base, increasing the capacity to accept visitors by 50%. The new parking lot would provide 30 more parking spaces than are currently located there (increasing to 49 total spaces), in addition to the expansion of the VRC.

4.1.2 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

Alternative 1 would occur at the same location as the existing gate and VRC but would expand the footprint of the complex to accommodate improvements. Alternative 1, like the Proposed Action, would reduce open space at the base. It would encroach upon approximately 0.84 acre of base open space, straining buffer requirements, but avoiding direct impact on nearby wetlands. This is compatible with the future land use designation of the property as dictated in the Base General Plan since the existing land use would not change. The new parking lot would provide approximately 30 more parking spaces than are currently located there, in addition to the expansion of the VRC.

Because the scope of Alternative 1 is the same as the Proposed Action the impact on land use would be the same.

4.1.3 No Action Alternative

Under the no action alternative, the conditions at the LaSalle Gate complex would remain unchanged. This alternative would have no effects on land use.

4.2 Air Quality

According to 40 CFR Part 93, the *de minimis* levels for general conformity are 100 tons per year each for NO_x and VOCs. Construction activities, including operation of diesel-powered equipment and architectural painting, stationary sources, and mobile sources were considered in this determination. Increased vehicle traffic beyond that necessary for the actions themselves was not considered because the Proposed Action and Alternatives would not facilitate or promote an increased number of personnel entering the base. The assumptions and calculations used to arrive at these emissions are provided in Appendix C.

4.2.1 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures

Under the Proposed Action, fugitive dust and vehicle emissions would temporarily increase because of increased construction vehicle traffic, site clearing, and demolition activities. Emissions from the work associated with the Proposed Action are shown in Table 4-1. Emissions calculations are based on construction activities occurring over a 6-month construction period.

Table 4-1. Emissions from the Proposed Action

Pollutant	Tons per Year	Percent Regional Contributions
CO	1.71	<0.01
VOCs	0.19378	<0.01
NO_x	0.63	<0.01
SO_x	0.07	<0.01
PM_{10}	1.64	<0.01

Fugitive dust would be minimized through the application of water to disturbed areas and haul roads as a dust suppressant, and low speed limits would be enforced on clearing equipment and haul trucks to reduce the amount of dust created during use.

The base environmental compliance office would enforce policies regarding truck trips, idling, and size and type of earth moving equipment that would minimize construction vehicle emissions.

Emissions generated from the operation of diesel-fueled construction equipment during construction are expected to be below the *de minimis* levels of the Clean Air Act's General Conformity Regulations. Under 40 CFR Part 93, the *de minimis* levels are 100 tons per year each for NO_x and VOCs. Based on emission factors provided in EPA's Compilation of Air Pollutant Emission Factors annual emissions of NO_x and VOCs during the construction period would be approximately 0.63 tons and 0.19378 tons respectively. The assumptions and calculations used to arrive at these emissions are provided in Appendix C. These emissions would not be expected to significantly impact local or regional air quality, or result in violations of NAAQS.

Emissions from the Proposed Action would be less than the *de minimis* levels included in the general conformity rule. Therefore, the Proposed Action would be exempt from the general conformity requirements for NO_x and VOCs.

4.2.2 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

Under Alternative 1, as under the Proposed Action, fugitive dust would temporarily increase during demolition, site clearing, and construction activities. Emissions from the work associated with Alternative 1 are shown in Table 4-2. A minor increase in emissions would be expected due to the construction and subsequent demolition of temporary structures to support the phased execution of the gate improvements.

Table 4-2. Emissions from Alternative 1

Pollutant	Tons	Percent Regional Contributions
CO	1.71	<0.01
VOCs	0.19378	<0.01
NO_x	0.63	<0.01
SO_2	0.07	<0.01
PM_{10}	1.64	<0.01

Fugitive dust would be minimized through the application of water to disturbed areas and haul roads as a dust suppressant, and low speed limits would be enforced on clearing equipment and haul trucks to reduce the amount of dust created during use.

The base would enforce policies regarding truck trips, idling, and size and type of earth moving equipment that would minimize construction vehicle emissions.

Emissions generated from the operation of diesel-fueled construction equipment during construction are expected to be below the *de minimis* levels of the Clean Air Act's General Conformity Regulations. Under 40 CFR Part 93, the *de minimis* levels are 100 tons per year each for NO_x and VOCs. Based on emission factors provided in EPA's Compilation of Air Pollutant Emission Factors, annual emissions of NO_x and VOCs during the construction period would be approximately 0.63 tons and 0.19378 tons respectively. The assumptions and calculations used to arrive at these emissions are provided in Appendix C. These emissions would not be expected to significantly impact local or regional air quality, or result in violations of NAAQS.

Emissions from Alternative 1 would be less than the *de minimis* levels included in the general conformity rule. Therefore, this alternative would be exempt from the general conformity requirements for NO_x and VOCs.

4.2.3 No Action Alternative

This alternative would not affect the air quality at the project area since no activity associated with gate improvement would occur.

4.3 Biological Resources

Construction activity would minimally impact vegetation and wildlife. Vegetation and wildlife are not prevalent in the immediate area of the Proposed Action and Alternatives. Existing roadway, guard house, VRC, and associated parking activities limit the presence of wildlife. With the exception of several mature trees vegetation is also not abundant. The buffer area to nearby wetlands would be diminished by expanding the footprint of the gate complex.

4.3.1 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures

Several mature trees, including wax myrtle and loblolly pines, located at the LaSalle Gate complex would be razed in the process of expanding and improving force protection at the complex. Substantial planting of native species would be included as a part of the Proposed Action to both compensate for trees lost to the construction activities, to enhance storm water management capabilities in the vicinity of wetlands, and to contribute to the inviting appearance sought for the entrance to the base's main gate.

The Proposed Action would have a minimal effect on wildlife. The gate complex and the surrounding area are extensively developed and experience high levels of human activity. Thus an increase in the footprint of the gate complex would have little additional impact on wildlife. During the planning and construction stages of the project, awareness of the potential presence of rare, threatened or endangered species, or species of concern, (noted in Section 3.3.1 and in Appendix D) would be emphasized. Contact with appropriate state personnel regarding methods for identifying and protecting these species, particularly the Canebrake Rattlesnake, would be carried out during the planning stages of the Proposed Action.

4.3.2 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

Several mature trees, including wax myrtle and loblolly pines, located at the LaSalle Gate complex would be razed in the process of expanding and improving the complex. However, like with the Proposed Action, substantial planting of native species would be included as a part of Alternative 1 to both compensate for trees lost to the construction activities, to enhance storm water management capabilities in the vicinity of wetlands, and to contribute to the inviting appearance sought for the entrance to the base's main gate.

As with the Proposed Action, Alternative 1 would have a minimal effect on wildlife. The gate complex and the surrounding area are extensively developed and experience high levels of human activity. Thus an increase in the footprint of the gate complex would have little additional impact. The extended duration of the effort under this Alternative would result in a greater period of potential impact to wildlife although this impact would not be significant. During the planning and construction stages of the project, awareness of the potential presence of rare, threatened or endangered species, or species of concern, (noted in Section 3.3.1 and in

Appendix D) would be emphasized. Contact with appropriate state personnel regarding methods for identifying and protecting these species, particularly the Canebrake Rattlesnake, would be carried out during the planning stages of Alternative 1.

4.3.3 No Action Alternative

This alternative would not negatively impact vegetation or wildlife, nor would it benefit them since no construction activity would occur.

4.4 Safety

4.4.1 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures

The main purpose of the Proposed Action is to increase force protection measures at the LaSalle Gate. Thus the safety of the base in general and of security personnel would increase as a result of the Proposed Action. The razing and reconstruction of the guard house would provide full ballistic protection for gate personnel. Other design elements would limit the possibility of a high-speed breech of the base perimeter.

The redesign of the LaSalle Gate complex would allow for the elimination of commercial vehicle inspections at the road side. This would allow security personnel and their canine support charged with inspecting these vehicles to perform their duties under safer conditions.

Under the Proposed Action, the construction would not attract additional local and migratory bird populations and would not result in an increased BASH hazard.

Worker safety during construction would be enhanced by the closure of the gate function. Other entry control points would absorb the LaSalle Gate traffic during implementation of the Proposed Action. Exposure to hazards associated with the operation of heavy equipment and typically associated with road and building construction would exist for workers during the construction period.

4.4.2 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

The main purpose of Alternative 1, as with the Proposed Action, would be to increase AT/FP measures at the gate. Thus increased safety for the base in general, and of security personnel in

particular, would occur as a result of Alternative 1. The razing and reconstruction of the guard house would provide full ballistic protection coverage for gate personnel. Other redesign elements would limit the possibility of a high-speed approach to the base, rendering it safer. Under Alternative 1, however, the duration of the project would be extended and as a result, the time required to implement increased perimeter security measures would be extended. In addition, during the phases of the construction activities, temporary structures and procedures could, theoretically, reduce the security level even further than the level experienced prior to the gate improvement project.

Under Alternative 1, the redesign of the LaSalle Gate complex also would allow for the elimination of commercial vehicle inspections at the road side. This would allow security personnel and their canine support charged with inspecting these vehicles to perform their duties under safer conditions.

Under Alternative 1, construction would not attract additional local and migratory bird populations and would not result in an increased BASH hazard.

Worker safety during construction would be diminished by the continued use of the gate function. Vehicles seeking entry to the base would be using new and changing routes to gain access to the base. This could expose construction workers and others in the vicinity to added danger of accidents on the site. Exposure to hazards associated with the operation of heavy equipment and typically associated with road and building construction would exist for workers during the construction period.

4.4.3 No Action Alternative

Under the No Action Alternative, the LaSalle Gate would continue to fail to meet AT/FP guidelines. The threat of a high-speed vehicle breaking the installation's perimeter security by "running the gate" would not be mitigated. The current guard house would continue to be below current ballistic design standards and processing of visitors would continue to be conducted in inadequate, overcrowded conditions.

4.5 Solid Waste and Hazardous Materials/Waste

The LaSalle Gate is not located near any historic contamination sites on base. However, waste would be created during the demolition and reconstruction of the VRC and guard house at the gate. Construction debris would be recycled to the maximum extent practicable, and all

contractors would be responsible for any hazardous materials they may bring to and use at the construction site. Recycled materials would be used in construction where feasible, in compliance with Executive Order 13101.

4.5.1 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures

During the demolition period associated with the gate improvements, approximately 7 truckloads (or 63 tons total) of building debris would be removed from the area. Efforts would be made to recycle as much of the debris as possible; otherwise, the debris (shingles, lumber, reinforcing bar, concrete, asphalt, soil, etc.) would be taken off site to the Bethel Sanitary Landfill for disposal. Raw materials for construction containing recycled material would be used whenever possible.

Use of construction equipment such as dump trucks, backhoes, bulldozers, pavers, etc., may require temporary storage of oils and fluids used to service them. Storage of these materials would be subject to the same storage requirements utilized elsewhere on base in conformance with state and Federal regulations. These requirements include marking the containers with the name of the contents of a tank or drum, placing the unit in a containment area, and routinely checking these units to verify that they are in good condition and have no leaks or signs of repeated dripping or spilling. Contractors would be held responsible for managing all hazardous wastes that they generate while on the base in accordance with the base Hazardous Waste Management Plan. Once the project was completed, all chemicals would be removed from the base.

Any storage of fertilizers, pesticides, or herbicides associated with the landscaping activities would be managed in the same way as described immediately above.

4.5.2 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

Like the consequences described under the Proposed Action, the solid waste generated as a result of implementing Alternative 1 would consist of approximately 7 truckloads (or 63 tons total) of debris. Efforts would be made to recycle as much of the debris as possible; otherwise, the debris (shingles, lumber, reinforcing bar, concrete, asphalt, soil, etc.) would be taken off site to the Bethel Sanitary Landfill for disposal. Temporary structures, used to facilitate the phased

completion of the improvement and expansion project, would add to the overall volume of debris generated by the project.

Use of construction equipment such as dump trucks, backhoes, bulldozers, pavers, etc., may require temporary storage of oils and fluids used to service them. Storage of these materials would be subject to the same storage requirements utilized elsewhere on base in conformance with state and Federal regulations. These requirements include marking the containers with the name of the contents of a tank or drum, placing the unit in a containment area, and routinely checking these units to verify that they are in good condition and have no leaks or signs of repeated dripping or spilling. Contractors would be held responsible for managing all hazardous wastes that they generate while on the base in accordance with the base Hazardous Waste Management Plan. Once the project was completed, all chemicals would be removed from the base.

Any storage of fertilizers, pesticides, or herbicides associated with the landscaping activities would be managed in the same way as described immediately above.

4.5.3 No Action Alternative

This alternative would create no solid or hazardous waste in the project area.

4.6 Water Quality

4.6.1 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures

Under the Proposed Action, the increase in paved surfaces could contribute to an increase in the volume and speed of storm water run-off. To combat potential negative impacts on nearby wetlands, drainage for the complex would be collected at various locations and slowly discharged to the low area to the east of the site. Machinery and construction vehicles would always be operated outside of the nearby wetlands. Soil disturbance as a result of earth-moving could contribute to turbid run-off, and accidental spills at the site could add hazardous and other waste to the run-off. Extensive erosion/sediment control measures that are designed in accordance with the current edition of the Virginia Erosion and Sediment Control Handbook would be installed at designated locations to prevent erosion and sediment from leaving the site. Should any wetland be disturbed temporarily, it would be restored to pre-construction conditions. In the long-term, the increase in the amount of paved areas at the site would facilitate the more

rapid transfer of storm water run-off into Tides Mill Creek triggering the need for storm water management measures to slow and disperse the waters as they travel toward the Creek.

4.6.2 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

Under Alternative 1, the increase in paved surfaces could contribute to an increase in the volume and speed of storm water run-off. To combat potential negative impacts on nearby wetlands, drainage for the complex would be collected at various locations and slowly discharged to the low area to the east of the site. Machinery and construction vehicles would always be operated outside of the nearby wetlands. Soil disturbance as a result of earth-moving could contribute to turbid run-off, and accidental spills at the site could add hazardous and other waste to the run-off. This condition would exist for a longer period of time under a phased approach to the gate improvements. Extensive erosion/sediment control measures that are designed in accordance with the current edition of the Virginia Erosion and Sediment Control Handbook would be installed at designated locations to prevent erosion and sediment from leaving the site. Should any wetland be disturbed temporarily, it would be restored to pre-construction conditions. In the long-term, the increase in the amount of paved areas at the site would facilitate the more rapid transfer of storm water run-off into Tides Mill Creek triggering the need for storm water management measures to slow and disperse the waters as they travel toward the Creek.

4.6.3 No Action Alternative

This alternative would create no impacts on water quality.

4.7 Coastal Zone, Wetlands and Floodplains

The Virginia Coastal Management Plan (Virginia Coastal Plan, VCP) calls for the protection of natural resources, including the preservation of wetland acreage and function via a no net loss strategy, the management of coastal development and the coordination and simplification of procedures in order to ensure expedited governmental decision-making for the management of coastal resources. All federal actions and programs that directly affect Virginia's coastal zone must be carried out in a manner that is consistent with Virginia's Coastal Resources Management Program.

The Chesapeake Bay Preservation Act provides for the definition and protection of certain lands called Chesapeake Bay Preservation Areas. All counties, cities, and towns in Tidewater Virginia

fall under the jurisdiction of the Act. The area around LaSalle Gate qualifies as a Resource Protection Area as defined by the Act. Resource Preservation Areas include tidal wetlands, tidal shores, and a 100-foot wide buffer area located adjacent to and landward of the wetlands and shores.

4.7.1 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures

Site constraints severely limit the area on which AT/FP improvements may be made. The Proposed Action would not directly encroach upon any wetlands; however, it would expand into the 100-foot wetland buffer, and the site lies within the 100-year floodplain. Work associated with the Proposed Action would, as a matter of comity, be conducted as much as possible as so to be consistent with the Chesapeake Bay Preservation Act. As stated previously in the Water Quality Subsection (4.6), to combat potential negative impacts on nearby wetlands, drainage for the complex would be collected at various locations and slowly discharged to the low area to the east of the site. Soil disturbance as a result of earth-moving could contribute to turbid run-off, and accidental spills at the site could add hazardous and other waste to the run-off. All work associated with the Proposed Action would be conducted in accordance with Virginia's Water Protection Permit Program. Once this EA is reviewed by the appropriate individuals within the Commonwealth of Virginia, the signed Coastal Compliance Determination would be attached in Appendix E.

4.7.2 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

Alternative 1 would be subject to the same constraints and conditions described above for the Proposed Action. Because both the Proposed Action and Alternative 1 would create the same footprint, the potential impact to wetlands, the coastal zone and floodplains would be equivalent.

4.7.3 No Action Alternative

The No Action Alternative would create no new impacts on the coastal zone, wetlands, and floodplain environment of Langley.

4.8 Noise

4.8.1 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures

While noise produced during construction would be noticeable, it would be similar to that produced by other construction occurring on base and would be temporary in nature. Because the DNL is dominated by long-term aircraft operations, noise sources from temporary construction activity occurring intermittently would not change the overall DNL; therefore, no significant adverse impacts are anticipated.

4.8.2 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

Under Alternative 1 construction activity and the associated noise would be intermittent and temporary. While noise produced during construction would be noticeable, it would not add to the DNL in the area, which is generated predominately by aircraft operations. Under a phased approach the potential for noticeable construction noise would span a much longer timeframe.

4.8.3 No Action Alternative

This alternative would create no noise impacts on the project area since no improvement activity would occur.

4.9 Cultural Resources

4.9.1 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures

If unanticipated resources were found, work would immediately stop, the Cultural Resources Manager would be contacted, and the State Historic Preservation Officer (SHPO) would be notified in accordance with Air Force Instruction 32-7065 and the CRMP.

4.9.2 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

As indicated above, If unanticipated resources were found, work would immediately stop, the Cultural Resources Manager would be contacted, and the State Historic Preservation Officer (SHPO) would be notified in accordance with Air Force Instruction 32-7065 and the CRMP.

4.9.3 No Action Alternative

This alternative would not disturb any cultural resource that may be in the project area.

4.10 Geology and Soils

4.10.1 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures

The existing gate complex is located on fill material. The Proposed Action would thus not affect native soils. During construction, contractors would follow the Erosion and Sedimentation Plan they are required to develop to reduce soil loss. The completed construction would leave all soil under vegetation or paved areas, leaving no bare soil vulnerable to erosion.

4.10.2 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

The existing gate complex is located on fill material. Alternative 1 would thus not affect native soils. During construction, contractors would follow the Erosion and Sedimentation Plan they are required to develop to reduce soil loss. The completed construction would leave all soil under vegetation or paved areas, leaving no bare soil vulnerable to erosion.

4.10.3 No Action Alternative

This action would not disturb the soils at the gate complex, nor would it benefit soils.

4.11 Socioeconomics

4.11.1 Proposed Action: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures

No long-term adverse socioeconomic effects would occur as a result of the Proposed Action. Neither minority nor low-income groups would be affected disproportionately.

4.11.2 Alternative 1: Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases

The socioeconomics impacts would not be any different under Alternative 1 as those under the Proposed Action.

4.11.3 No Action Alternative

The No Action Alternative would result in neither adverse nor beneficial socioeconomic effects.

5.0 CUMULATIVE EFFECTS

This section provides a definition of cumulative effects, a description of past, present, and reasonably foreseeable actions relevant to cumulative effects, and an evaluation of cumulative effects potentially resulting from these interactions.

5.1 Definition of Cumulative Effects

Cumulative impacts on environmental resources result from incremental impacts of Proposed Actions, when combined with other past, present, and reasonably foreseeable future projects in the area. Cumulative impacts can result from minor, but collectively substantial, actions undertaken over a period of time by various agencies (Federal, state, and local) or individuals.

In accordance with NEPA, a discussion of cumulative impacts resulting from projects which are proposed, under construction, recently completed, or anticipated to be implemented in the near future is required. The scope of the cumulative effect analysis involves both the geographic extents of the effects and the time frame in which the effects could be expected to occur. For this EA, the Region of Influence (ROI) includes the base and the portion of Tide Mill Creek in the vicinity of the Proposed Action. Actions that do not occur within or adjacent to the ROI are not considered in the cumulative effects analysis.

5.2 Past, Present, and Reasonably Foreseeable Actions

Langley is an active military installation that undergoes changes in mission and in training requirements in response to defense policies, current threats, and tactical and technical advances. The base, like any other major institution (e.g., university, industrial complex), requires new construction, facility improvements, infrastructure upgrades, maintenance and repairs. In addition, tenant organizations (such as the Air National Guard) occupy portions of the base, conduct aircraft operations, and maintain facilities. All of these factors (e.g., mission changes, facility improvements, and tenant use) have and will continue to apply before, during, and after the Proposed Action.

A number of construction activities completed in the recent past, currently underway and planned for the near future should be considered under this analysis of cumulative effects. Within the last 18 months Langley has completed five construction projects: Air Combat Command Operations Support Center, Housing Management Office, F/A-22 Flight Simulator, F/A-22 Squadron Operations and Aircraft Maintenance Unit Hangars, and F/A-22 Low Observable/ Composite Repair Facility. Additional construction that is planned for 2005

includes: Force Protection Measures at the West Gate, AAFES Mini Mall, Munitions Storage Area (repair and construction, multiple buildings), Demolition of Two-Million Gallon Tank and Replacement with Two One-Million Gallon Tanks, Golf Course Improvements, Repair Firing Range, and Demolish Building 633 and Construct a Parking Lot. Upcoming construction projects that may start in 2006 include: a vehicle maintenance facility, a maintenance hangar, a security forces facility, and a Joint Mobility Processing Center.

At the same time, Langley's Natural Resources Management Program has an ongoing effort to proactively provide stewardship of lands under Air Force control. Within the ROI for the Proposed Actions, various organizations outside of the Air Force are also working to proactively restore and protect the Chesapeake Bay and its tributaries. Langley is partnering with the EPA and other agencies within the Chesapeake Bay Program to plant riparian forest buffers along the Bases' shoreline.

5.3 Analysis of Cumulative Effects of the Proposed Actions

5.3.1 Land Use

While the improvements to the LaSalle Gate complex would have a relatively minor negative impact particularly in comparison to the benefits that would be realized by the Proposed Action, the greater concern would be that of the combined loss of open space due to the numerous construction projects currently underway at the base.

5.3.2 Water Quality

Increases in paved areas throughout the base would negatively impact water quality in the Back River and its tributaries which in turn impact the Chesapeake Bay. Storm water that is unable to soak into pervious surfaces, rushes across paved areas, picking up pollutants and then overloads nearby water bodies depositing those pollutants.

5.3.3 Coastal Zone, Wetlands, and Floodplains

As more and more of the open spaces throughout the base are developed, this puts greater stresses on the health of nearby habitats, including wetlands and the tributaries of the Chesapeake Bay. Compliance with the Clean Water Act, the Chesapeake Bay Protection Act, as well as good faith participation in the FACEUP requires that adequate buffers be maintained to protect existing wetlands. Other steps, such as the planting of native species and the responsible stewardship of the dwindling natural resources on the base would be useful, proactive actions to be taken in light of the pace of construction occurring at Langley AFB.

6.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Irreversible and irretrievable resource commitments are related to the use of non-renewable resources and the effects that the uses of these resources have on future generations. Irreversible effects primarily result from the use or destruction of a specific resource (e.g., energy or minerals) that cannot be replaced within a reasonable time and could have been used for other purposes. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., the extinction of an endangered or threatened species).

For the Proposed Action, resource commitments are neither irreversible nor irretrievable. The relatively minor environmental consequences would be temporary or can be mitigated through the use of best management practices.

7.0 RELATIONSHIP BETWEEN SHORT TERM USE OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY

This section summarizes the relationship between the use of the environment for AT/FP improvements and different actions that could be taken to maintain and enhance the long-term productivity of the same land and its resources.

Because the construction activity would occur at an existing ECP the location of such improvements is not subject to change. Bringing each of Langley AFB's three gates into compliance with DoD and AF force protection standards is of the highest priority. While it is regrettable that the LaSalle Gate is proximate to wetlands, steps can be taken to minimize the impact of ECP improvements. Other impacts would be temporary and are not significant. There are no practical alternative uses for this land other than continuing to act as a buffer between existing human activity and wetlands.

The long-term human productivity associated with the AT/FP improvements would be securing the perimeter of Langley AFB.

8.0 LIST OF PREPARERS

Authors of the Force Protection Measures at the LaSalle Gate, EA include:

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9.0 CONSULTATION AND COORDINATION

Organizations with which consultation and coordination will be conducted in association with the Proposed Action.

- U.S. Army Corps of Engineers, Norfolk District;
- Commonwealth of Virginia, Department of Environmental Quality;
- U.S. Fish and Wildlife Service;
- Commonwealth of Virginia, Department of Game and Inland Fisheries;
- Commonwealth of Virginia, Department of Conservation and Recreation; and
- City of Hampton Planning Office.

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APPENDIX A

FEDERAL AGENCIES' CHESAPEAKE ECOSYSTEM UNIFIED PLAN

Chesapeake Bay Program

FEDERAL AGENCIES' CHESAPEAKE ECOSYSTEM UNIFIED PLAN

NOVEMBER 5, 1998

WHEREAS, the *Clean Water Action Plan* charts a course toward fulfilling the original goals of the *Clean Water Act* and calls upon Federal agencies to develop a unified policy to enhance watershed management in which Federal, state, and local governments and the public work together to identify critical problems, focus resources, recognize waters of exceptional value, include watershed goals in Federal planning, and implement effective strategies to solve problems; and

WHEREAS, as reported in the April 1997 *Second Biennial Progress Report* of the *1994 Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay*, the Federal agency partners of the Chesapeake Bay Program have accomplished, and are committed to accomplish, the numerous goals of that 1994 Agreement; and

WHEREAS, the community of Federal agencies with signed formal Chesapeake Bay partnership agreements has expanded to include 15 agencies dedicated to enhancing stewardship on Federally-managed public lands, supporting cooperative state and community implementation, and contributing expertise in resource management, science and planning to achieve ecosystem-based management; and

WHEREAS, the Chesapeake Bay Program's directives on Nutrient Reduction, Habitat Restoration, Wetlands, and Riparian Forest Buffers, and its Local Government Participation Action Plan and Community Watershed Initiative continue to advance the Program as a national leader in the use of partnerships and sound science for targeting, developing and implementing restoration and protection programs.

Now, therefore, we the undersigned representatives of the participating Federal agencies, establish the following unified plan to meet the goals of the *1987 Chesapeake Bay Agreement* and subsequent amendments and directives, and to build on the achievements of the *1994 Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay*, consistent with our missions and our success in securing the necessary resources. Specifically, we further agree to be:

PARTNERS FOR THE CHESAPEAKE

creating new opportunities for Federal agencies to work with states to carry out the commitments of the Clean Water Action Plan. We commit to:

1. target Conservation Reserve Enhancement funds to Bay watershed states in support of efforts to protect farmland and forests and reduce nutrient inputs to the Chesapeake Bay (USDA lead);
2. work to integrate opportunities to benefit the Bay through existing Federal initiatives such as USDA's Environmental Quality Incentives Program and the Wetlands Reserve program (USDA lead);
3. support the development of state Unified Watershed Assessments and Action Plans for Priority Watersheds;
4. encourage the development of permanent teams within each Bay watershed state, comprised of Federal and state officials with responsibilities for implementing the Clean Water Action Plan;
5. promote the addition of new Federal partners, including agencies that deal with transportation and other infrastructure; establish or update memoranda of understanding with all Federal partners; and strengthen relationships among existing partners through resource sharing and unified program planning and implementation; and
6. develop and adopt a Bay Partner Facility program by March 1, 1999, and seek the designation of at least 30 Federal facilities as partners by December 31, 2000, and 60 Federal facilities by December 31, 2005.

PROTECTORS OF PRIORITY WATERSHEDS

targeting various Federal programs and resources to meet the needs of priority watersheds, particularly those designated by states under the Clean Water Action Plan. We commit to:

1. support geographically-specific programs, such as the Chesapeake Bay Program's Regions of Concern for toxics and Nutrient Areas of Concern;
2. develop, by June 30, 1999, a mechanism to implement wet weather pollution prevention on Federal facilities in the Anacostia River and Rock Creek watersheds and transfer these technologies to other appropriate Federal facilities and urban areas (EPA lead);
3. implement the Biennial Federal Workplan for the Anacostia River Watershed and provide biennial updates beginning in June 30, 1999 (COE lead);
4. support the 18-point restoration plan for the Elizabeth River through active participation in the programs and projects of the Elizabeth River Coalition (COE lead); and
5. participate fully in the American Heritage Rivers Program for the Potomac and Upper Susquehanna/Lackawanna Rivers by: a) identifying relevant Federal landholdings by December 31, 1998; b) establishing partnership agreements with community-based efforts in the Heritage Rivers watersheds by April 30, 1999; c) and supporting directed application of technical and funding resources to aid revitalization efforts (EPA lead).

STEWARDS OF THE BAY'S LIVING RESOURCES AND HABITATS

supporting the restoration of Chesapeake Bay living resources and their habitats by fully implementing fish and wildlife conservation efforts and all habitat restoration authorities on all lands, including Federal lands, in the Bay watershed. We commit to:

1. develop an inventory of habitat restoration needs on Federal lands in the Chesapeake Bay watershed to aid in the creation of an annual list of restoration priority areas, from which two projects will be completed each year beginning in 2000 (NOAA lead);
2. support the Chesapeake Bay Program's Wetlands Directive by assisting states in implementation of their strategies for net gain of wetlands and establishing a restoration goal for Federal facilities of 100 acres per year beginning in 2000 (EPA lead);
3. support conservation and restoration of stream corridors on Federal lands by: a) establishing demonstration sites and implementing restoration technology on three Federal facilities by December 31, 1999 (USFWS lead); b) adopting riparian area conservation policies for Federal lands by September 30, 2000 (USFS lead); c) adopting a stream assessment and inventory protocol for Federal lands by May 31, 2000 and an inventory of stream systems on Federal lands by January 1, 2005 (USFWS lead); and d) restoring 200 miles of riparian forest buffers on Federal lands by January 1, 2010 (USFS lead);
4. identify additional blockages to anadromous fish on Federal lands by December 31, 1999, and open priority blockages to 50 miles of streams by December 31, 2003 (NOAA lead);
5. identify 4 areas for aquatic reef siting at near shore areas adjacent to Federal facilities, in accordance with the Chesapeake Bay Program's Framework for Habitat Restoration and the Aquatic Reef Habitat Plan, by December 31, 1999 (NOAA lead);
6. target priority areas for terrestrial and aquatic invasive species control on Federal facilities by January 1, 2000 and implement controls on priority sites (USFWS lead);
7. expand conservation landscaping on Federal facilities, in keeping with the Presidential directive on beneficial landscaping, by: a) completing a Conservation Landscaping and BayScapes Guide for Federal Land Managers by January 1, 2000; and b) integrating conservation landscaping into Federal agency specifications and design criteria by July 31, 2001 (USFWS lead);
8. develop model lease provisions by September 30, 1999 for facilities, outleases, rights-of-way, and other Federal actions to provide a means for Chesapeake Bay stewardship goals to be considered in the issuance of leases by or to Federal agencies within the watershed (GSA lead); and
9. work with state conservation agencies to determine the effects of nutria on tidal wetland loss and to evaluate methods of controlling this exotic species (USGS lead).

LEADERS IN NUTRIENT AND TOXICS PREVENTION AND REDUCTION ON FEDERAL LANDS AND FACILITIES

working to meet and maintain the nutrient and toxics prevention and reduction goals of the Chesapeake Bay Program, with an emphasis on non-point source controls, and extending our efforts beyond year 2000. We commit to:

1. provide technical assistance and training for Federal landholders for development of nutrient management plans by December 31, 1999 (NRCS lead), and develop nutrient management plans for Federal lands within the watershed by December 31, 2000, emphasizing agricultural, construction, turf, golf course and recreation, and developed lands;
2. assess the performance of Federal on-site septic systems and adopt management plans for priority improvements by December 31, 2000 (USPS lead);
3. expand our existing Chesapeake Bay Program Federal facility site assessment protocol beyond nutrients to include toxics reduction and habitat restoration opportunities, and continue to complete at least five such assessments annually within the Bay watershed (NRCS lead);
4. ensure, by December 31, 2000, that personnel are trained to strengthen and implement comprehensive Integrated Pest Management (IPM) on 75% of all Federally-owned lands in the watershed, and establish a peer review panel to evaluate at least five Federal IPM plans annually (USDA lead);
5. implement pollution prevention and related technologies to achieve, by January 1, 2000, a 75% voluntary reduction from a 1994 baseline in releases of Chesapeake Bay Toxics of Concern and chemicals required for reporting under section 313(c) of the Emergency Planning and Community Right-to-Know Act for Federal facilities in the Chesapeake Bay basin (EPA lead);
6. establish, by January 1, 2000, participation of 30 Federal facilities as mentors in the Chesapeake Bay Program's Businesses for the Bay to implement pollution prevention initiatives (DoD lead); and
7. compile and provide information on the reported occurrence of toxics in wildlife in the Bay ecosystem by January 1, 2003 (USGS lead).

GUARDIANS OF HUMAN HEALTH

focusing renewed efforts on the protection of human health through actions we take to control the effects of harmful pollutants in the Bay watershed. We commit to:

1. coordinate Federal funding and response systems in support of state and local efforts in the Chesapeake Bay watershed for major events, including Pfiesteria-type outbreaks and other harmful algal blooms (NOAA lead);
2. support and target research and monitoring efforts on the relation of harmful microorganisms such as Pfiesteria to aquatic resources and human health (NOAA lead) and the effects of other physical and biological stressors on fin fish and shellfish (USGS lead);

3. provide preliminary identification of nitrate levels over the maximum drinking water contaminant level in shallow aquifers throughout the watershed by January 1, 2001 (USGS lead);

4. identify closed shellfish beds adjacent to Federal lands in the Chesapeake Bay watershed by December 31, 1998 and participate in re-opening priority areas by January 1, 2005 (NOAA lead);

5. locate releases of toxics from Federal facilities in the Chesapeake Bay watershed, with priority on drainage areas where fish consumption advisories exist, and work cooperatively to address these releases by December 31, 2000 (EPA lead); and

6. work with local governments to address pollution from storm drain outfalls on Federal lands that pose a human health risk through exposure by inhalation, ingestion, or body contact such as swimming (EPA lead).

PROVIDERS OF RESEARCH, ASSESSMENT, AND NEW TECHNOLOGIES

assuring "state-of-the-art" technical support for Chesapeake Bay Program partners, ranking research needs, and identifying requirements to develop new technologies. We commit to:

1. sign Memoranda of Agreements to make Chesapeake Bay-related data and information Internet accessible by all Bay Program partners through the Chesapeake Information Management System by July 1, 1999 (EPA lead);

2. complete, by March 1, 1999, a Bay watershed-wide assessment of potential levels of nutrient loadings (USDA lead) and water quality parameters (USGS lead) that support the identification of Nutrient Areas of Concern and serve as a basis for strengthening the ability of local and state jurisdictions to achieve their tributary basins' nutrient reduction goals;

3. complete an inventory, by January 1, 2000, of current science-based technology available for implementation to achieve the agricultural component of Bay nutrient reduction goals (USDA lead), and identify the sources that restrict the production of submerged aquatic vegetation and associated habitat in the middle and upper Bay and tidal tributaries (USGS lead);

4. define and assess, by January 1, 2003, the contribution and implications of nitrogen compound emissions (e.g., ammonia) from agricultural activities; and develop models that characterize the transport of emissions and deposition of these compounds (NOAA lead);

5. provide an assessment, by July 1, 2000, of the amount of nutrients and associated lag times in ground water, and of implications for adjustments to tributary strategies' nutrient reduction goals, and identify follow-up research needs to further address management needs by January 1, 2002 (USGS lead);

6. develop an index of river flow, by January 1, 2001, and other tools to document the long-term changes in water quality, living resources, and sea-level rise (USGS lead);

7. develop an index that demonstrates the changes in climate affecting the Chesapeake Bay ecosystem, as needed to refine restoration strategies by January 1, 2003 (NOAA lead);

8. conduct research and provide information needed to identify species and habitats on Federal lands in need of special management efforts to maintain biodiversity and the integrity of the Chesapeake ecosystem by January 1, 2003 (USGS lead); and

9. complete an analysis of forest distribution and condition in the Chesapeake Bay watershed and host a regional conference to discuss issues related to fragmentation of forest landscape by January 1, 2000 (USFS lead).

SUPPORTERS OF SMART GROWTH

identifying and implementing new mechanisms to avoid development patterns that increase pollution problems, to encourage redevelopment of urban areas, and to raise the quality of life. We commit to:

1. evaluate and implement alternative work practices and other policies of Federal agencies in the watershed to reduce vehicle miles traveled (EPA lead);

2. promote funding for research into the effects of road and highway construction on growth and development within the Chesapeake Bay watershed, and on increasing storm water flow and inputs of nutrients and toxics to the Bay and its tributaries, including air pollution and land use changes (FHWA lead);

3. give preference to re-use and recycling of Federal brownfield sites, and discourage development in greenfield sites (EPA lead);

4. fully cooperate with local governments, states, and other Federal agencies in carrying out voluntary and mandatory actions to comply with the management of storm water (EPA lead);

5. encourage construction design that: a) minimizes natural area loss on new and rehabilitated Federal facilities; b) adopts low impact development and best management technologies for storm water, sediment and erosion control, and reduces impervious surfaces; c) utilizes energy efficient technologies; and d) considers the Conservation Landscaping and Bay-Scapes Guide for Federal Land Managers (GSA lead);

6. develop, by January 1, 2000, a protocol by which Federal facilities proposed for relocation or major expansion within the Chesapeake Bay watershed will assess the direct and secondary ecological, economic, and community effects (DoD lead);

7. increase public access to the Chesapeake Bay, with at least 200 additional miles of Federally-owned shoreline and tidal waters opened or enhanced for public access by January 1, 2005, and participate in the development of water trails to improve access and appreciation of the Bay and its resources (NPS lead); and

8. establish annual meetings, beginning in 1999, with the Office of Management and Budget to assess regional impacts associated with major Federally-funded actions in the Chesapeake Bay watershed (EPA lead).

Finally, we agree to supplement our biennial reporting on the *1994 Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay* with progress in the implementation of this new unified plan, beginning April 1, 1999 (EPA lead).

FOR THE ENVIRONMENTAL PROTECTION AGENCY

Carol M. Browner, *Administrator*

Jonathan C. Fox, *Assistant Administrator for Water*

W. Michael McCabe, *Regional Administrator, Region III*

William Matuszeski, *Director, Chesapeake Bay Program Office*

FOR THE DEPARTMENT OF THE INTERIOR

Bruce Babbitt, *Secretary*

Donald J. Barry, *Assistant Secretary for Fish & Wildlife & Parks*

Patricia J. Beneke, *Assistant Secretary for Water & Science*

FOR THE FISH AND WILDLIFE SERVICE

Jamie Rappaport Clark, *Director*

FOR THE U.S. GEOLOGICAL SURVEY

Thomas J. Casadevall, *Acting Director*

FOR THE NATIONAL PARK SERVICE

for Robert G. Stanton, *Director*

FOR THE DEPARTMENT OF DEFENSE

Sherri W. Goodman, *Deputy Under Secretary of Defense for Environmental Security*

FOR THE DEPARTMENT OF THE NAVY

Robert B. Pirie, Jr., *Assistant Secretary for Installations and Environment*

FOR THE DEPARTMENT OF THE ARMY

Joseph W. Westphal, *Assistant Secretary for Civil Works*

Mahlon Apgar IV, *Assistant Secretary for Installations, Logistics and Environment*

FOR THE DEPARTMENT OF THE AIR FORCE

Ruby B. DeMesme, *Assistant Secretary for Manpower, Reserve Affairs, Installations, and Environment*

FOR THE DEFENSE LOGISTICS AGENCY

Lt. Gen. Henry T. Glisson, *Director*

FOR THE DEPARTMENT OF TRANSPORTATION

Rodney E. Slater, *Secretary*

FOR THE U.S. COAST GUARD

Admiral James M. Loy, *Commandant*

FOR THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

D. James Baker, *Administrator*

FOR THE DEPARTMENT OF AGRICULTURE

James R. Lyons, *Under Secretary for Natural Resources & Environment*

FOR THE FARM SERVICE AGENCY

Keith C. Kelly, *Administrator*

FOR THE U.S. FOREST SERVICE

Michael P. Dombeck, *Chief*

FOR THE NATURAL RESOURCES CONSERVATION SERVICE

Pearlie S. Reed, *Chief*

FOR THE GENERAL SERVICES ADMINISTRATION

David J. Barram, *Administrator*

FOR THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Daniel S. Goldin, *Administrator*

FOR THE U.S. POSTAL SERVICE

William J. Henderson, *Postmaster General and Chief Executive Officer*

FOR THE NATIONAL CAPITAL PLANNING COMMISSION

Harvey B. Gantt, *Chairman*

FOR THE SMITHSONIAN INSTITUTION

I. Michael Heyman, *The Secretary*

OBSERVERS:

U.S. Senator Paul S. Sarbanes

Congresswoman Eleanor Holmes Norton

For the State of Maryland

For the District of Columbia

For the Chesapeake Bay Commission

APPENDIX B

COMMUNITY OUTREACH

1.0 Introduction

In conformance with the regulations implementing the Air Force's Environmental Impact Analysis Process (EIAP) found in the Code of Federal Regulations in Title 32, Part 989 (32 CFR 989.14 and 32 CFR 989.23) Langley AFB engaged in discussions with local officials, and provided copies of the Draft LaSalle Gate EA to numerous state and regional officials for review. Copies of the Draft EA were placed prominently in the reference areas of four local libraries and the availability of the Draft EA was announced in the local media.

2.0 Public Involvement

To facilitate public involvement in the project, the Air Force published a Notice of Availability for the Draft EA to solicit public input. The Notice initiated a 30-day public comment period and briefly described the Proposed Action to improve force protection at the main entrance to Langley AFB and to expand the Visitor Reception Center functions. The Notice, shown in figures B-1 and B-2, was published in the Local section of a Sunday issue of the *Daily Press*, a widely-read Hampton, Virginia newspaper and the base weekly newspaper, the *Flyer*. In addition, a press release was issued by the base Public Affairs Office (1FW/PA) and is shown as figure B-3. The press release was disseminated to:

<u>Local Radio and Television Stations</u>

WKOC 93.7
WCMS 100.5
Channel 10 WAVY
Channel 13 WVEC
Channel 3 WTKR
Cox Communications
WGNT 27
WHRO
WJLZ
WNOR 98.7
WPXV-TV
WRIC-TV
WRIC-TV
WTVR-TV

<u>Local Print Media</u>

Daily Press
Denbeigh Gazette
E-News City By the Bay
Poquoson Post
Richmond Times-Dispatch
Soundings
Virginia Gazette
Virginian Pilot
Yorktown Crier

<u>Air Force and National Media</u>

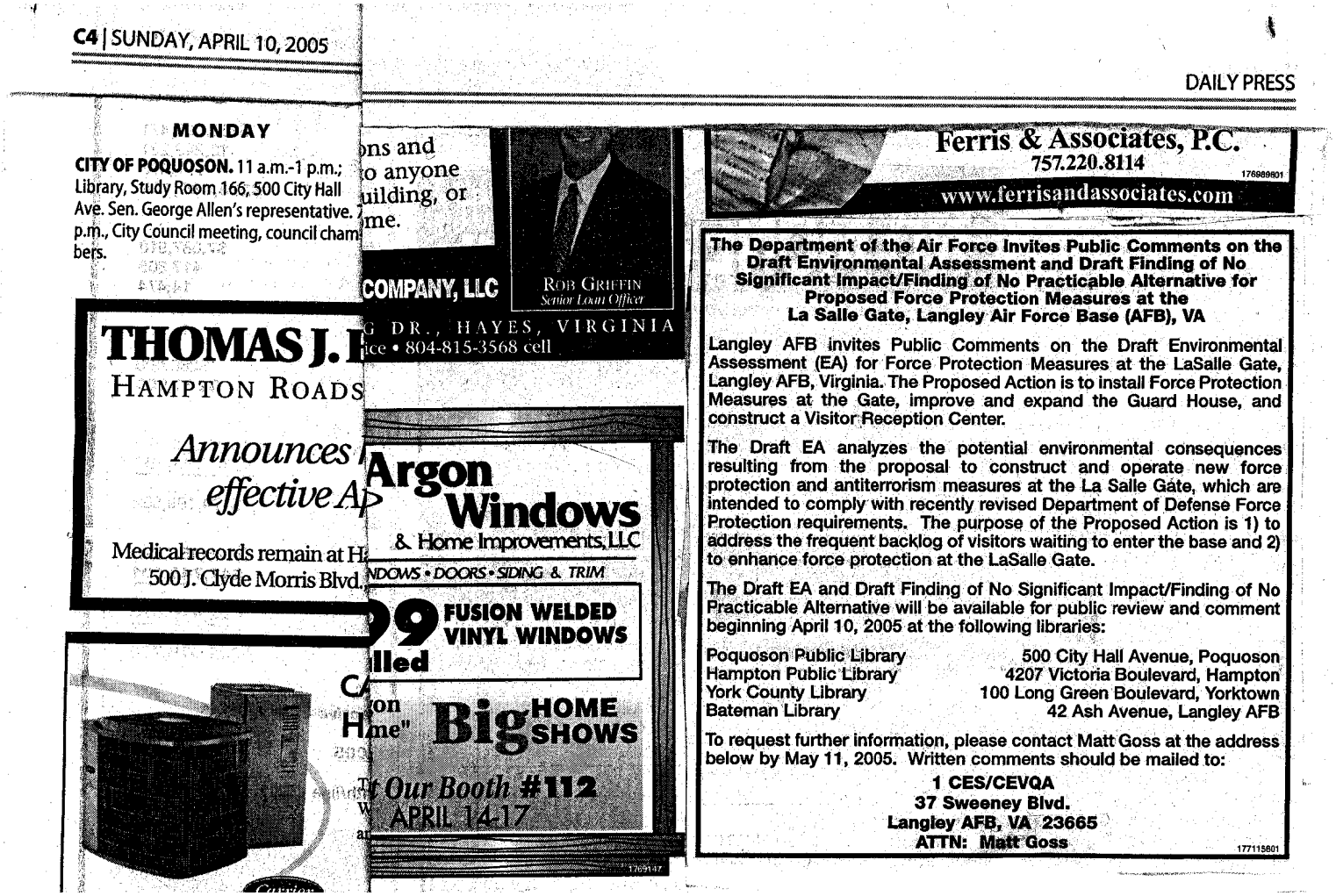
Air Combat Command Public Affairs
Inside the Air Force
Air Force Magazine
Air Force Times
Associated Press

Copies of the Draft EA were made available for review at the following locations:

Bateman Library	42 Ash Avenue, Langley AFB
Hampton Library	4207 Victoria Boulevard, Hampton
Poquoson Library	500 City Hall Avenue, Poquoson
York County Library	100 Long Green Boulevard, Yorktown

Within the 30-day comment period the base may chose to conduct a public meeting if there is sufficient interest shown by the surrounding community. No comments were received during the 30-day comment period.

After the 30-day comment period, consolidated comments from various offices within the Virginia Department of Environmental Quality (VDEQ) were received. A summary of these comments and the Air Force response to these comments are provided in this Appendix.



C4 | SUNDAY, APRIL 10, 2005

DAILY PRESS

MONDAY

CITY OF POQUOSON. 11 a.m.-1 p.m.; Library, Study Room 166, 500 City Hall Ave. Sen. George Allen's representative. p.m., City Council meeting, council chambers.

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The Department of the Air Force Invites Public Comments on the Draft Environmental Assessment and Draft Finding of No Significant Impact/Finding of No Practicable Alternative for Proposed Force Protection Measures at the La Salle Gate, Langley Air Force Base (AFB), VA

Langley AFB invites Public Comments on the Draft Environmental Assessment (EA) for Force Protection Measures at the LaSalle Gate, Langley AFB, Virginia. The Proposed Action is to install Force Protection Measures at the Gate, improve and expand the Guard House, and construct a Visitor Reception Center.

The Draft EA analyzes the potential environmental consequences resulting from the proposal to construct and operate new force protection and antiterrorism measures at the La Salle Gate, which are intended to comply with recently revised Department of Defense Force Protection requirements. The purpose of the Proposed Action is 1) to address the frequent backlog of visitors waiting to enter the base and 2) to enhance force protection at the LaSalle Gate.

The Draft EA and Draft Finding of No Significant Impact/Finding of No Practicable Alternative will be available for public review and comment beginning April 10, 2005 at the following libraries:

Poquoson Public Library	500 City Hall Avenue, Poquoson
Hampton Public Library	4207 Victoria Boulevard, Hampton
York County Library	100 Long Green Boulevard, Yorktown
Bateman Library	42 Ash Avenue, Langley AFB

To request further information, please contact Matt Goss at the address below by May 11, 2005. Written comments should be mailed to:

1 CES/CEVQA
37 Sweeney Blvd.
Langley AFB, VA 23665
ATTN: Matt Goss

Figure B-1. Notice of Availability of LaSalle Gate EA, Daily Press

EXERC

Draft environmental assessment available

Langley Air Force Base invites public comments on the draft environmental assessment for force protection measures at the LaSalle Gate. The proposed action is to install force protections measures at the gate, improve and expand the guard house, and construct a visitor reception center.

The draft EA analyzes the potential environmental consequences resulting from the proposal to construct and operate new force protection and antiterrorism measures at the LaSalle Gate, which are intended to comply with recently revised Department of Defense force protection requirements. The purpose of the proposed action is 1) to address the frequent backlog of visitors waiting at the gate and 2) to enhance force protection at the LaSalle Gate.

The draft EA and draft finding of no significant impact/finding of no practicable alternative will be available for public review and comment beginning today at the following libraries:

Poquoson Public Library
500 City Hall Avenue, Poquoson
Hampton Public Library
4207 Victoria Boulevard, Hampton
York County Library
100 Long Green Boulevard, Yorktown
Bateman Library
42 Ash Avenue, Langley AFB

For more information, contact Matt Goss at the address below by May 11. Written comments should be mailed to:

1 CES/CEVQA
37 Sweeney Blvd.
Langley AFB, VA 23665
ATTN: Matt Goss

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Figure B-2. Notice of Availability of LaSalle Gate EA, the Flyer

United States Air Force

1st Fighter Wing Public Affairs, 9th Air Force (Air Combat Command)
159 Sweeney Blvd., Suite 100, Langley AFB, VA, 23665-2292
(757) 764-2018
Release No.: 1

11.0 APR. 11, 2005

Environmental assessment meeting

LANGLEY AFB, VA- Langley AFB invites Public Comments on the Draft Environmental Assessment (EA) for Force Protection Measures at the LaSalle Gate, Langley AFB, Virginia. The Proposed Action is to install Force Protections Measures at the Gate, improve and expand the Guard House, and construct a Visitor Reception Center.

The Draft EA analyzes the potential environmental consequences resulting from the proposal to construct and operate new force protection and antiterrorism measures at the LaSalle Gate which are intended to comply with recently revised Department of Defense Force Protection requirements. The purpose of the Proposed Action is 1) to address the frequent backlog of visitors waiting to enter the base and 2) to enhance force protection at the LaSalle Gate.

The Draft EA and Draft Finding of No Significant Impact/Finding of No Practicable Alternative were made available for public review and comment beginning 8 April 2005 at the following libraries:

Poquoson Public Library	500 City Hall Avenue, Poquoson
Hampton Public Library	4207 Victoria Boulevard, Hampton
York County Library	100 Long Green Boulevard, Yorktown
Bateman Library	42 Ash Avenue, Langley AFB

To request further information, please contact Matt Goss at the address below by 11 May 2005. Written comments should be mailed to:

1 CES/CEVQA
37 Sweeney Blvd.
Langley AFB, VA 23665
ATTN: Matt Goss

For additional details call 1st Fighter Wing Public Affairs at 764-2018.

Figure B-3. Press Release for Public Comment on the LaSalle Gate EA

3.0 Comments and Responses to Comments

Comments were received from two parties. Consolidated comments from the Virginia Department of Environmental Quality (VDEQ) that reflect comments from various agencies within the VDEQ and the Division of Chesapeake Bay Local Assistance (DCBLA) offering an alternative design for the force protection measures needed at the LaSalle Gate. The comments, and Air Force response to those comments, are provided below.

3.1 Consolidated Comments from VDEQ

VDEQ requires that multiple copies of draft EAs be submitted by the Air Force so that many offices within the organization can concurrently review the document. The comments submitted to the Air Force were lengthy since each office's correspondence was included. Many of the reviewing offices had the same comment so rather than including the 37-page comment package here, we have summarized them below.

The vast majority of commentary coming from VDEQ was in the form of reiterating a particular office's area of expertise and the associated requirements that they enforce. For example, the Waste Division stated that solid and hazardous waste issues were addressed adequately in the report but went on to discuss the waste generator status of the base, listed the regulatory citations under which solid and hazardous waste generated during the project is subject, reminded the reader that asbestos may be present in the buildings being demolished and reiterated the value of pollution prevention. This sort of discussion is appreciated, noted, and generally already known to Langley AFB.

The comments that have direct bearing on the Draft EA for the LaSalle Gate Force Protection Measures and the Air Force responses are as follows:

Comment: The scale of Figure 2-1, the only figure depicting the proximity of the proposed construction to nearby wetlands, is not adequate. It is not possible to confirm that only the 100-foot riparian buffer is impacted and not the actual wetlands.

Response: The Air Force agrees that additional and better figures are warranted. The aerial view of Figure 2-1 has been reduced thereby enlarging the size of the features that are shown. Also, the method for identifying the delineated wetlands (the delineation is considered a "very good" representation by John Evans of the Norfolk USACE office) is

now translucent so that the reader may see the land underneath. The layout plan, civil engineering drawings, has been added as another figure in the EA. The layout plan shows details such as the dimensions of the proposed new features as well as existing buildings and topography. These figures confirm that while the buffer zone is clearly impacted the delineated wetlands begin beyond the proposed new parking area.

Comment: The impact of the temporary closure of the LaSalle Gate on surrounding transportation systems is not adequately discussed. A traffic study was not conducted.

Response: The Air Force has stated in the subject EA and in previous EAs related to the improvements at the King and West Gates that the majority of traffic associated with the base uses the West Gate. The King Street Gate improvements have been completed which enables this entrance to process more cars than it had in the past. The West Gate improvements will be completed before the LaSalle Gate construction would begin. The West Gate would then return to its previous status as the primary gate in terms of volume, and would be able to process a greater volume of vehicles, including the commercial vehicle traffic which previously used the La Salle Gate.

A traffic study was conducted in July 2003 for the West Gate project. Data from that study shows that under pre-improvement conditions the West Gate already managed significantly more vehicles than the LaSalle Gate, apparent volumes at the LaSalle Gate during the West Gate construction activities are artificially high because of absorbing some of the West Gate traffic. Additionally, the traffic study showed that the King Street Gate was quite under utilized and certainly would be available to absorb a portion of the displaced LaSalle Gate users. At the time the study was conducted, the West Gate provided access to approximately 45% of the vehicles entering the base, while the LaSalle and King Street gates provided access to approximately 27% and 8% respectively.

Comment: The EA's Summary of Potential Impacts of the Proposed Action and Alternative table does not define the criteria for the ratings used in the table.

Response: Below the table, the "-", "0", and "+" designations are defined as representing "an adverse, but not significant impact", "a neutral effect", and "a positive effect" respectively. Further, in the text that precedes the table, the issue areas for which the "-" rating was assigned are identified and the following text is included:

"In the table below Land Use, Water Quality and Coastal Zone, Wetlands and Floodplains are all given a "-" rating. The Proposed Action would encroach upon approximately 0.84 acre of base open space; would substantially increase the amount of paved area in the vicinity of tidal wetlands; and would strain wetland buffer requirements, but avoid direct impact on nearby wetlands."

The adverse, but not significant impact on these issue areas, as well as the neutral effect of the Proposed Action on issue areas such as Air Quality or Biological Resources is the subject of the EA document itself and is explained section 4.0 of the document.

Comment: General concern was expressed regarding the increase in impervious surfaces and the storm water management issues that such conditions create.

Response: Langley AFB is completely aware of its responsibilities as an installation located and operating within the areas protected by the Chesapeake Bay Preservation Act. As such, the base works to ensure that plans are developed that result in the least impact possible while at the same time ensuring the mission of the base can be carried out. As stated in the VDEQ comment package, there are various methods and technologies that can be employed to slow and reduce storm water run-off, and the base will utilize these methods to the extent that they can be used within other constraints presented by the Proposed Action's purpose and location.

3.2 Comment from the Division of Chesapeake Bay Local Assistance

Mentioned in the consolidated comment from VDEQ, the DCBLA comment was sent to Langley AFB under separate cover and is provided below.

Comment: Sketches providing an alternative design for the improvements to the LaSalle Gate were submitted by DCBLA.

Response: The sketches submitted, and provided below as figures B-4 and B-5, move the project to the north and west in order to pull back the portion of the parking lot that would overlap with the 100-foot buffer area. While this looks good on paper it is not workable for a number of reasons.

First, the movement of the Gate to the north, brings it deeper into the base and too close to the new Operations Control Center Building, violating the clear zone requirements in the Antiterrorism Unified Facility Criteria.

Second, locating the roundabout closer to Elm Street would cause the automatic pop-up barriers to be even closer to the gate house than in the proposed design. Barriers need to be located as far from the gate house as possible as the increased length gives the gate guards more time to activate the barriers to stop a gate runner.

Third, the proposed design creates a bend in the roadway which would inhibit the field of view for gate guards limiting their ability to detect approaching threats.

Fourth, the sketches do not represent the Visitor Reception Center and associated parking area as meeting the square footage requirement needed for the amount of people who would travel through and work in this building on a daily basis.

Fifth, utilizing less of the existing roadway would result in increased consumption of open space for the new road and would significantly increase the cost of the project.

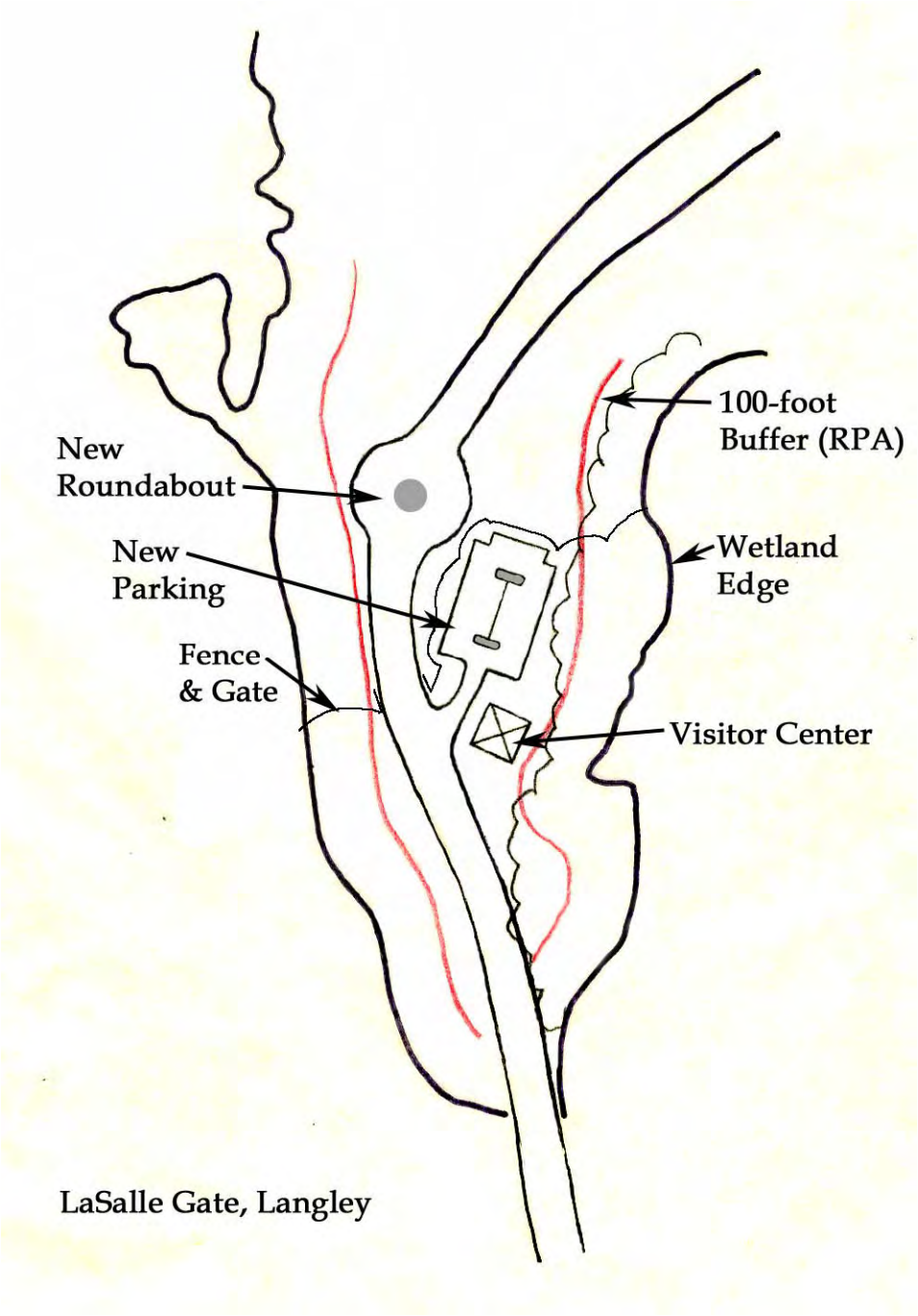


Figure B-4. DCBLA Proposed Revisions to LaSalle Gate Force Protection Measures

Figure B-5. DCBLA Proposed Revisions with Delineated Wetland Area Shown

COMMONWEALTH of VIRGINIA

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P. O. Box 10009, Richmond, Virginia 23240
Fax (804) 698-4500 TDD (804) 698-4021
www.deq.virginia.gov

Robert G. Burnley
Director

(804) 698-4000
1-800-592-5482

June 6, 2005

Matt Goss
1 CES/CEVQA
37 Sweeney Boulevard
Langley AFB VA 23665-2107

RE: Environmental Assessment and Federal Consistency Determination for the Force Protection Measures at the LaSalle Gate on Langley Air Force Base (AFB), Virginia (DEQ 05-106F).

Dear Mr. Goss:

The Commonwealth of Virginia has completed its review of the above-referenced Environmental Assessment (hereinafter "EA"), which includes a Federal Consistency Determination. The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of federal environmental documents prepared pursuant to the National Environmental Policy Act and responding to appropriate federal officials on behalf of the Commonwealth. DEQ is also responsible for coordinating state reviews of federal consistency determinations submitted under the Coastal Zone Management Act. The following agencies, planning district commission, and locality joined in this review:

Department of Environmental Quality
Department of Game and Inland Fisheries
Department of Agriculture and Consumer Services
Department of Conservation and Recreation
Department of Mines, Minerals, and Energy
Virginia Marine Resources Commission
Department of Historic Resources
Department of Forestry
Hampton Roads Planning District Commission
City of Hampton

Project Description

The Department of the Air Force has submitted an Environmental Assessment and Federal Consistency Determination for the Force Protection Measures at the LaSalle gate on Langley Air Force Base (AFB), Virginia (DEQ 05-106F).

According to the EA (pages ES-1, and 1-1), the Demolition, Redesign and Reconstruction project for the LaSalle Gate at Langley Air Force Base (AFB) is required in order to comply with Department of Defense (DoD) Force Protection requirements as identified in Langley AFB's Air Force Instruction (AFI) 10-245, Air Force Antiterrorism Standards. The EA (EA, Section 1.1 & 1.2, pages 1-1 through 1-3) provides background information describing Langley AFB. The Purpose and Need for the Proposed Action are described in EA Section 1.3 (EA, page 1-3).

In addition to the Proposed Action (e.g., the Preferred Alternative: Improvement and Expansion of Guard House, Visitor Reception Center (VRC), Parking Lot and Force Protection Measures Completed in One Phase), the Executive Summary (EA, pages ES-1 through ES-3) describes the following two (2) "Build Alternatives," and the No-action Alternative:

Proposed Action – Improvement and Expansion of Guard House, Visitor Reception Center (VRC), Parking Lot and Force Protection Measures Completed in One Phase.

According to the EA (EA, page ES-1), under the Proposed Action (Preferred Alternative) the size and function of the VRC would expand to include the Base Pass Office to reduce the delays experienced by visitors trying to get a base pass. Additional parking capacity would be needed to support the expanded VRC function. The guard house would be moved, enlarged, and equipped with features to improve protection of personnel. Serpentine roadways, bollards, and other structures to support force protection objectives would be constructed. Under the Proposed Action, the gate complex improvements would require the rerouting of traffic to the King Street and West Gates while the existing complex is demolished and the new complex is constructed.

Alternative 1 – Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases.

The EA (EA, page ES-2) reports that, under this alternative the LaSalle Gate improvements would be the same as those in the Proposed Action (Preferred Alternative), but would be conducted in four phases, during which the gate would continue to operate as an entry point. First, the new VRC parking lot would be constructed and would temporarily receive traffic via a temporary guard house constructed near Nealy Avenue. Second, the guard house would be demolished and reconstructed and road and paving treatments would be built. Third, the use of the parking lot and temporary guard house would end and the new guard house would begin operation and the new VRC would be constructed. The final phase would include the demolition of the old VRC, operation of the new VRC, and the final grading and placement of landscaping and fencing.

Alternative 2 – Improvement and Expansion of Guard House, Visitor Reception Center, and Parking Lot with Force Protection Measures – Reverse Layout.

The EA (EA, page ES-2) reports that, under this alternative, the gate improvements would occur in a reverse layout relative to the Proposed Action and Alternative 1. Visitors would enter the VRC parking lot, park and walk northward to the VRC. This layout could accommodate a greater number of parking spaces in the area and would be more appealing from an architectural design standpoint. The scope of the improvements and expansion would be similar to those described under the Proposed Action. According to the EA (EA, page ES-2) this alternative, reportedly, creates two problems: it would (1) place the largest aspect of the construction project against a protected wetland area, and (2) place the VRC relatively deep inside the gate, beyond the guard house. For these two (2) reasons, Alternative 2 is not carried forward for analysis.

No-action Alternative

According to the EA (EA, page ES-2), under the No-action Alternative, the La Salle Gate would remain unchanged and no reduced or increased impacts to the environment would occur. However, the threat of a high-speed vehicle breaking the installation's perimeter security by "running the gate" would not be mitigated. The current guard house would continue to be below current ballistic design standards and the excessive wait times experienced by visitors seeking entry to the base would continue.

According to the *Summary of Impacts* (EA, page ES-3), the Proposed Action (Preferred Alternative) at the LaSalle Gate would:

- generate short-term impacts on the surrounding environment;
- encroach upon approximately 0.84 acre of "*base open space;*"
- substantially increase the amount of paved area in the vicinity of tidal wetlands;
- strain wetland buffer requirements, but (reportedly) avoid direct impact to nearby wetlands.
- Table ES-1. Summary of the Potential Impacts of the Proposed Action and Alternatives, assigns the following "rating" to eleven (11) "Issue Areas" *(e.g., Land Use; Air Quality; Biological Resources; Safety; Solid and Hazardous Waste; Water Quality, Coastal Zone, Wetlands, and Floodplains; Noise; Cultural Resources; Geology and Soils; and Socioeconomics)*:

  (-) represents an adverse, but not significant impact (to a resource).
  (0) represents a neutral effect.
  (+) represents a positive effect.

  A rating of (-) has been assigned to the *Land Use; Water Quality,* and *Coastal Zone, Wetlands, and Floodplains* "Issue Areas."

It is noteworthy that the EA does not appear to reference data or explain the procedure used to define the criteria for the rating assigned to each of the 11 *"Issue Areas"* identified in Table ES-1. This suggests that the rating system may be subjective.

- The nature and duration of the impacts are such that, with the use of common construction practices, there would be no significant impacts because of the implementation of the Proposed Action.

- The U.S. Air Force has evaluated the Proposed Action and Alternatives for potential effects to the land or water uses or natural resources of the Commonwealth's coastal zone within the context of statutes listed in the Virginia Coastal Resources Management Program. This evaluation is included as part of the EA (Appendix E: Virginia Coastal Program: Enforceable Regulatory Programs Comprising Virginia's Coastal Resources Management Program (VCP), pages E-1 through E-5).

Environmental Impacts and Mitigation

*1. **Wetlands Management.*** Regarding VWP issues, DEQ finds that the assertions that no wetlands will be impacted by the proposed project to be unsupported by specific information and therefore, questionable. In reviewing Figure 2-1, the only diagrammatic representation of the proposed project, it appears that the proposed action will "strain" buffer requirements as referenced in Section 4.1.1. Given the scale of figure 2.1, it could easily be inferred that direct and more importantly, indirect impacts to wetlands may occur. It is not clear from this figure where the exact wetland boundary is and whether the boundary shown represents tidal wetlands, non-tidal wetlands or both. In addition, no discussion is presented concerning a Corps confirmation of this wetland boundary. More detailed drawings, at a scale suitable for assessing encroachment of paved areas, berms, etc. into or adjacent to wetlands should be included in this environmental assessment. For additional information and coordination, please contact Harold Winer, Deputy Regional Director -- DEQ Tidewater Regional Office (757)-518-2153.

The Virginia Marine Resources Commission (VMRC) stated that, pursuant to Chapter 12 of Title 28.2 of the Code of Virginia, it is responsible for issuing permits for encroachments in, on, or over state-owned submerged lands throughout the Commonwealth. All encroachments channelward of mean low water will require authorization from this agency. The proposed project, while impacting wetlands, appears to remain outside of VMRC jurisdiction. VMRC will make further comments on the proposed project once the Joint Permit Application has been submitted. For additional information and coordination, please contact VMRC's Traycie West (757) 247-2256.

2. Erosion and Sediment Control and Stormwater Management. The EA (Table ES-1, page ES-3), does not include *Erosion and Sediment Control and Stormwater Management.*

According to the discussion of Non-point Source Pollution Control within the Federal Consistency Determination (EA: Appendix E; page E-5); approximately 0.84 acre of open space would be paved over to accommodate the Proposed Action. Runoff and erosion measures that are designed in accordance with the current edition of the Virginia Erosion and Sediment Control Handbook would be used throughout the duration of the project. Drainage for the complex would be collected and allowed to drain slowly into the low lying area east of the site.

The Department of Conservation and Recreation (DCR) administers programs pertaining to regulated land-disturbing activities. Federal agencies and their authorized agents conducting regulated land-disturbing activities on private and public lands in the state must comply with the Virginia Erosion and Sediment Control Law and Regulations (VESCL&R), Virginia Stormwater Management Law and Regulations (VSWML&R), and other applicable federal nonpoint source pollution mandates (e.g. Clean Water Act Section 313, Federal Consistency under the Coastal Zone Management Act).

The Air Force must comply with Virginia's Erosion and Sediment Control Law (Virginia Code 10.1-567) and regulations (4 VAC 50-30-30 et seq.) and Stormwater Management Law (Virginia Code 10.1-603.5) and regulations (4 VAC 3-20-210 et seq.). Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, or other structures, soil/dredge spoil areas, or related land conversion activities that disturb 10,000 square feet or more (2,500 square feet or more in a Chesapeake Bay Preservation Area) would be regulated by VESCL&R and those that disturb one acre or greater would be covered by VSWML&R. Accordingly, the Air Force should prepare and implement erosion and sediment control (ESC) and stormwater management (SWM) plans to ensure compliance with state law. The federal agency is ultimately responsible for achieving project compliance through oversight of on-site contractors, regular field inspection, prompt action against non-compliant sites, and/or other mechanisms, consistent with agency policy.

DEQ encourages the Air Force to contact DCR's Chowan-Albemarle Coastal Watershed Office, (757) 925-2468, for assistance with developing or implementing E&S and/or Stormwater Management Plans to ensure project conformance during and after construction.

The project may require a Virginia Pollutant Discharge Elimination System (VPDES) Permit for Control of Stormwater Discharges for construction activities and municipal separate storm sewer systems (MS4s). The authority for administering this permit program has been transferred from DEQ to the Department of Conservation and Recreation. For information pertaining to the VPDES stormwater general permit for construction activities, please contact Lee Hill at DCR's Central Office, telephone (804) 786-3998 or e-mail lee.hill@dcr.virginia.gov).

3. Air Pollution Control. According to the EA (Table ES-1, page ES-3), the Proposed Action (Preferred Alternative), Alternative 1 (Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases), and the No-action Alternative are assigned a rating of "0," (0 represents a neutral effect) to *Air Quality.*

The DEQ Air Division reported that the project is located in an Ozone (O_3) Non-attainment Area and an emission control area for the contributors to ozone pollution, which are volatile organic compounds (VOCs) and oxides of nitrogen (NO_x). This has two practical consequences for project development. First, the Air Force should take all reasonable precautions to limit emissions of VOCs and NO_x, principally by controlling or limiting the burning of fossil fuels. The second precaution, which typically applies to road construction and paving work, (9 VAC 5-40-5490 in the Regulations for the Control and Abatement of Air Pollution), places limitations on the use of "cut-back" (liquefied asphalt cement, blended with petroleum solvents), and may

apply in the demolition of the driveways or paths associated with the demolition project. The asphalt must be "emulsified" (predominantly cement and water with a small amount of emulsifying agent) except when specified circumstances apply. Moreover, there are time-of-year restrictions on its use during the months of April through October in VOC emission control areas.

DEQ Air Division also recommends that during construction, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 *et seq.* of the Regulations for the Control and Abatement of Air Pollution. These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

If project activities include the burning of material, this activity must meet the requirements under 9 VAC 5-40-5600 *et seq.* of the Regulations for open burning, and it may require a permit. The Regulations provide for, but do not require, the local adoption of a model ordinance concerning open burning. For additional information and coordination pertaining to Regulations for the Control and Abatement of Air Pollution, please contact Harold Winer, Deputy Regional Director -- DEQ Tidewater Regional Office (757)-518-2153. For more information pertaining to local requirements (e.g., open burning, etc.), please call James Freas, City Planner, City of Hampton, VA (757) 728-2449.

4. Coastal Lands Management/Chesapeake Bay Preservation Act. According to the EA (Table ES-1, page ES-3), the Proposed Action (Preferred Alternative) and Alternative 1 (Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases) are both assigned a rating of "-," (- represents an adverse, but not significant impact) to *Coastal Zone, Wetlands, and Floodplains*. The No-action Alternative is assigned a rating of "0," (0 represents a neutral effect) upon *Coastal Zone, Wetlands, and Floodplains*.

According to the Federal Consistency Determination (EA: Appendix E; page E-5), the following statement is provided to support a Coastal Consistency Determination required under the Coastal Zone Management Act of 1972, as amended:

- Of the nine (9) Enforceable Programs included under the Virginia Coastal Resources Management Program (VCP), seven are not applicable (e.g., Fisheries Management, Subaqueous Lands Management, Dunes Management, Point Source Pollution Control, Shoreline Sanitation, Air Pollution Control, and Coastal Lands Management).
- The following two Enforceable Programs included under the VCP are applicable to the Proposed Action:

1. Wetlands Management; and
2. Non-Point Source Pollution Control.

- Steps would be taken during the implementation of the Proposed Action to be consistent to the maximum extent possible with these two regulatory programs.
- Wetlands Management: Due to encroachment on the 100-foot buffer area around the nearby wetlands, extreme care would be taken in maintaining the greatest distance possible from the wetlands during construction and should any temporary disturbance occur, the wetland would be restored to its pre-construction state.
- Non-point Source Pollution Control: Approximately 0.84 acre of open space would be paved over to accommodate the Proposed Action. Runoff and erosion measures that are designed in accordance with the current edition of the Virginia Erosion and Sediment Control Handbook would be used throughout the duration of the project. Drainage for the complex would be collected and allowed to drain slowly into the low lying area east of the site.

According to DCR's Division of Chesapeake Bay Local Assistance (DCR-DCBLA), the consistency determination states that Coastal Lands Management is not triggered by the Proposed Action for improvements to the LaSalle Gate at Langley Air Force Base. While this may be technically true in that Chesapeake Bay Preservation Areas are not locally designated on federal lands, this does not relieve the Air Force of its responsibilities to be consistent with the provisions of the *Chesapeake Bay Preservation Area Designation and Management Regulations* (Regulations), as one of the enforceable programs of Virginia's Coastal Resources Management Program (VCRMP). Federal actions on installations located within Tidewater Virginia are required to be consistent with the performance criteria of the Regulations on lands analogous to locally designated Chesapeake Bay Preservation Areas.

The Chesapeake Bay Preservation Act, as locally implemented through Section 17.3-60 (Chesapeake Bay Preservation District) of the City of Hampton's zoning ordinance and Section 33.1-9 of the City of Hampton's stormwater management ordinance, strictly controls land disturbance in tidal wetlands, non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow, tidal shores and within a 100-foot vegetated buffer area located adjacent to and landward of the aforementioned features and along both sides of any water body with perennial flow. Less stringent performance criteria apply to land that is contiguous to the 100-foot buffer for a distance of 100 feet in the landward direction.

In order to comply with Hampton's Stormwater management performance standards (Sec. 33.1.9 of its Stormwater Management Ordinance), the project should minimize impervious cover, minimize land disturbance, and shall control stormwater quality consistent with the water quality provisions (4 VAC 3-20-71 et seq.) of the Virginia Stormwater Management Regulations (4 VAC 3-20).

In addition, since the project exceeds 2,500 square feet of land disturbance, an erosion and sediment control plan is required prior to land disturbance in accordance with the *Virginia Erosion and Sediment Control Handbook*, Third Edition, 1992.

The proposed plan for the improvement and expansion of the guardhouse, Visitor Reception Center, Parking Lot and Force Protection Measures appears to be largely within areas analogous to those areas requiring the stringent performance criteria by encroaching within the 100-foot buffer. The proposed improvements have not been designed to minimize this impact. Redevelopment is permitted in the 100-foot buffer *only if there is no increase in the amount of impervious cover and no further encroachment within those areas requiring the stringent performance criteria* (§9 VAC 10-20-130.1.c.).

DCR-DCBLA finds that, as currently proposed, the design is not consistent with the *Chesapeake Bay Preservation Area Designation and Management Regulations.* According to DCR-DCBLA they have provided guidance and an alternative design that is consistent with the VCP to the Air Force (Telephone conversation: E. Aschenbach/A. Baird; 31-May 2005).

The 1998 Federal Agencies' Chesapeake Ecosystem Unified Plan requires the signatories, including the US Air Force, to fully cooperate with local and state governments in carrying out voluntary and mandatory actions to comply with the management of stormwater. The agencies also committed to encouraging construction design that a) minimizes natural area loss on new and rehabilitated federal facilities; b) adopts low impact development and best management technologies for storm water, sediment and erosion control, and reduces impervious surfaces; and c) considers the Conservation Landscaping and Bay-Scapes Guide for Federal Land Managers. In addition, the Chesapeake 2000 Agreement committed the government agencies to a number of sound land use and stormwater quality controls. The signatories additionally committed the agencies to lead by example with respect to controlling nutrient, sediment and chemical contaminant runoff from government properties. In December 2001, the Executive Council of the Chesapeake Bay Program issued Directive No. 01-1, Managing Storm Water on State, Federal and District-owned Lands and Facilities, which includes specific commitments for agencies to lead by example with respect to stormwater control. For additional information and coordination, contact Alice Baird, DCR-CBLA at (804) 225-2307.

5. Natural Heritage Resources. According to the EA (Table ES-1, page ES-3), the Proposed Action (Preferred Alternative), Alternative 1 (Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases), and the No-action Alternative are assigned a rating of "0," (0 represents a neutral effect) for Biological Resources. The EA does not identify potential impacts to Natural Heritage Resources, resulting from the Proposed Action.

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

The Department of Conservation and Recreation's Division of Natural Heritage (DCR-DNH) reported that, natural heritage resources have been documented in the project area. However, due to the scope of the activity and the distance to the resources, DCR-NHP does not anticipate that this project will adversely impact these resources.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the Virginia Department of Conservation and Recreation (DCR), DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects. VDACS concurs with this assessment.

New and updated information is continually added to Biotics. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized. Please contact René Hypes, DCR-DNH at (804) 786-7951 for further information.

6. Wildlife Resources. According to the EA (Table ES-1, page ES-3), the Proposed Action (Preferred Alternative), Alternative 1 (Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases), and the No-action Alternative are assigned a rating of "0," (0 represents a neutral effect) for Biological Resources.

Under Section 7 of the endangered Species Act of 1973 (as amended), if any protected species (to include state or federally listed species, or their critical habitats) are sighted or would be impacted by the proposed project, the Air Force is required to notify the U.S. Fish and Wildlife Service (USFWS) and Virginia Department of Game and Inland Fisheries (DGIF) and suspend the project until the Section 7 consultation process has been completed.

The Department of Game and Inland Fisheries, as the Commonwealth's wildlife and freshwater fish management agency, exercises enforcement and regulatory jurisdiction over wildlife and freshwater fish, including state or federally listed endangered or threatened species, but excluding listed insects (*Virginia Code* Title 29.1). DGIF is a consulting agency under the U.S. Fish and Wildlife Coordination Act (16 U.S.C. sections 661 et seq.), and provides environmental analysis of projects or permit applications coordinated through DEQ and several other state and federal agencies. DGIF determines likely impacts upon fish and wildlife resources and habitat, and recommends appropriate measures to avoid, reduce, or compensate for those impacts.

Finding. DGIF finds this project to be consistent with the Fisheries Management enforceable policy of the VCP under its jurisdiction.

Recommendations. DGIF recommends that the applicant:

- Avoid and minimize impacts to wetlands to the fullest extent practicable.
- Provide compensatory mitigation for unavoidable impacts to forested wetlands at a minimum of 2:1 mitigation ratio and for impacts to palustrine emergent wetlands at a minimum of 1:1 ratio.
- Design the stormwater controls for this project to replicate and maintain the hydrographic condition of the site prior to the change in landscape. This should include, but not be limited to, utilizing bioretention areas, and minimizing the use of curb and gutter in favor of grassed swales. Bio-retention areas (also called rain gardens) and grass swales are components of Low Impact Development (LID). They are designed to capture stormwater runoff as close to the source as possible and allow it to slowly infiltrate into

the surrounding soil. They benefit natural resources by filtering pollutants and decreasing downstream runoff volumes. DGIF did not report impacts to Wildlife Resources, resulting from this project. For more information, see the DGIF website at www.dgif.state.va.us or contact Ray Fernald at (804) 367-6913.

*7. **Historic Structures and Archaeological Resources.*** According to the EA (Table ES-1, page ES-3), the Proposed Action (Preferred Alternative), Alternative 1 (Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases), and the No-action Alternative are assigned a rating of "0," (0 represents a neutral effect) for Cultural Resources.

Section 106 of the National Historic and Preservation Act of 1966, as amended, requires that federal agencies must consider effects of its activities on properties that are listed or eligible for listing on the National Register of Historic Places. The Department of Historic Resources (DHR) conducts reviews of projects to determine their effect on historic structures or cultural resources.

According to DHR, the Air Force should continue to consult directly with DHR pursuant to *Section 106 of the National Historic and Preservation Act of 1966*, as amended on this undertaking. For additional information, contact Marc Holma, DHR at (804) 367-2323. In the event that archaeological resources are encountered during project activities, immediately contact Dr. Ethel Eaton, DHR at (804) 367-2323.

*8. **Solid and Hazardous Wastes and Hazardous Materials.*** DEQ found that, both solid and hazardous waste issues were addressed adequately in the report. However, the report did not include a search of waste-related data bases. The Waste Division staff performed a cursory review of its data files and determined that the facility is under DEQ's Federal Facilities Installation Restoration Program (VA2800005033), a Formerly Used Defense Site (VA9799F1590), and a RCRA small quantity generator of hazardous waste (VAD988222527). The following websites may prove helpful in locating additional information for these identification numbers: http://www.epa.gov/echo/search_by_permit.html or http://www.epa.gov/enviro/html/rcris/rcris_query_java.html.

Any soil that is suspected of contamination or wastes that are generated must be tested and disposed of in accordance with applicable Federal, State, and local laws and regulations. Some of the applicable state laws and regulations are: Virginia Waste Management Act, Code of Virginia Section 10.1-1400 *et seq.*; Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC 20-60); Virginia Solid Waste Management Regulations (VSWMR) (9VAC 20-80); Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110). Some of the applicable Federal laws and regulations are: the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 *et seq.*, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous materials, 49 CFR Part 107.

Also, all structures being demolished/renovated/ removed should be checked for asbestos-containing materials (ACM) and lead-based paint prior to demolition. If ACM or LBP are

found, in addition to the federal waste-related regulations mentioned above, State regulations 9VAC 20-80-640 for ACM and 9VAC 20-60-261 for LBP must be followed.

Please note that DEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately. If you have any questions or need further information, please contact Allen Brockman at (804) 698-4468.

During construction, also there is the potential for a short-term increase in hazardous substances to be introduced to the ground surface from construction equipment operation. In the event of a spill, the Air Force should excavate and dispose of contaminated soil in accordance with state and federal regulations. The DEQ Tidewater Regional Office (DEQ-TRO) reported that, all wastes generated must be characterized and properly disposed. It is the responsibility of Langley Air Force Base to ensure that any hazardous wastes generated by the project be handled through the base's hazardous waste program. Contractors are not to remove hazardous waste from the site.

DEQ's Federal Facilities Program. DEQ's Federal Facilities Program has reviewed this project and provided the following comments. Langley Air Force Base (LAFB) is on the National Priorities List. The LaSalle Gate, its buildings, and their surrounding property do not lie adjacent to active or closed Environmental Restoration Program (ERP) Sites. The LaSalle Gate sits atop the Environmental Restoration Program (ERP) Base-wide Groundwater Site, OT-64, and ERP Site OT-06 lies a quarter-mile to the northeast.

Due to the age of the buildings at the LaSalle Gate, it is likely that they contain asbestos-containing materials and lead-based paints. The presence of these potentially hazardous materials may be evident in the soils surrounding the buildings due to past maintenance activities. Demolition and/or construction activities in this area may stir the surface soils creating an airborne pathway for any surface soil contamination that resulted from historic maintenance activities. Disposal of any demolition debris must be properly sampled and characterized in order to determine which landfill is appropriate.

The Federal Facilities Restoration Program recommends Mr. John Tice, LAFB Environmental Restoration be contacted at (757) 764-1082, for information concerning the CERCLA obligations at or near the buildings proposed for demolition prior to initiating any land, sediment, or ground water disturbing activities. For additional information and coordination, please contact Paul E. Herman, DEQ Federal Facilities Program (804) 698-4131.

9. Forestry. According to the EA (Table ES-1, page ES-3), the Proposed Action (Preferred Alternative), Alternative 1 (Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases), and the No-action Alternative are assigned a rating of "0," (0 represents a neutral effect) for *Biological Resources.*

The Department of Forestry stated that, there will be no significant impact on the forest resources of the Commonwealth. For additional information and coordination, please contact Mike Foreman at DOF (434) 977-6555.

10. Geology. According to the EA (Table ES-1, page ES-3), the Proposed Action (Preferred Alternative), Alternative 1 (Improvement and Expansion of Guard House, Visitor Reception Center, Parking Lot and Force Protection Measures Completed in Four Phases), and the No-action Alternative are assigned a rating of "0," (0 represents a neutral effect) for *Geology and Soils.*

The Department of Mines, Minerals and Energy (DMME) stated that, there will be no impact to the geology or mineral resources of the site. For additional information and coordination, please contact Gerald Wilkes at DMME (434) 951-6364.

11. Pesticides and Herbicides. The use of herbicides or pesticides for landscape maintenance should be in accordance with the principles of integrated pest management. The least toxic pesticides that are effective in controlling the target species should be used. Also, we recommend that the use of pesticides or herbicides containing volatile organic compounds as their active ingredient be avoided to the maximum extent practicable in order to protect air quality. Please contact the Department of Agriculture and Consumer Services at (804) 786-3501 for more information.

12. Pollution Prevention. DEQ advocates that principles of pollution prevention be used in all construction projects as well as in facility operations. Effective siting, planning, and on-site Best Management Practices (BMPs) will help to ensure that environmental impacts are minimized. However, pollution prevention techniques also include decisions related to construction materials, design, and operational procedures that will facilitate the reduction of wastes at the source. We have several pollution prevention recommendations that may be helpful in constructing or operating this project:

- Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level, and amount of packaging should be considered and can be specified in purchasing contracts.
- Consider contractors' commitment to the environment when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals.
- Choose sustainable materials and practices for infrastructure and building construction and design. These could include asphalt and concrete containing recycled materials, and integrated pest management in landscaping, among other things.

DEQ's Office of Pollution Prevention provides free information and technical assistance relating to pollution prevention techniques. For more information, contact DEQ's Office of Pollution Prevention, Mr. Tom Griffin at (804) 698-4545.

13. Local Comments. The City of Hampton, Virginia comments (attached) stated, while the project appears to present a minor impact on natural resources, the EA does not adequately

address potential impacts on local transportation systems. The EA states that, 27% of base traffic currently utilizes the LaSalle Gate, but does not include how many vehicles per day that percentage represents, the approximate time-period over which that traffic will be diverted, and how that diverted traffic will most likely be divided between the two alternative gates. In addition, the project proposes permanently rerouting the commercial truck traffic that currently utilize the LaSalle Gate to the West Gate without assessing the potential impacts of that diversion on local transportation systems. The City cannot assess the short- and long-term transportation impacts of this project without an assessment of these factors.

The City requests that every effort be made to mitigate the water quality impacts of the project on the local waterways. There are a number of different techniques for mitigating such impacts besides a standard detention system. The City supports the commitment by Langley Air Force Base (LAFB) to recycle demolition debris materials from the project to the maximum extent possible (pages 4-7 & 4-8). For additional information pertaining to these comments, please contact James Freas, City Planner, City of Hampton Virginia (757) 727-6140.

The Hampton Roads Planning District Commission (HRPDC) comments (attached) stated that, based on this review the information provided indicates that there will be no encroachment in the 100-foot buffer for adjacent tidal wetlands, but does not provide site plans or drawings that adequately illustrate the proposed encroachment or any alternative alignment that would reduce encroachment. The proposed 0.84-acre increase in impervious cover located in the buffer is significant and further detail would be useful for evaluation of the potential impacts on tidal wetlands. The document also identifies endangered and threatened species known to occur in the area, but no site-specific details are provided. HRPDC encourages the applicant to provide additional information that addresses these issues.

In addition to the comments above, the HRPDC agrees with the City of Hampton concerns regarding the lack of transportation analysis for the reconfiguration of the LaSalle Gate and the rerouting of base traffic to other access points. Additionally, HRPDC concurs with the City of Hampton's comments regarding mitigation of water quality impacts that may occur as a result of the proposed project. Finally, HRPDC encourages the Air Force to coordinate with the City of Hampton to address these issues. For additional information pertaining to these comments, please contact Arthur L. Collins, Executive Director/Secretary, HRPDC (757) 420-8300.

Federal Consistency under the Coastal Zone Management Act

Pursuant to the Coastal Zone Management Act of 1972, as amended, federal activities located inside or outside of Virginia's designated coastal management area that can have reasonably foreseeable effects on coastal resources or coastal uses must, to the maximum extent practicable, be implemented in a manner consistent with the Virginia Coastal Resources Management Program (VCP). The VCP consists of a network of programs administered by several agencies. The DEQ coordinates the review of federal consistency determinations with agencies administering the Enforceable and Advisory Policies of the VCP. All applicable approvals must be obtained prior to commencing the project.

According to the Federal Consistency Determination (EA: Appendix E; page E-5), the following statement is provided to support a Coastal Consistency Determination required under the Coastal Zone Management Act of 1972, as amended:

- Of the nine (9) Enforceable Programs included under the Virginia Coastal Resources Management Program (VCP), seven are not applicable (e.g., Fisheries Management, Subaqueous Lands Management, Dunes Management, Point Source Pollution Control, Shoreline Sanitation, Air Pollution Control, and Coastal Lands Management).
- The following two Enforceable Programs included under the VCP are applicable to the Proposed Action:
    1. Wetlands Management; and
    2. Non-Point Source Pollution Control.
- Steps would be taken during the implementation of the Proposed Action to be consistent to the maximum extent possible with these two regulatory programs.
- Wetlands Management: Due to encroachment on the 100-foot buffer area around the nearby wetlands, extreme care would be taken in maintaining the greatest distance possible from the wetlands during construction and should any temporary disturbance occur, the wetland would be restored to its pre-construction state.
- Non-point Source Pollution Control: Approximately 0.84 acre of open space would be paved over to accommodate the Proposed Action. Runoff and erosion measures that are designed in accordance with the current edition of the Virginia Erosion and Sediment Control Handbook would be used throughout the duration of the project. Drainage for the complex would be collected and allowed to drain slowly into the low lying area east of the site.

DEQ's Finding on the Federal Consistency Determination

Based on the information provided in the Federal Consistency Determination (FCD), and the comments of reviewing agencies, DEQ is not able to complete our review of the Federal Consistency Determination at this time because the Environmental Assessment (EA) and FCD do not provide the necessary information. The content of a consistency determination is described in 15 CFR §930.39. In accordance with 15 CFR §930.41(a), our 60-day review for the Federal Consistency Determination expires on 8-June 2005. This response pertains to the FCD contained in the EA.

Analysis of Objection

Pursuant to 15 C.F.R. 930.41 and 930.43(b), the Commonwealth objects to the Air Force's consistency determination for this project on the grounds that there is insufficient information to determine project consistency with the Wetlands Management Enforceable Policy (Code of Virginia 62.1-44.15:5) and the Coastal Lands Management Policy (Code of Virginia §10.1-2100 -10.1-2114.

After reviewing the EA and consistency determination, DEQ-TRO finds the assertions that no wetlands will be impacted by the proposed project to be unsupported by specific information and therefore, questionable (See above, Section 1. *Wetlands Management*). In reviewing Figure 2-1,

the only diagrammatic representation of the proposed project, it appears that the proposed action will indeed "strain" buffer requirements as referenced in Section 4.1.1. Given the scale of figure 2.1, it could easily be inferred that direct and more importantly, indirect impacts to wetlands may occur. It is not clear from this figure where the exact wetland boundary is and whether the boundary shown represents tidal wetlands, non-tidal wetlands or both. In addition, no discussion is presented concerning a Corps confirmation of this wetland boundary. More detailed drawings, at a scale suitable for assessing encroachment of paved areas, berms, etc. into or adjacent to wetlands should be included in the Final Environmental Assessment or provided directly to the DEQ – Tidewater Regional Office (DEQ-TRO). Based on the information provided, DEQ-TRO indicated that it seems the opportunity exists to shift this entire improvement project northward and in doing so, reduce the potential for wetland impacts as well as the referenced "strain" on buffer requirements. For additional information and coordination, please contact Harold Winer, Deputy Regional Director -- DEQ Tidewater Regional Office (757)-518-2153.

DCR's Division of Chesapeake Bay Local Assistance (DCR-DCBLA) finds that, as currently proposed, the design is not consistent with the *Chesapeake Bay Preservation Area Designation and Management Regulations*, and is discussed above (in Section 4. *Coastal Lands Management/Chesapeake Bay Preservation Act*).

DCR indicates that, although the entryway is on a narrow piece of land, an alternative design could shift the new entrance roadway, roundabout, guardhouse, visitors' center driveway and parking farther to the west and north, more centrally placed within the parcel. While that may still encroach slightly within the 100-foot buffer on both sides, the encroachment and impact would be minimized. Additionally, the placement of either the gate, the visitor's center or both should be reconfigured so that the driveway to the parking is on the landward side of the visitor's center, thereby minimizing driveway pavement encroachment on the buffer. Placing parking bays on both sides of the drive would condense the pavement, minimizing the impervious surface. For additional information and coordination, please contact Alice Baird, DCR-CBLA at (804) 225-2307.

The Hampton Roads Planning District Commission (HRPDC) stated that (See above, Section 13. *Local Comments*), the information provided in the EA and FCD indicates that there will be no encroachment in the 100-foot buffer for adjacent tidal wetlands, but does not provide site plans or drawings that adequately illustrate the proposed encroachment or any alternative alignment that would reduce encroachment.

We encourage the Air Force to work with the DEQ – Tidewater Regional Office and the DCR – Division of Chesapeake Bay Local Assistance to provide each agency with the information needed to determine whether the project is consistent with the wetlands management policy and CZM policy. To coordinate the exchange of the required information, contact Harold Winer, Deputy Regional Director -- DEQ Tidewater Regional Office (757)-518-2153; and Alice Baird, DCR-CBLA at (804) 225-2307. The required information may be provided within the Final Environmental Assessment or separately. Upon receipt of the requested information, DEQ will complete our review of the Federal Consistency Determination.

Regulatory and Coordination Needs

1. Erosion and Sediment Control and Stormwater Management. The Air Force must comply with Virginia's Erosion and Sediment Control Law (Virginia Code 10.1-567) and regulations (4 VAC 50-30-30 et seq.) and Stormwater Management Law (Virginia Code 10.1-603.5) and regulations (4 VAC 3-20-210 et seq.). Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, or other structures, soil/dredge spoil areas, or related land conversion activities that disturb 10,000 square feet or more (2,500 square feet or more in a Chesapeake Bay Preservation Area) would be regulated by VESCL&R and those that disturb one acre or greater would be covered by VSWML&R. DEQ encourages the Air Force to contact DCR's Chowan-Albemarle Coastal Watershed Office, (757) 925-2468, for assistance with developing or implementing E&S and/or Stormwater Management Plans to ensure project conformance during and after construction.

The project may require a Virginia Pollutant Discharge Elimination System (VPDES) Permit for Control of Stormwater Discharges for construction activities and municipal separate storm sewer systems (MS4s). For information and coordination pertaining to the VPDES stormwater general permit for construction activities, please contact Lee Hill at DCR's Central Office, telephone (804) 786-3998 or e-mail lee.hill@dcr.virginia.gov).

2. Air Quality Regulations. This project may be subject to air regulations administered by the Department of Environmental Quality, because the project is located in an Ozone (O_3) Non-attainment Area and an emission control area for the contributors to ozone pollution, which are volatile organic compounds (VOCs) and oxides of nitrogen (NO_x). This has two practical consequences for project development. First, the Air Force should take all reasonable precautions to limit emissions of VOCs and NO_x, principally by controlling or limiting the burning of fossil fuels. The second precaution, which typically applies to road construction, pavement-milling/reclamation, and paving work, (9 VAC 5-40-5490 in the Regulations for the Control and Abatement of Air Pollution), places limitations on the use of "cut-back" (liquefied asphalt cement, blended with petroleum solvents), and may apply in the demolition of the driveways or paths associated with the demolition project.

DEQ Air Division also recommends that during construction, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 *et seq.* of the Regulations for the Control and Abatement of Air Pollution. If project activities include the burning of material, this activity must meet the requirements under 9 VAC 5-40-5600 *et seq.* of the Regulations for open burning, and it may require a permit. The Regulations provide for, but do not require, the local adoption of a model ordinance concerning open burning.

For additional information and coordination pertaining to Regulations for the Control and Abatement of Air Pollution, please contact Harold Winer, Deputy Regional Director -- DEQ Tidewater Regional Office (757)-518-2153. For more information pertaining to local requirements (e.g., open burning, etc.), please call James Freas, City Planner, City of Hampton, VA (757) 728-2449.

3. Solid and Hazardous Wastes. Any soil that is suspected of contamination or wastes that are generated must be tested and disposed of in accordance with applicable Federal, State, and local laws and regulations. Some of the applicable state laws and regulations are: Virginia Waste Management Act, Code of Virginia Section 10.1-1400 et seq.; Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC 20-60); Virginia Solid Waste Management Regulations (VSWMR) (9VAC 20-80); Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110). Some of the applicable Federal laws and regulations are: the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 et seq., and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous materials, 49 CFR Part 107.

All solid waste, hazardous waste, and hazardous materials must be managed in accordance with all applicable federal, state, and local environmental regulations. Also, all structures being demolished/renovated/removed should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM or LBP are found, in addition to the federal waste-related regulations mentioned above, State regulations 9VAC 20-80-640 for ACM and 9VAC 20-60-261 for LBP must be followed. For additional information and coordination concerning the location and availability of suitable waste management facilities in the project area or if free product, discolored soils, or other evidence of contaminated soils are encountered, please contact Harold Winer, Deputy Regional Director -- DEQ Tidewater Regional Office (757)-518-2153. *The DEQ – Federal Facilities Restoration Program* recommends that the facility contact Mr. John Tice, LAFB Environmental Restoration at (757) 764-1082 for more information concerning any CERCLA obligations at the proposed construction area prior to initiating any land, sediment, or ground water disturbing activities.

4. Historic Structures and Archaeological Resources. To ensure compliance with *Section 106 of the National Historic and Preservation Act of 1966*, as amended, the Air Force must continue to coordinate with DHR. For additional information and coordination, contact Marc Holma, DHR at (804) 367-2323. In the event that archaeological resources are encountered during project activities, immediately contact Dr. Ethel Eaton, DHR at (804) 367-2323.

Additional Environmental Considerations and Recommended Coordination

There are other state approvals which may apply to this project that are not addressed in the EA or FCD. The following comments were submitted by the City of Hampton and the Hampton Roads Planning and District Commission (HRPDC), concerning impact to Transportation.

1. Transportation. The City of Hampton, Virginia (see above Section 13. *Local Comments*) stated, while the project appears to present a minor impact on natural resources, the EA does not adequately address potential impacts on local transportation systems. The EA states that, 27% of base traffic currently utilizes the LaSalle Gate, but does not include how many vehicles a day that percentage represents, the approximate time-period over which that traffic will be diverted, and how that diverted traffic will most likely be divided between the two alternative gates. In addition, the project calls for permanently rerouting the commercial truck traffic that currently utilizes the LaSalle Gate to the West Gate without assessing the potential impacts of that

diversion on local transportation systems. The City cannot assess the short- and long-term transportation impacts of this project without an assessment of these factors.

The HRPDC agreed with the City of Hampton's concerns regarding the lack of transportation analysis for the reconfiguration of the LaSalle Gate and the rerouting of base traffic to other access points.

DEQ encourages the Air Force to coordinate with the Virginia Department of Transportation – Hampton Roads District Manager Dennis Heuer at (757) 925-2584. For additional information pertaining to locality and PDC comments, please contact James Freas, City Planner, City of Hampton Virginia (757) 727-6140; or Arthur L. Collins, Executive Director/Secretary, HRPDC (757) 420-8300.

Thank you for the opportunity to review this project. Pursuant to 15 C.F.R. § 930 (d), we encourage the Air Force to coordinate with DEQ-TRO, DCR-DCBLA, the City of Hampton, and the HRPDC to resolve the issues raised in their comments. If you have questions, please feel free to call Ellie Irons (804) 698-4325 or Ernst Aschenbach (804) 698-4326.

Sincerely,

Ellie L. Irons
Program Manager
Office of Environmental Impact Review

Enclosures

cc: Catherine Harold, DEQ-OWPS
Kotur S. Narasimhan, DEQ-ADA
Allen Brockman, DEQ-ORP
John Winer, DEQ-TRO
Tony Watkinson, VMRC
Gerald P. Wilkes, DMME
Ray Fernald, DGIF
Allan Weber, VDH
John Davy, DCR
Marlee A. Parker, VDOT
Keith R. Tignor, VDACS
Ethel Eaton, DHR
Alice Baird, DCR-CBLA
Michael Foreman, DOF
James Freas, City Planner, City of Hampton, VA
Arthur L. Collins, Executive Director/Secretary Hampton Roads PDC
Steven D. Stinger, Project Manager – URS

APPENDIX C

EMISSIONS CALCULATIONS

1.0 Introduction

Appendix C explains the software used to calculate most of the emissions that may be generated by this project, and states the assumptions used to formulate user inputs for the model. It also explains those emission calculations which were not included in the model.

The Air Force Air Conformity Applicability Model (ACAM) was used to determine most of the air emissions related to the gate improvement project. This program was developed for the Air Force Center for Environmental Excellence (AFCEE) for the purpose of performing air conformity applicability analysis for proposed Air Force actions based on limited user input requirements. Emissions generated from road striping and clearing and grubbing of land were not included in ACAM, therefore engineering estimates were performed.

ACAM uses emission factors derived from EPA's Compilation of Air Pollutant Emission Factors, Stationary Point and Area Sources (AP-42) when calculating emissions from sources except where otherwise noted, and references Air Emissions Inventories at Air Force Installations in order to determine total facility emissions and determine whether construction activities may trigger general conformity regulations.

2.0 Emission Estimates Using ACAM

2.1 Demolition

Two structures, the visitor building and guard shack, would be demolished at the LaSalle Gate. ACAM calculates demolition emissions based on duration of demolition and building dimensions. According to architectural drawings of the site, the Visitor Reception Center's dimensions are estimated at 15 feet by 21 feet. The Guard Shack is approximately 19 feet by 22 feet. No height was given in the drawings; therefore it was assumed that the height of the buildings is approximately 12 feet. Figure C-1 provides a view of the user input values as entered into ACAM.

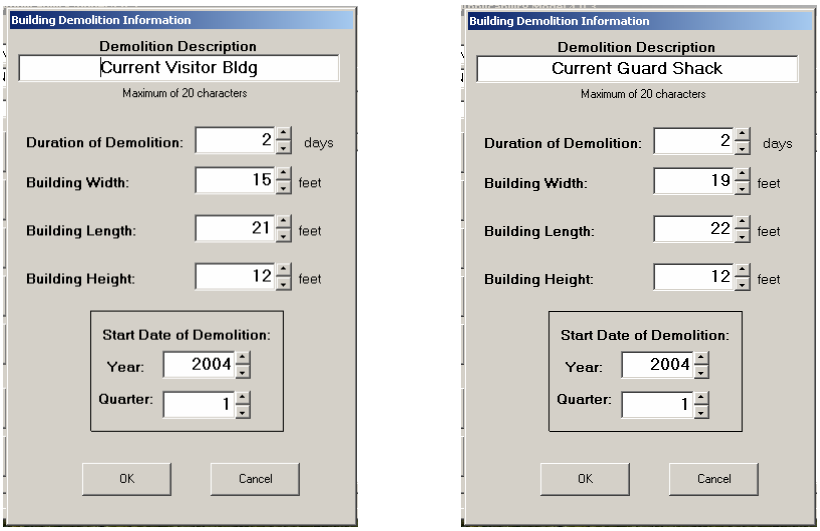


Figure C-1. ACAM User Input Values for Demolition of Current Visitor Reception Center and Guard Shack at the LaSalle Gate.

2.2 Construction

Several new structures are proposed for construction at LaSalle Gate, including a Visitor Reception Center and a Guard House. Construction emissions were calculated in ACAM based on building dimensions, construction duration, and dust controls. Dimensions were taken from design schematics, and dust controls were conservatively assumed to be non-existent. Construction information is given in Figures C-2 and C-3.

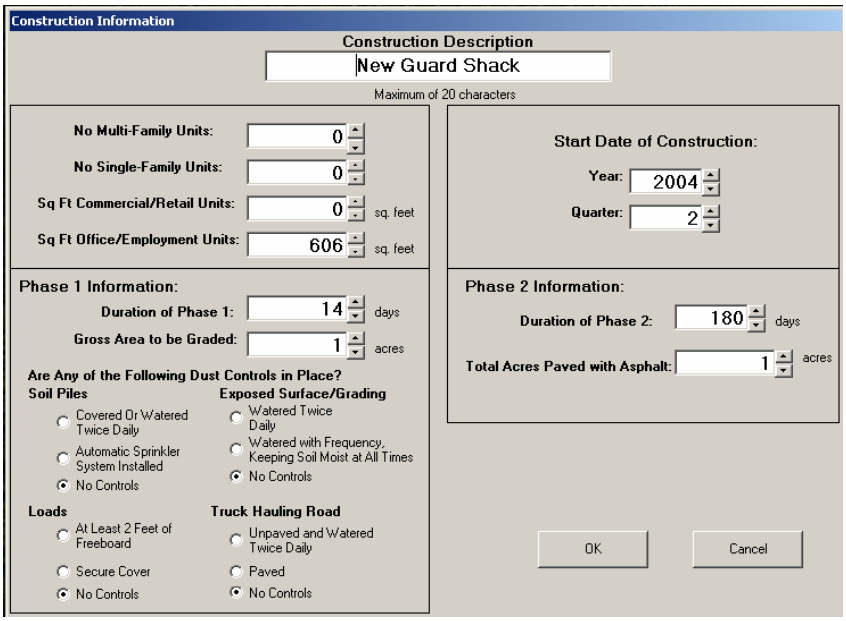


Figure C-2. New Guard House User Input Values

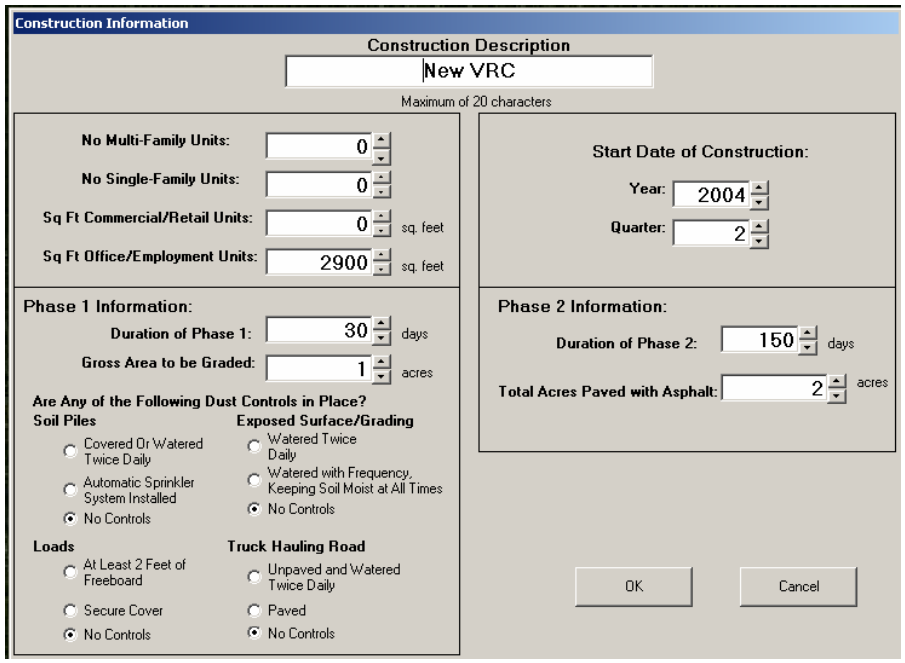


Figure C-3. New Visitor Reception Center User Input Values

Included in construction total emission calculations are emissions from grading operations, construction worker trips, stationary equipment (generators, saws, etc), mobile equipment (forklifts, dump trucks, etc), grading, architectural coating, and asphalt paving. (See ACAM Technical Document, in reference list, for emission factors and formulas.)

2.3 Emergency Generator

A 45 kW emergency generator would be placed at the gate. Based on a weekly usage rate of one hour and a fuel consumption of 3.4 gallons per hour of diesel fuel, a throughput of 177 hours was assumed. Figure C-4 displays the user input values entered into ACAM.

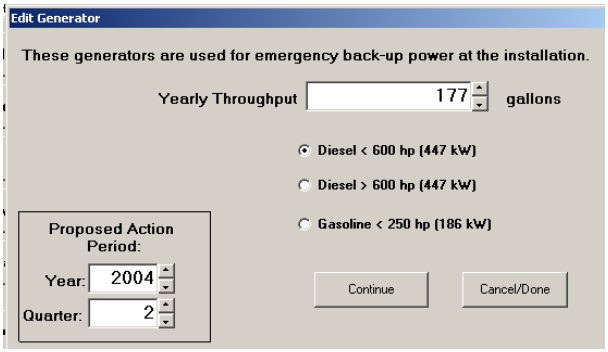


Figure C-4. Emergency Generator User Input Values

2.4 ACAM Total Emissions

ACAM provides a summary table of emissions by source and individual construction activity. Figure C-5 shows this information.

Source Category	Emissions, Tons/Year				
	CO	NO_X	SO_2	VOC	PM_{10}
Area Sources					
Demolition	0	0	0	0	0.19
Other Phase I Const. - Grading Equip.	0.01	0.05	0	0	0
Other Phase I Const. - Grading Ops.	0	0	0	0	1.34
Other Phase II Const. - Mobile Equip.	0.21	0.51	0.06	0.05	0.04
Other Phase II Const. - Non-Res. Arch. Ctgs.	0	0	0	0.06	0
Other Phase II Const. - Stationary Equip.	1.44	0.04	0	0.05	0
Other Phase II Const. - Workers Trips	0.03	0	0	0	0
Total	1.69	0.59	0.07	0.17	1.57
Point Sources					
Emergency Generators	0.01	0.04	0	0	0
Total	0.01	0.04	0	0	0
Grand Total	**1.71**	**0.63**	**0.07**	**0.18**	**1.57**

Figure C-5. ACAM Emissions Summary

3.0 Engineering Estimate

One other potential emission source was taken into account in calculating total emissions for the Proposed Action but was not accounted for in ACAM. An engineering estimate was made based on the available information.

3.1 Road Striping

Based on architectural and engineering schematics, approximately 0.53 miles of striping would be painted at the LaSalle Gate. VOC emissions from road striping were determined using an emission factor found in the Air Force document, Air Emissions Inventory Guidance Document for Stationary Sources at Air Force Installations (IERA). The formula for emissions is:

Inventory Area VOC Emissions from Traffic Paints	=	Emission Factor (lb/lane mile)	*	Traffic Lane Miles Painted,

where a mile refers to one 4-inch wide stripe that is one mile long. Figure C-6 displays road striping emissions information.

Emission Factor (lb/lane mile)	Traffic Lane Miles Painted	VOC Emissions (tpy)
52	0.53	**0.01378**

Figure C-6. VOC Emissions for Road Striping

APPENDIX D

RARE, THREATENED, AND ENDANGERED SPECIES

URS

2 December 2003

U.S. Fish and Wildlife Service
Ecological Services
Virginia Field Office
6669 Shore Lane
Gloucester, VA 23061

Subject: Request for Species List – Project at Langley Air Force Base

1. The U.S. Air Force is preparing an Environmental Assessment (EA) to evaluate potential environmental impacts associated with three related proposed actions at the base:

   - Antiterrorism/Force Protection (AT/FP) improvements on base along Sweeney Boulevard prior to the West Gate (see attached map);
   - Antiterrorism/Force Protection (AT/FP) improvements at the LaSalle Gate (see attached map); and
   - Antiterrorism/Force Protection (AT/FP) improvements at the West Gate (see attached map).

2. The proposed facility improvements would bring these areas into compliance with DoD Force Protection Requirements as identified in Langley Air Force Base's Antiterrorism Plan 10-245. At each gate, various construction activities may occur, including the razing of inadequate facilities that fail to meet the requirements, the building of more suitable structures, and the expansion of roads.

3. Pursuant to the Endangered Species Act and the National Environmental Policy Act, I am requesting information regarding federally listed or proposed species that may be present in the potentially affected area(s).

4. Please provide responses and direct inquiries on the matter to Laurie Huber, (703) 534-7517.

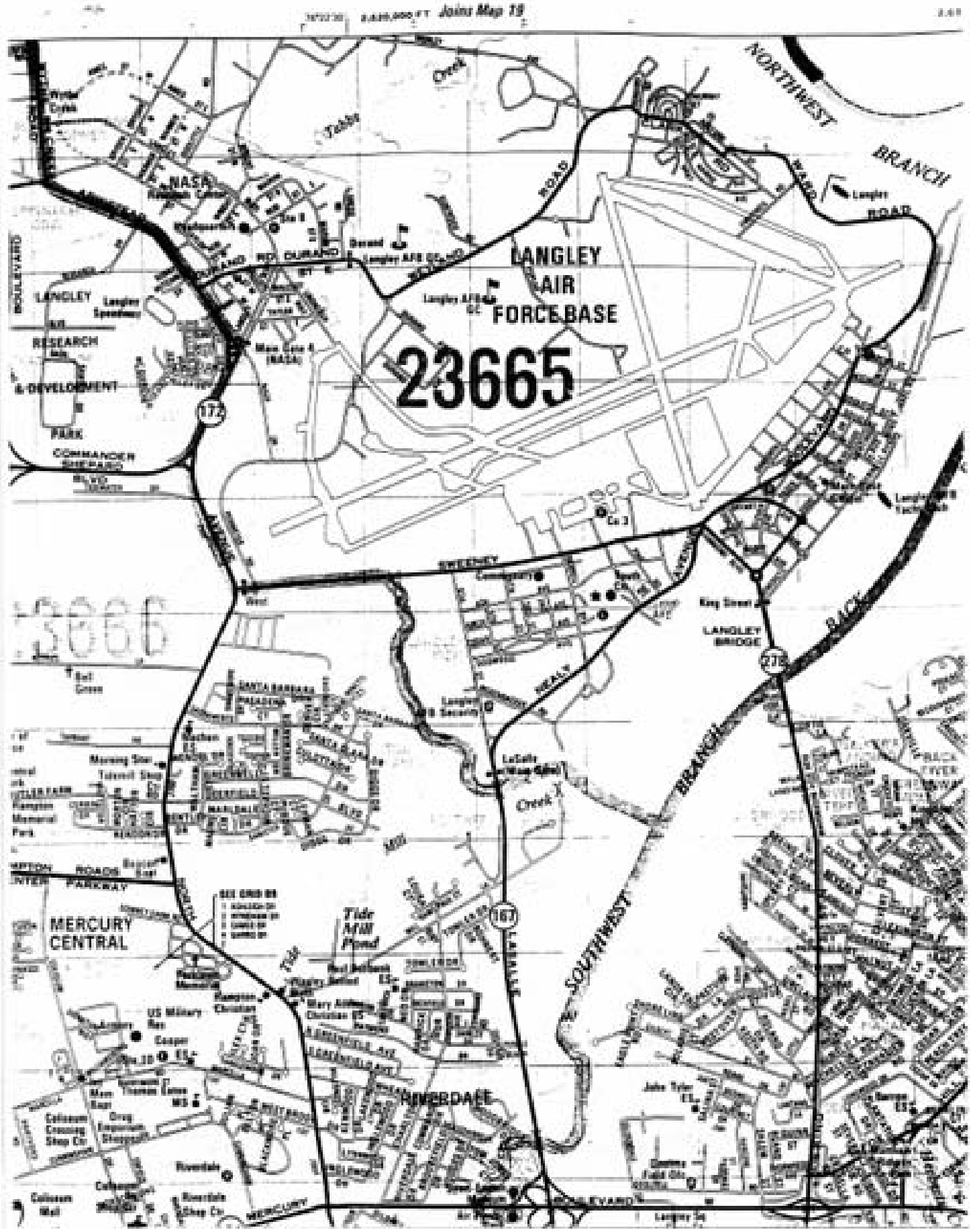
Sincerely,

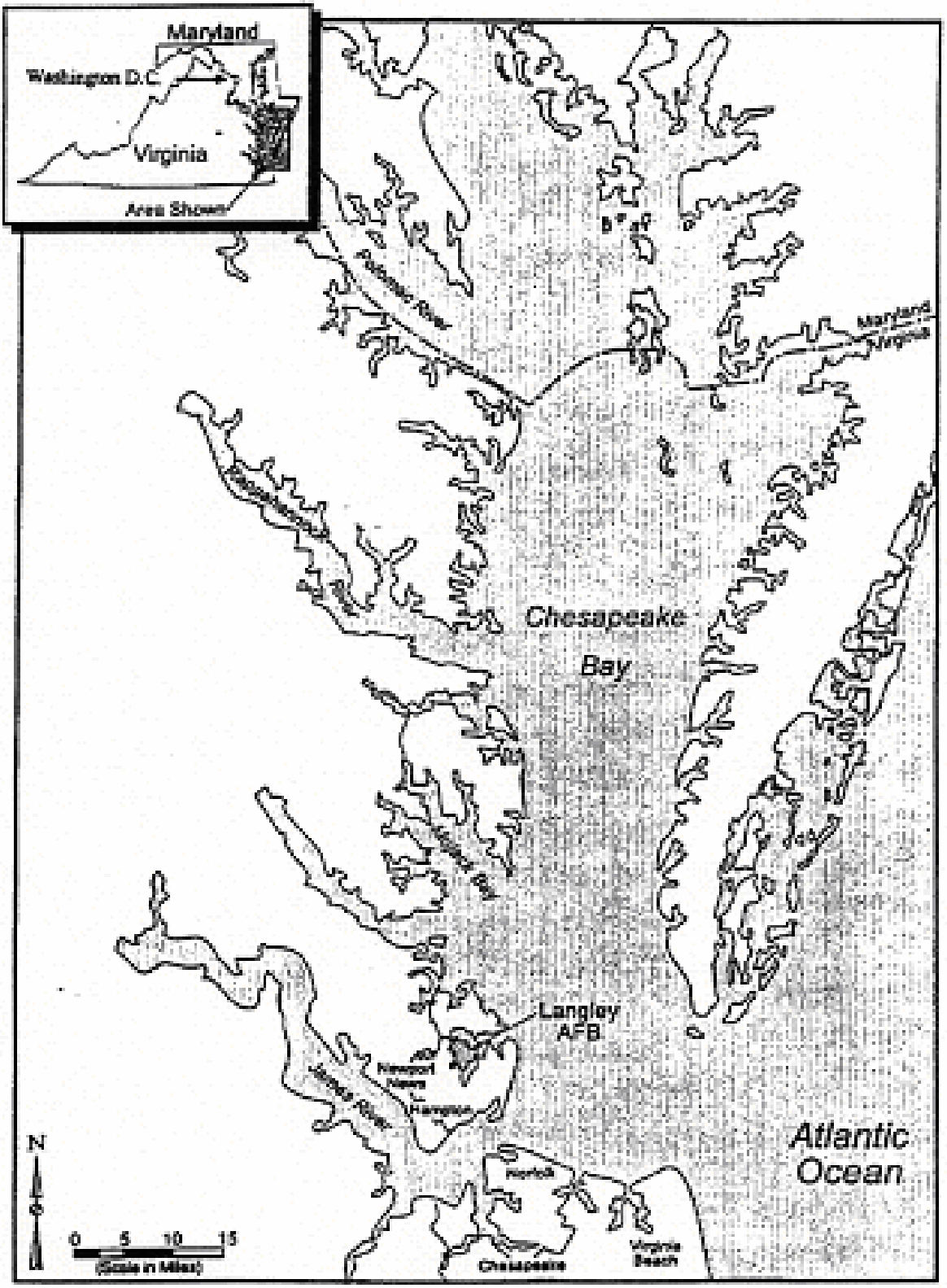
Laurie Huber

Laurie Huber
Sr. Regulatory Specialist

Attachments: Base Layout
Location Map, Langley Air Force Base, Virginia

URS Corporation
13825 Sunrise Valley Drive, Suite 250
Herndon, VA 20171-3426
Tel: 703.713.1500
Fax: 703.713.1512


Joins Map 19
NORTHWEST
BRANCH
LANGLEY
AIR
FORCE BASE
23665
NASA
LANGLEY
RESEARCH
& DEVELOPMENT
PARK
COMMANDER
SHEPARD
BLVD
172
SWEENEY
King Street
LANGLEY
BRIDGE
278
BACK
BRANCH
SOUTHWEST
Creek
Tide
Mill
Pond
167
MERCURY
CENTRAL
RIVERDALE
MERCURY
BOULEVARD



Source: Integrated Natural Resource Management Plan, Langley AFB, Virginia

Location Map, Langley Air Force Base, Virginia

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
6669 Short Lane
Gloucester, VA 23061

December 18, 2003

Ms. Laurie Huber
URS Corporation
13825 Sunrise Valley Drive, Suite 250
Herndon, Virginia 20171-3426

Re: Project #3176

Greetings:

The U.S. Fish and Wildlife Service (Service) has received your request to review the attached project for potential impacts to federally listed or proposed endangered and threatened species and designated critical habitat in Virginia pursuant to the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). Attached is a list of species with Federal status and species of concern that have been documented or may occur in the county where your project is located. This list was prepared by this office and is based on information obtained from previous surveys for rare and endangered species.

In order to ensure coordination with the State agencies, we consistently recommend that individuals contact the Virginia Department of Conservation and Recreation, Division of Natural Heritage **and** the Virginia Department of Game and Inland Fisheries, since each agency maintains a different database and has differing expertise and/or regulatory responsibility. You can contact these agencies at the following addresses:

Virginia Department of Game and Inland Fisheries
Environmental Services Section
P.O. Box 11104
Richmond, VA 23230
(804) 367-1000

Virginia Department of Conservation and Recreation
Division of Natural Heritage
217 Governor Street, 2nd Floor
Richmond, VA 23219
(804) 786-7951

If either of these agencies determines that your project may impact a federally listed, proposed, or candidate species OR federally designated critical habitat, please contact this office and provide a copy of the response letter from each agency and the above referenced project number; otherwise, further contact with this office is not necessary.

If you have any questions or need further assistance, please contact Ms. Jolie Harrison at (804) 693-6694, extension 208.

Sincerely,

Karen L. Mayne

Karen L. Mayne
Supervisor
Virginia Field Office

Enclosures

KEY

LE - federally listed endangered.

LT - federally listed threatened.

PE - federally proposed endangered.

PT - federally proposed threatened.

EX - believed to be extirpated in Virginia.

LE(S/A) - federally listed endangered due to similarity of appearance to a federally listed species.

LT(S/A) - federally listed threatened due to similarity of appearance to a federally listed species.

C - candidate species; the U.S. Fish and Wildlife Service has enough information to list the species as threatened or endangered, but this action is precluded by other listing activities.

SOC - species of concern; those species that have been identified as potentially imperiled or vulnerable throughout their range or a portion of their range. These species are not protected under the Endangered Species Act.

G - global rank; the species rarity throughout its total range.

G1 - extremely rare and critically imperiled with 5 or fewer occurrences or very few remaining individuals; or because of some factor(s) making it especially vulnerable to extinction.

G2 - very rare and imperiled with 6 to 20 occurrences or few remaining individuals; or because of some factor(s) making it vulnerable to extinction.

G3 - either very rare and local throughout its range or found locally (abundantly at some of its locations) in a restricted range; or vulnerable to extinction because of other factors. Usually fewer than 100 occurrences are documented.

G_T_ - signifies the rank of a subspecies or variety. For example, a G3T1 would apply to a subspecies of a species that is very rare and local throughout its range or found locally in a restricted range (G3) but the subspecies warrants a rank of T1, critically imperiled.

G_Q - The taxon has a questionable taxonomic assignment.

CITY OF HAMPTON, VIRGINIA
Federally Listed, Proposed, and Candidate Species

SCIENTIFIC NAME	COMMON NAME	STATUS
BIRDS		
Charadrius melodus	Piping plover	LT
Haliaeetus leucocephalus	Bald eagle	LT
INVERTEBRATES		
Cicindela dorsalis dorsalis	Northeastern beach tiger beetle	LT

Species of Concern

VASCULAR PLANTS		
Trillium pusillum var. virginianum	Virginia least trillium	G3T2

May 29, 2001
Prepared by U.S. Fish and Wildlife Service, Virginia Field Office

Bald Eagle

Haliaeetus leucocephalus

Description - The bald eagle occurs throughout the United States. It is a large bird-of-prey with dark brown plumage, a white head and tail, and a yellow bill, feet, and eyes. Juvenile eagles generally have a dark brown body, sometimes with white patches on the tail, belly, and underwings. The head and tail become completely white when full adult plumage is reached at four to five years of age.

Life History - The majority of Virginia's eagle population is found on the coastal plain. The bald eagle breeding season begins in mid-November when large nests are built (or the previous year's nest is repaired) usually in loblolly pine trees that are in close proximity to water. Eagles lay one to three eggs between mid-January and late March. In March, most eggs hatch and by June or July most young have fledged. However, the young will continue to use the nest for several weeks. In Virginia, during the summer and winter months, juvenile and nonbreeding adult eagles congregate along large rivers in areas with abundant food and little human disturbance. During the day, these eagles feed and perch along the river shoreline. In late afternoon, they move inland to roost either singly or communally. Roosts are typically located away from human disturbance and near water and a food source. Bald eagles feed primarily on fish, b. t will also eat carrion, waterfowl, small mammals, snakes, and turtles.

Conservation - The bald eagle was federally listed as an endangered species in the Chesapeake Bay Region on March 11, 1967. On July 12, 1995, the bald eagle was reclassified to threatened throughout the 48 lower states because the population had increased due to the banning persistent pesticides, habitat protection, and other recovery activities. On July 6, 1999, the bald eagle was proposed for removal from the list of endangered and threatened wildlife in the lower 48 states. This action was proposed because the available data indicated that this species has recovered. The recovery is due in part to habitat protection and management actions initiated under the Endangered Species Act. It is also due to reduction in levels of persistent pesticides occurring in the environment. If and when the eagle is no longer protected by the Endangered Species Act, it will still be protected by the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and state laws. Until the eagle is officially delisted, it will continue to receive protection pursuant to the Endangered Species Act. Bald eagles in the Chesapeake Bay are increasing. However, habitat destruction through urban and residential development and human disturbance in nesting, roosting, and foraging habitats continue to be a threat.

What You Can Do To Help - If you know of a bald eagle nest on or near property proposed for clearing, development, or logging please contact one of the following agencies for assistance:

Virginia Department of Game and Inland Fisheries
P.O. Box 11104
Richmond, Virginia 23230
(804) 367-1000

U. S. Fish and Wildlife Service
6669 Short Lane
Gloucester, Virginia 23061
(804) 693-6694

References

U.S. Fish and Wildlife Service. 1990. Chesapeake Bay Region bald eagle recovery plan: first revision. Newton Corner, Massachusetts.

U.S. Fish and Wildlife Service. 1999. Proposed rule to remove the bald eagle in the lower 48 states from the list of endangered and threatened wildlife. Federal Register 64(128): 36453-36464.

Watts, B.D., K.W. Cline, and M.A. Byrd. 1994. The bald eagle in Virginia: An information booklet for land planners. The Center for Conservation Biology, College of William and Mary, Williamsburg, Virginia.

U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, Virginia 23061
(804) 693-6694
http://www.fws.gov
August 1999

Piping Plover

Charadrius melodus

© J. Zickefoose

Description - Piping plovers occur in three disjunct populations in North America: Northern Great Plains, Great Lakes, and Atlantic Coast. The piping plover is a 5 ½ inch long pale grayish-brown shorebird with a white breast. During the breeding season, it has a black breast band which is sometimes incomplete and a black bar between its eyes. The bill is dull orange with a black tip and the legs and feet are orange.

Life History - The piping plover nesting season is from late April to late July with one brood raised per year. If there is a disturbance or the nest is lost, the birds may renest. Plovers nest on beaches, dunes, and washover areas. They also nest on areas where suitable dredged material is deposited. The nest is a shallow scrape in the sand dug by the adults and is usually lined with broken seashells and small pebbles. The female usually lays four eggs. The chicks are mobile and able to feed themselves within hours of hatching. Piping plovers feed on small invertebrates in intertidal surf zones, mud flats, tidal pool edges, barrier flats, and sand flats and along the ocean and barrier bays. Plovers migrate to breeding grounds from February through early April, and to wintering grounds from late July through September.

Conservation - The piping plover was federally listed as a threatened species along the Atlantic Coast on January 10, 1986. In the Northern Great Plains, it is federally listed threatened and in the Great Lakes, endangered. Destruction and degradation of habitat and disturbance during the nesting season by humans and pets are threats to this species. Piping plovers are extremely sensitive to disturbance during the nesting season. Predation by red foxes, skunks, raccoons, feral cats, herring gulls, fish crows, grackles, and ghost crabs is an additional threat to the eggs and young.

What You Can Do To Help - Respect all signed or fenced shorebird nesting areas; stay as far away from these areas as possible. The birds and their eggs blend in with the sand and are difficult to see. Young birds are particularly vulnerable before they can fly and can be killed by vehicles or trapped in vehicle tracks. Watch for signs of adult birds calling, displaying a feigned broken wing, or flying or running ahead of you. Keep pets leashed or indoors during the nesting season; both dogs and cats are known to prey on eggs and chicks. Take care not to discard trash or food scraps on beaches used by nesting birds, as they attract predators that may prey on eggs and/or chicks.

To find out more about the piping plover contact:

Virginia Department of Game and Inland Fisheries
P.O. Box 11104
Richmond, Virginia 23230
(804) 367-1000

References

Cross, R.C. 1991. Piping plover. Pages 501-502 in K. Terwilliger, ed. Virginia's Endangered Species, Proceddings of a Symposium. McDonald and Woodward Publishing Company, Blacksburg, Virginia.

U.S. Fish and Wildlife Service. 1985. Endangered and Threatened Wildlife and Plants: Determination of endangered and threatened status for the piping plover; final rule. Federal Register 50(238):50726-59734.

U.S. Fish and Wildlife Service, Region 5. 1994. You can help protect the piping plover. Newton Corner, Massachusetts.

U.S. Fish and Wildlife Service. 1996. Piping plover (*Charadrius melodus)* Atlantic Coast population, revised recovery plan. Hadley, Massachusetts.

U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, Virginia 23061
(804) 693-6694
http://www.fws.gov

August 1999

Northeastern Beach Tiger Beetle

Cicindela dorsalis dorsalis

© K. Brown-Wing

Description - Historically, the northeastern beach tiger beetle was common on coastal beaches from Massachusetts to central New Jersey, and along the Chesapeake Bay in Maryland and Virginia. Currently, the only populations known to exist along the Atlantic Coast are in New Jersey and southeastern Massachusetts. The majority of populations occur in the Chesapeake Bay. This insect measures 0.5 inches in length. It has white to light tan wing covers, often with several fine grayish-green lines, and a bronze-green head and body.

Life History - Adult and larval tiger beetles are found on long, wide, dynamic beaches that have little human and vehicular activity, fine sand-particle size, and a high degree of exposure to tidal action. Adult beetles are present from June through August and are active on warm, sunny days where they can be seen feeding, mating, or basking along the water's edge. Adults are active predators that forage on small invertebrates or scavenge on dead fish, crabs, and amphipods. Larvae are sedentary predators that live in well-formed burrows from which they extend to capture passing prey. During the summer, adult tiger beetles lay eggs on the beach. After hatching, the larvae pass through three developmental stages and emerge from their burrows as adults two years following egg-laying.

Conservation - The northeastern beach tiger beetle was federally listed as a threatened species on August 7, 1990. Few northeastern beach tiger beetle sites are protected and many are threatened by human activities. Loss of this beetle from most of its range has been attributed primarily to destruction and disturbance of natural beach habitat from shoreline development, beach stabilization, and high levels of recreational use. Additional threats include pollution, pesticides, oil slicks, and off-road vehicle traffic. Natural limiting factors include winter storms, beach erosion, flood tides, hurricanes, parasites, and predators. Recovery for the tiger beetle depends to a large extent on re-establishing the subspecies across its former range along the Atlantic Coast and protecting it within the Chesapeake Bay.

What You Can Do To Help - If you plan to stabilize a tidal beach along the Chesapeake Bay or its tributaries, please contact the U.S. Fish and Wildlife Service. Such activity may require a federal permit, for more information contact:

U.S. Army Corps of Engineers
Norfolk District
803 Front Street
Norfolk, Virginia 23510-1096
(757) 441-7652

References

Knisley, C.B. 1991. Northeastern beach tiger beetle. Pages 233-234 in K. Terwilliger, ed. Virginia's Endangered Species, Proceedings of a Symposium. McDonald and Woodward Publishing Company, Blacksburg, Virginia.

Knisley, C.B., J.I. Luebke, and D.R. Beatty. 1987. Natural history and population decline of the coastal tiger beetle, *Cicindela dorsalis dorsalis* Say (Coleoptera: Cicindelidae). Virginia Journal of Science 38: 293-303.

U.S. Fish and Wildlife Service. 1994. Northeastern beach tiger beetle (*Cicindela dorsalis dorsalis* Say) recovery plan. Hadley, Massachusetts.

U.S. Fish and Wildlife Service
Virginia Field Office
6669 Short Lane
Gloucester, Virginia 23061
(804) 693-6694
http://www.fws.gov
August 1999

URS

March 17, 2004

Virginia Department of Conservation and Recreation
Attention: Renee Hypes
217 Governor Street, 2nd Floor
Division of Natural Heritage
Richmond, Virginia 23219

Subject: **Request for Species List – Project at Langley Air Force Base**

In response to a similar request made to the Fish and Wildlife Service, reference was made to contacting your organization as well.

1. The U.S. Air Force is preparing an Environmental Assessment (EA) to evaluate potential environmental impacts associated with two related proposed actions at the base:

   - Antiterrorism/Force Protection (AT/FP) improvements on base along Sweeney Boulevard prior to the West Gate (see attached map);
   - Antiterrorism/Force Protection (AT/FP) improvements at the LaSalle Gate (see attached map); and
   - Antiterrorism/Force Protection (AT/FP) improvements at the West Gate (see attached map).

2. The proposed facility improvements would bring these areas into compliance with DoD Force Protection Requirements as identified in Langley Air Force Base's Antiterrorism Plan 10-245. At each gate, various construction activities may occur, including the razing of inadequate facilities that fail to meet the requirements, the building of more suitable structures, and the expansion of roads.

3. Pursuant to the Endangered Species Act and the National Environmental Policy Act, I am requesting information regarding federally listed or proposed species that may be present in the potentially affected area(s).

4. Please provide responses and direct inquires on this mater to Laurie Huber, (703) 534-7517.

Sincerely,

Laurie Huber

Laurie Huber
Sr. Regulatory Specialist

Attachments: Base Map

Request Form

URS Corporation
13825 Sunrise Valley Drive, Suite 250
Herndon, VA 20171-3420
Tel: 703.713.1300
Fax: 703.713.1512

URS

March 17, 2004

Virginia Department of Game and Inland Fisheries
Attention: Kathy Graham
Environmental Services Section
P.O. Box 11104
Richmond, Virginia 23230

Subject: Request for Species List – Project at Langley Air Force Base

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1. The U.S. Air Force is preparing an Environmental Assessment (EA) to evaluate potential environmental impacts associated with two related proposed actions at the base:

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4. Please provide responses and direct inquires on this mater to Laurie Huber, (703) 534-7517.

Sincerely,

Laurie Huber

Laurie Huber
Sr. Regulatory Specialist

Attachments: Base Map

URS Corporation
13625 Sunrise Valley Drive, Suite 250
Herndon, VA 20171-3426
Tel: 703.713.2500
Fax: 703.713.1512

W. Tayloe Murphy, Jr.
Secretary of Natural
Resources

Joseph H. Maroon
Director

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

217 Governor Street
Richmond, Virginia 23219-2010
Telephone (804) 786-7951 FAX (804) 371-2674 TDD (804) 786-2121

April 15, 2004

Laurie Huber
URS Corporation
13825 Sunrise Valley Drive, Suite 250
Herndon, VA 20171-4672

Re: West Gate, LaSalle Gate and Sweeney Blvd. Improvements to Langley AFB

Dear Ms. Huber:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

Biotics documents the presence of natural heritage resources in the project area. However, due to the scope of the activity and the distance to the resources, we do not anticipate that this project will adversely impact these natural heritage resources.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the Virginia Department of Conservation and Recreation (DCR), DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

In addition, our files do not indicate the presence of any State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

Any absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks additional natural heritage resources. New and updated information is continually added to Biotics. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized.

Due to an increasing number of requests and limiting staffing resources, effective July 1, 2003 DCR-DNH will require 30 days to comment on projects submitted for our review.

A fee of $60.00 has been assessed for the service of providing this information. Please find enclosed an invoice for that amount. Please return one copy of the invoice along with your remittance made payable to the Treasurer of Virginia, Department of Conservation and Recreation, 203 Governor Street, Suite 414, Richmond, VA 23219, ATTN: Cashier. Payment is due within thirty days of the invoice date.

An Agency of the Natural Resources Secretariat

Should you have any questions or concerns, feel free to contact me at 804-692-0984. Thank you for the opportunity to comment on this project.

Sincerely,

Elizabeth Locklear
Locality Liaison

COMMONWEALTH of VIRGINIA

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Department of Game and Inland Fisheries

William L. Woodfin, Jr.
Director

April 6, 2004

Laurie Huber
Sr. Regulatory Specialist
URS Corporation
13825 Sunrise Valley Drive, Suite 250
Herndon, VA 20171-3426

RE: ESSLOG #19433, Project at Langley Air Force Base

Dear Ms. Huber:

This letter is in response to your request for information related to the presence of threatened or endangered species in the vicinity of the above referenced project.

The *state endangered* canebrake rattlesnake (*Crotalus horridus*) has been documented in the project area. The applicant should coordinate with this Department (Don Schwab, Region 1 Non-game Biologist, 540-899-4169) regarding potential impacts to this species.

The federal species of concern northern diamond-backed terrapin (*Malaclemys terrapin terrapin*), the state special concern great egret (*Ardea alba egretta*), the state special concern yellow-crowned night heron (*Nyctanassa violacea violacea*), the state special concern northern harrier (*Circus cyaneus*), the state special concern Forster's tern (*Sterna forsteri*), the state special concern least tern (*Sterna antillarum*), and the state special concern Caspian tern (*Sterna caspia*) have been documented in the project area. However, the classification of "federal species of concern" and "state special concern" are not legal designations and do not require further coordination.

A block survey of an area encompassing the project site has documented the following species during the breeding season: the state special concern saltmarsh sharp tailed sparrow (*Ammodramus caudacutus*). Though the species may occur at the site if appropriate habitat exists further coordination is not required.

Information about fish and wildlife species was generated from our agency's computerized Fish and Wildlife Information System, which describes animals that are known or may occur in a particular geographic area. Field surveys may be necessary to determine the presence or absence of some of these species on or near the proposed area. Also, additional sensitive animal species

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(804) 367-1000 (V/TDD) ***Equal Opportunity Employment, Programs and Facilities*** **FAX (804) 367-9147**

may be present, but their presence has not been documented in our information system.

Endangered plants and insects are under the jurisdiction of the Virginia Department of Agriculture and Consumer Services, Bureau of Plant Protection. Questions concerning sensitive plant and insect species occurring at the project site should be directed to Keith Tignor at (804) 786-3515.

There is a processing charge of $25.00 for our response. Please remit a check, made payable to **TREASURER OF VIRGINIA**, within 30 days. To insure proper credit to your account, please address your payment envelope directly to MaryBeth Murr at the address listed in the letterhead.

This letter summarizes the likelihood of the occurrence of endangered or threatened animal species at the project site. If you have additional questions in this regard, please contact me at (804) 367-2211.

Please note that the data used to develop this response are continually updated. Therefore, if significant changes are made to your project or if the project has not begun within 6 months of receiving this letter, then the applicant should request a new review of our data.

The Fish and Wildlife Information Service, the system of databases used to provide the information in this letter, can now be accessed via the Internet! The Service currently provides access to current and comprehensive information about all of Virginia's fish and wildlife resources, including those listed as threatened, endangered, or special concern; colonial birds; waterfowl; trout streams; and all wildlife. Users can choose a geographic location and generate a report of species known or likely to occur around that point. From our main web page, at www.dgif.state.va.us, choose the hyperlinks to "Wildlife" then "Wildlife Information and Mapping Services", and then "Wildlife Information Online Service". For more information about the service, please contact Amy Martin, Online Service Coordinator, at (804) 367-2211.

Thank you for your interest in the wildlife resources of Virginia.

Sincerely,

Amy Martin

Amy Martin
Online Service Coordinator

cc: R.T. Fernald, VDGIF
Don Schwab, VDGIF

APPENDIX E

VIRGINIA COASTAL PROGRAM: ENFORCEABLE REGULATORY PROGRAMS COMPRISING VIRGINIA'S COASTAL RESOURCES MANAGEMENT PROGRAM

COMMONWEALTH of VIRGINIA

James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 10009, Richmond, Virginia 23240
Fax (804) 698-4500 · TDD (804) 698-4021
http://www.deq.state.va.us

Dennis H. Treacy
Director

(804) 698-4000
1-800-592-5482

Attachment 1

Enforceable Regulatory Programs comprising Virginia's Coastal Resources Management Program (VCP)

a. Fisheries Management - The program stresses the conservation and enhancement of finfish and shellfish resources and the promotion of commercial and recreational fisheries to maximize food production and recreational opportunities. This program is administered by the Marine Resources Commission (VMRC); Virginia Code §28.2-200 to §28.2-713 and the Department of Game and Inland Fisheries (DGIF); Virginia Code §29.1-100 to §29.1-570.

The State Tributyltin (TBT) Regulatory Program has been added to the Fisheries Management program. The General Assembly amended the Virginia Pesticide Use and Application Act as it related to the possession, sale, or use of marine antifoulant paints containing TBT. The use of TBT in boat paint constitutes a serious threat to important marine animal species. The TBT program monitors boating activities and boat painting activities to ensure compliance with TBT regulations promulgated pursuant to the amendment. The VMRC, DGIF, and Virginia Department of Agriculture Consumer Services (VDACS) share enforcement responsibilities; Virginia Code §3.1-249.59 to §3.1-249.62.

b. Subaqueous Lands Management - The management program for subaqueous lands establishes conditions for granting or denying permits to use state-owned bottomlands based on considerations of potential effects on marine and fisheries resources, tidal wetlands, adjacent or nearby properties, anticipated public and private benefits, and water quality standards established by the Department of Environmental Quality (DEQ). The program is administered by the Marine Resources Commission; Virginia Code §28.2-1200 to §28.2-1213.

c. Wetlands Management - The purpose of the wetlands management program is to preserve wetlands, prevent their despoliation, and accommodate economic development in a manner consistent with wetlands preservation.

(1) The tidal wetlands program is administered by the Marine Resources Commission; Virginia Code §28.2 -1301 through §28.2 -1320.

(2) The Virginia Water Protection Permit program administered by DEQ includes protection of wetlands --both tidal and non-tidal; Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the Clean Water Act.

d. Dunes Management - Dune protection is carried out pursuant to The Coastal Primary Sand Dune Protection Act and is intended to prevent destruction or alteration of primary dunes. This program is administered by the Marine Resources Commission; Virginia Code §28.2-1400 through §28.2-1420.

e. Non-point Source Pollution Control – (1) Virginia's Erosion and Sediment Control Law requires soil-disturbing projects to be designed to reduce soil erosion and to decrease inputs of chemical nutrients and sediments to the Chesapeake Bay, its tributaries, and other rivers and waters of the Commonwealth. This program is administered by the Department of Conservation and Recreation; Virginia Code §10.1-560 et.seq.).

(2) Coastal Lands Management is a state-local cooperative program administered by the Chesapeake Bay Local Assistance Department and 84 localities in Tidewater (see i) Virginia; Virginia Code §10.1-2100 –10.1-2114 and 9 VAC10-20 et seq.

f. Point Source Pollution Control - The point source program is administered by the State Water Control Board (DEQ) pursuant to Virginia Code §62.1-44.15. Point source pollution control is accomplished through the implementation of:

(1) the National Pollutant Discharge Elimination System (NPDES) permit program established pursuant to Section 402 of the federal Clean Water Act and administered in Virginia as the Virginia Pollutant Discharge Elimination System (VPDES) permit program.

(2) The Virginia Water Protection Permit (VWPP) program administered by DEQ; Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the Clean Water Act.

g. Shoreline Sanitation - The purpose of this program is to regulate the installation of septic tanks, set standards concerning soil types suitable for septic tanks, and specify minimum distances that tanks must be placed away from streams, rivers, and other waters of the Commonwealth. This program is administered by the Department of Health (Virginia Code §32.1-164 through §32.1-165).

h. Air Pollution Control - The program implements the federal Clean Air Act to provide a legally enforceable State Implementation Plan for the attainment and maintenance of the National Ambient Air Quality Standards. This program is administered by the State Air Pollution Control Board (Virginia Code §10.1-1300 through §10.1- 1320).

(i) Coastal Lands Management is a state-local cooperative program administered by the Chesapeake Bay Local Assistance Department and 84 localities in Tidewater, Virginia established pursuant to the Chesapeake Bay Preservation Act; Virginia Code §10.1-2100 –10.1-2114 and Chesapeake Bay Preservation Area Designation and Management Regulations; Virginia Administrative Code 9 VAC10-20 et seq.

Attachment 2

Advisory Policies for Geographic Areas of Particular Concern

a. Coastal Natural Resource Areas - These areas are vital to estuarine and marine ecosystems and/or are of great importance to areas immediately inland of the shoreline. Such areas receive special attention from the Commonwealth because of their conservation, recreational, ecological, and aesthetic values. These areas are worthy of special consideration in any planning or resources management process and include the following resources:

a) Wetlands
b) Aquatic Spawning, Nursery, and Feeding Grounds
c) Coastal Primary Sand Dunes
d) Barrier Islands
e) Significant Wildlife Habitat Areas
f) Public Recreation Areas
g) Sand and Gravel Resources
h) Underwater Historic Sites.

b. Coastal Natural Hazard Areas - This policy covers areas vulnerable to continuing and severe erosion and areas susceptible to potential damage from wind, tidal, and storm related events including flooding. New buildings and other structures should be designed and sited to minimize the potential for property damage due to storms or shoreline erosion. The areas of concern are as follows:

i) Highly Erodible Areas
ii) Coastal High Hazard Areas, including flood plains.

c. Waterfront Development Areas - These areas are vital to the Commonwealth because of the limited number of areas suitable for waterfront activities. The areas of concern are as follows:

i) Commercial Ports
ii) Commercial Fishing Piers
iii) Community Waterfronts

Although the management of such areas is the responsibility of local government and some regional authorities, designation of these areas as Waterfront Development Areas of Particular Concern (APC) under the VCRMP is encouraged. Designation will allow the use of federal CZMA funds to be used to assist planning for such areas and the implementation of such plans. The VCRMP recognizes two broad classes of priority uses for waterfront development APC:

i) water access dependent activities;
ii) activities significantly enhanced by the waterfront location and complementary to other existing and/or planned activities in a given waterfront area.

Advisory Policies for Shorefront Access Planning and Protection

a. Virginia Public Beaches - Approximately 25 miles of public beaches are located in the cities, counties, and towns of Virginia exclusive of public beaches on state and federal land. These public shoreline areas will be maintained to allow public access to recreational resources.

b. Virginia Outdoors Plan - Planning for coastal access is provided by the Department of Conservation and Recreation in cooperation with other state and local government agencies. The Virginia Outdoors Plan (VOP), which is published by the Department, identifies recreational facilities in the Commonwealth that provide recreational access. The VOP also serves to identify future needs of the Commonwealth in relation to the provision of recreational opportunities and shoreline access. Prior to initiating any project, consideration should be given to the proximity of the project site to recreational resources identified in the VOP.

c. Parks, Natural Areas, and Wildlife Management Areas - Parks, Wildlife Management Areas, and Natural Areas are provided for the recreational pleasure of the citizens of the Commonwealth and the nation by local, state, and federal agencies. The recreational values of these areas should be protected and maintained.

d. Waterfront Recreational Land Acquisition - It is the policy of the Commonwealth to protect areas, properties, lands, or any estate or interest therein, of scenic beauty, recreational utility, historical interest, or unusual features which may be acquired, preserved, and maintained for the citizens of the Commonwealth.

e. Waterfront Recreational Facilities - This policy applies to the provision of boat ramps, public landings, and bridges which provide water access to the citizens of the Commonwealth. These facilities shall be designed, constructed, and maintained to provide points of water access when and where practicable.

f. Waterfront Historic Properties - The Commonwealth has a long history of settlement and development, and much of that history has involved both shorelines and near-shore areas. The protection and preservation of historic shorefront properties is primarily the responsibility of the Department of Historic Resources. Buildings, structures, and sites of historical, architectural, and/or archaeological interest are significant resources for the citizens of the Commonwealth. It is the policy of the

The following statement is provided to support a Coastal Consistency Determination required under the Virginia Coastal Resources Management Program (VCP):

Virginia's Coastal Zone Management Area includes Langley Air Force Base (LAFB), located in Hampton, Virginia. The land areas in the Proposed Action, which is the subject of the attached Environmental Assessment, are within LAFB. Although Federal lands are excluded from Virginia's costal zone management area, activities on Federal lands that may affect Virginia's coastal resources or uses must be consistent with the VCP.

There are nine enforceable programs included under the VCP. Seven of these programs are not applicable to the Proposed Action for improvements to the LaSalle Gate at LAFB. Specifically, the following programs are not triggered:

- Fisheries Management;
- Subaqueous Lands Management;
- Dunes Management;
- Point Source Pollution Control;
- Shoreline Sanitation;
- Air Pollution Control; and,
- Costal Lands Management.

The remaining two programs are applicable to the Proposed Action, they are:

- Wetlands Management; and,
- Non-Point Source Pollution Control.

Steps would be taken during the implementation of the Proposed Action to be consistent to the maximum extent possible with the two regulatory programs identified above. The following activities would be carried out:

Wetlands Management – Due to the encroachment on the 100-foot buffer area around the nearby wetlands, extreme care would be taken in maintaining the greatest distance possible from the wetlands during construction and should any temporary disturbance occur the wetland would be restored to its pre-construction state.

Non-Point Source Pollution Control – Approximately .84 acre of open space would be paved over to accommodate the Proposed Action. Run off and erosion control measures that are designed in accordance with the current edition of the Virginia Erosion and Sediment Control Handbook would be used throughout the duration of the project. Drainage for the complex would be collected and allowed to drain slowly into the low lying area east of the site.